

INSTITUTO SUPERIOR DE GESTÃO

Assessing the drivers of green consumerism: a multi-factor analysis

Cristina Isabel Duque Pita

Dissertation presented at ISG for the purpose of obtaining a Master's Degree in
Strategic Investment and Internationalization

Supervisor: Álvaro Lopes Dias

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Abstract - EN

In the last decades, human activity has abused the planet on an unprecedented scale leading to severe depletion of natural resources and affecting the environment. The awareness of this widespread environmental degradation changed the consumption patterns and has led to the emergence of green consumerism, creating a new opportunity for companies. Marketers are now challenged to incorporate green values into their practices and to take green marketing to its full potential. However, there is a recognized inconsistency between attitude and behavior for those who claim to care about the environment and therefore green consumerism is considered a complex behavior that needs to be scrutinized. Marketers need to address this gap in order to help protecting the environment, while assuring the financial sustainability of their companies. The main objective of this study is to provide further insights to mitigate this gap by exploring the effect of a set of multiple factors on green buying behavior. Using a quantitative methodology, results from this study show that general prosocial attitudes, receptivity to green communication, perceived green value, perceived consumer effectiveness and willingness to pay more have a positive effect over green buying behavior, while green skepticism affects it in a negative way.

Keywords: green marketing, green consumerism, green practices, green gap, green buying behavior

Abstract – PT

Nas últimas décadas, a atividade humana tem abusado do planeta de forma nunca antes vista levando ao esgotamento dos recursos naturais e prejudicando o ambiente. A tomada de consciência do estado de degradação generalizado do ambiente alterou os padrões de consumo e levou ao surgimento do *consumo ecológico*, criando-se assim uma nova oportunidade para as empresas. Os profissionais de marketing são agora desafiados a incorporar os valores ecológicos nas suas práticas e a levar o marketing ecológico a atingir o seu potencial máximo. Contudo, existe uma inconsistência reconhecida entre atitude e comportamento (*green gap*) nas pessoas que alegam preocupar-se com o ambiente, o que demonstra que o *consumo ecológico* é um comportamento complexo que exige ser examinado. Os profissionais de marketing devem mitigar esta lacuna de forma a poderem contribuir para a proteção do ambiente, assegurando em paralelo a sustentabilidade financeira das suas empresas. O principal objetivo deste estudo é aprofundar conhecimentos de forma a mitigar este *green gap* explorando em simultâneo um grupo de fatores que afeta o comportamento de compra verde. Recorrendo à metodologia quantitativa, os resultados deste estudo mostram que as atitudes pro-sociais, a receptividade à comunicação verde, o valor verde percebido, a eficácia percebida pelo consumidor e a disposição para pagar mais afetam positivamente o comportamento de compra verde, ao passo que o ceticismo verde exerce uma influência negativa sobre o mesmo.

Palavras-chave: marketing ecológico, consumo ecológico, práticas ecológicas, *green gap*, comportamento de compra verde

Abbreviations

GBB – Green buying behavior

Table of Contents

1. Introduction	7
1.1. Subject	7
1.2. Problematic.....	8
1.3 Objectives	10
1.4 Structure	10
2. Literature revision and theoretical model	11
2.1. Theoretical Framework.....	11
2.2. Hypothesis Development.....	24
3. Methodology.....	38
3.1. Research design	38
3.2. Sample, population and participants	39
3.3. Measures, data collection and variables	40
3.4. Data analysis procedure	42
4. Results	42
4.1. Descriptive statistics and correlations	42
4.1.1 Cronbach's alpha	42
4.1.2 Average, standard deviation, minimum and maximum	43
4.1.3 Frequencies	44
4.2 Hypothesis test	47
5. Conclusions	51
5.1 Discussion of results and implications for theory	51
5.2 Implications for management	53
5.3 Study's limitations and future research	54
6. References	55
7. Appendices	65

1. Introduction

1.1. Subject

The exacerbated demographic, technological and industrial growth of the last decades has profoundly changed the way of life of the populations and is having a very negative impact on the environment and on the planet. Over the past decades, consumption of goods and services has increased tremendously worldwide, leading to depletion of natural resources and serious damage to the environment (Chen & Chai, 2010). Some of the serious repercussions of environmental damage include global warming, increased environmental pollution, deforestation, accumulation of plastic and garbage in the environment and severe drought, amongst others. All these changes caused by the human activity, together, are disrupting the natural balance of the ecosystems, affecting the Earth and all the living creatures that inhabit it – people, animals and plants. As consequence, more and more governments and citizens share the concern about the huge impact that environmental changes have in their lives.

This current growth model of economies is depleting the planet's resources, making it unsustainable in the long run and there is an increasing collective awareness of this unsustainability. This is the reason why environmental concerns not only play a central role in the international political agenda, but also are driving citizens to change their patterns of consumption, knowing that their consumption habits also have an impact on the environment.

Nowadays, both governments and citizens seek to modify the current processes of manufacturing goods and providing services to others with less environmental impact, and to change processes and habits making them more eco-friendly. This conversion involves the adoption of ecological consumption habits, which comprises the purchase of alternative products that do not threaten the resources and the natural balance of the planet. These products are products whose design, manufacture, transport and/or distribution process was designed to minimize the environmental footprint associated. They will be referred in this study as green products.

So “as the environment issue has become mainstream in the world” (Lee & Chen, 2019, p.1), consumers increasingly adopt these green products and green

marketing becomes not only a need for enterprises, but also an opportunity for companies to reinvent their processes becoming more efficient and competitive, while differentiating themselves from their competitors (Chang & Chen, 2012). The “realization that a good socio-environmental performance could form the basis of competitive advantage” (Peattie, 2001, p.132), lead firms to “exploit the environmental concerns of consumers to differentiate and to position their products in order to seize new green markets” (Chen, 2012, p.516). The success of a green marketing strategy relies on a deep understanding of the green consumer, his motivations and what drives his green consumption habits.

1.2. Problematic

Since the arise of the green marketing era, thousands of studies have been published in order to deepen the knowledge about this new field. In fact, most of the past work deals with consumer profiles (Banerjee & Iyer, 1993) and what drives his intentions to the purchase of ecological products. Proof of this is the numerous market studies available in the literature, performed amongst different countries and focused on different types of products, in an attempt of profiling the green consumer and disclosing his motivations.

A great effort has been made to disclosure the drivers behind green success, but all these efforts have failed to mitigate the flaw in the relationship between environmental concern and buying attitude, called green purchasing inconsistency or green attitude-behavior gap. A green gap is ascertained when consumers care about the planet, but are rarely willing to deal with the hassles of recycling, spend the additional money on green products, or risk the potential embarrassment of having environmentally friendly products fail to meet expectations (Gleim & Lawson, 2014). This green gap is responsible for green consumerism not being growing at the same pace as environmental awareness and concern and explains why green marketing is still far from reaching its full potential.

So, tough the green consumer has been deeply studied across various countries, in different cultures and across product categories, all the information conquered hasn't been enough to close the green gap and bring green consumerism to the

next level. The reason might lie in the fact that most of the published studies profile a specific group of green consumers (e.g. users of cosmetics or hybrid cars; British housewives; Indian students; Millennials ...) or devalue the effect that advertising credibility might have on the other aspects that are known to influence the green buying behavior (environmental concern, perceived consumer effectiveness, willingness to pay more, etc).

Advertising credibility applied to green marketing is not so extensively explored. Newell, Goldsmith and Banzhaf, (1998) studied the impact of misleading environmental claims on consumer's perception on advertisements and the results from their study should not impress: levels of perceived deception were associated with lower levels of perceived corporate credibility, less favorable attitudes toward the ad, less favorable attitudes toward the advertised brand and decreased purchase intentions towards the product in the ad.

Additionally, Banerjee and Iyer (1993), who make the first attempt to analyze a sample of "green print" advertisements using a framework to categorize them stand that, "given the growing attention placed on environmental issues and the heavy reliance of the consuming public on mass media, the dire lack of credibility in green advertising is a shocking state" (Banerjee & Iyer, 1993, p.3).

Spack, Board and Crighton (2012) studied two aspects of green packaging - argument strength and use of imagery - on participants' perceptions of an advertising claim's credibility, their perceptions that an advertised product is green, their attitudes toward a product, their behavioral purchasing intent, and their general perceptions of green product advertising. Spack et al. (2012) point the need to "further study how environmental information on product packaging affects the consumer image of a brand" (p. 442), since there is little scientific literature about this issue.

Advertising credibility and its effect on the determinants of green buying behavior is therefore underexplored and might be part of the solution to address the existing green gap. A broader approach to study the green buying behavior is required, one that analyzes how advertising credibility might moderate the consumer behavior towards green consumerism.

1.3. Objectives

Since green consumerism represents nowadays a necessary change for the long-term survival of the planet and the people, we understand that green marketing should be achieving its full potential at the present day.

The aim of this study is hence to contribute to the existing literature with insights about the factors that affect green buying behavior. Particularly, we will explore the effect that advertising credibility might have on the other variables and on their effect over green buying behavior.

In order to do so, it will be tested, in a sample of Portuguese consumers, a group of relationships built based on existing literature. These relationships are established between different factors - environmental concern, prosocial attitudes, receptivity to green communication, perceived green value, perceived consumer effectiveness, willingness to pay more, green skepticism - and their effect on the green buying behavior, the dependent variable. Advertising credibility will be the moderator variable and it will be tested how this impacts the relationships between the mentioned factors and the green buying behavior.

By providing further insights about some of the main factors that affect green buying behavior and how the perceptions of advertising credibility moderate these relationships, this study arises knowledge on consumer's perceptions and buying behaviors. This knowledge might be then used by green marketers to better prepare and communicate their advertising campaigns so that they are more well-directed and effective, hence providing an increased return on advertising investment. Ultimately this might help closing the green gap, increasing consistency between values and attitudes.

1.4. Structure

This study is structured in six parts. In chapter I the importance of the matter in hand and the problematic under discussion are introduced, justifying the relevance of this study and finally the general and specific objectives are presented. In the chapter II, existing literature is explored, providing the theoretical basis for the current study and for the substantiation and formulation of the hypothesis of the study model used. Based on proper theoretical support,

the study model is designed. In chapter III the design of current investigation is presented, along with the construct of the questionnaire, applicable measures and scales, and the statistical tools used to process the data collected. In chapter IV discussion of results obtained will take place, based on the exploration and treatment of data collected. In chapter V conclusions and managerial implications from present study will be settled, as well as suggestions for future research. Chapter VI will include all reference sources used to perform the present study.

2. Literature revision and theoretical model

2.1. Theoretical Framework

According to Dangelico and Vocalelli (2017, p.1263), “over the past decades, environmental sustainability has raised at the top of the international political agenda and has been recognized as a key driver of innovation”. As a result, “the number of companies developing green products has been rapidly growing and consumers have shown an increasing interest for these products” (Dangelico & Vocalelli, 2017, p.1263). Green consumerism raises from the recognition that natural resources are limited, and that consumption should be ruled by sustainability principles. Mansvelt and Robbins (2011, p.10) define it as “a range of practices centered on lowering consumption, consuming more sustainably, or ameliorating the negative social and environmental effects of consumption”.

Green consumerism creates a new opportunity for many companies and organizations are now led to embrace the challenge of integrating environmental issues into business strategies. Green initiatives have therefore emerged across almost all sectors including health care, electronics, personal care and automobiles, durable and nondurable services and industries (Saxena & Khandelwal, 2012). These green initiatives are the practical implementation of green marketing, which is born from the need to develop, promote and sell environmentally friendly products that can sustain the growth of economies without compromising the future of the planet.

Green Marketing

The first records of definitions related to green marketing date back to 1976 (Dangelico & Vocalelli, 2017), when Hennion and Kinnear (1976) defined it as “concerned with all marketing activities that have served to help cause

environmental problems and that may serve to provide a remedy for environmental problems” (p.1) .

This concept has evolved and changed over time and authors such as Awan and Wamiq (2016) will adopt a shorter definition for green marketing, considering it simply the “promotion of those products, which are not harmful for environment and for the human being” (p. 2959). According to Reddy (2018) green marketing, also alternatively known as environmental marketing and sustainable marketing, as an organization’s efforts at designing, promoting, pricing and distributing products that will not harm the environment (as cited in Pride & Ferrel, 1993). In this study, we will adopt the definition from Peattie (2001) who defines green marketing as the “marketing activities which attempt to reduce the negative social and environmental impacts of existing products and production systems, and which promote less damaging products and services” (p.129).

Considering the definition adopted, green marketing should refer to green products and services. Reddy (2018) defines green product as “a product that is manufactured through green technology that causes no hazards to the environment” (p.121). Others, like Awan and Wamiq (2016, p. 2959), list a group of features which characterize green products:

- Green products are grown originally and have natural elements.
- Green products are ecological, reusable, and biodegradable.
- Green products neither harm nor pollute environment.
- Green products are not experienced on and cruelty to animals.
- Green products are not a threat to the health of human being and animals.
- Green products are not practically harmful when it is produced or disposed. Its manufacturing and disposal is safe and efficient. Efficient.
- Green products materials are not derived from the scare species and threatened environments.
- Green products are not contributing to unnecessary waste in its use and packaging.

For the purpose of this study, we will adopt the definition of Ottman, Stafford, and Hartman (2006) who stated, about green products, that “although no consumer

product has a zero impact on the environment, in business, the terms 'green products' or 'environmental product' are used commonly to describe those that strive to protect or enhance the natural environment by conserving energy and/or resources and reducing or eliminating use of toxic agents, pollution, and waste" (p. 24).

Green Profiling

According to Lampe and Gazda (1995), green marketing does not influence all consumers in the same way, so it is crucial to identify and reach those market segments concerned with the environment. Even though the goal of marketers is to attract more customers into the green zone, green products are in first place thought to be sold to green consumers - profiling the green consumer becomes therefore an imperative to develop efficient green marketing strategies.

Efforts to identify environmentally friendly consumers date back to the early 1970s. Berkowitz and Lutterman (1968), as well as Anderson and Cunningham (1972), were pioneers in the study of the profile of socially responsible consumers. Anderson and Cunningham (1972) identified some of those characteristics of these consumers. Based on the definition from Kelley (1971), the authors define socially conscious consumers as individuals concerned not only with meeting their personal satisfactions, but also societal well-being (p.1) belonging to an above-average socio-economic class and with professional occupations of recognition and status.

This investigation from Anderson and Cunningham (1972) allowed them to trace the typical profile of the consumer with high environmental awareness: female, 40 years old, a high level of education and an above-average socio-economic status. This profile may not be updated today.

Determinants of green purchase behavior

It is generally accepted that there is a relationship between eco concerns and willingness to adopt a green purchasing behavior. However, "there isn't yet a consensual model able to predict green consumer behavior" (Shiel, Do Paço & Alves, 2018, p.1) .

Joshi and Rahman (2015) carried out a study that comprised the revision of 53 articles related to attitude-behavior inconsistencies, issued from 2000 to 2004. The authors categorized the factors analyzed in different studies into two types – individual factors, related to the individual process of decision making, and others considered situational (price, product availability, quality and attributes, among others). The extensive review of all miscellaneous factors showed that consumer's environmental concern and products functional attributes were the two major determinants of green consumerism. However, if consumers "lack a feeling of strong personal obligation towards the betterment of the environment and society [they] may not be willing to select green products, especially when they have different options" (Joshi & Rahman, 2015, p.137). According to the authors, consumers generally "make a trade-off between environmental concern and product attributes while purchasing green products" (Joshi & Rahman, 2015, p.137).

Moreover, the fact that green products are generally more expensive than conventional products was found to be one of the barriers to the adoption of their consumption. In addition, the inconvenient that they are not as available as conventional products, demanding the consumer to spend time searching for them, represents an obstacle. Lack of trust in ethical claims and green characteristics were also reported as negatively influencing the green purchase in this study from Joshi and Rahman (2015).

Another determinant factor is perceived quality. This study highlights how functional attributes of the product are valued by the consumer, often above its ethical characteristics. This finding is also supported by the results from a study carried out on 197 undergraduates from a private university in the southern USA (Lu, Bock, & Joseph, 2013). This study, specifically designed to address which product attributes are valued by the millennials and which factors represent barriers in the adoption of green products, showed that "consumers are not willing to give up certain product attributes just to 'go green'" (Lu et al., 2013, p.4). In fact, according to this study, this was found to be one of the reasons that prevents millennials from buying green products – the belief that they are of inferior quality. Besides this, they consider green products too expensive; they are unable to

differentiate between green and non-green products and there is a lack of trust surrounding green products (Lu et al., 2013).

Taking into consideration the fact that quality is frequently perceived as inferior in green products, companies should focus not only on improving the product's environmental performance, but also on its quality and communicating these two characteristics to the market, so that the perception of quality is not negatively affected by the green character of the product. In addition, green products must ideally own characteristics that make them suitable to replace non green/standard products. Their availability, quality and price should be accessible in the same way as standard products are.

Liobikiene, Mandravickaite and Bernatoniene (2016) used the Theory of Planned Behavior to evaluate the determinants of green purchase behavior in all European Union Countries. Although largely used to assess the green buying behavior, in this theory the consumer intention is the central dependent variable and it is considered the best predictor of behavior, which is not always true.

The data from this study was collected through a Eurobarometer survey conducted in 2012, which encompassed 23 questions about environmentally friendly behaviors and attitudes.

The results showed that there were observed substantial differences in terms of green purchase behavior in the European Union countries and it did not depend on economic development significantly (Liobikiene et al., 2016). The subjective norms had the biggest influence on green purchase behavior and its level "significantly depended on economic development" (Liobikiene et al., 2016, p.42). In practice, what was observed was that in less developed countries the individuals felt more morally responsible for buying green products than in the others. Additionally, subjective norms are reinforced by a culture of uncertainty avoidance (Liobikiene et al., 2016). This might explain why people from less developed countries, who are more familiar with risky or uncertainty conditions, have stronger subjective norms. In this context, the enrichment of poorer countries might entail a perverse repercussion in terms of European global subjective norm. According to the same authors, "interaction of knowledge and

confidence in green products significantly determined the green purchase behavior in all countries” (p.44).

Shiel, Do Paço and Alves (2018) advanced a new model for green consumer behavior based on a different set of buying behavior antecedents: a prosocial attitude, the value placed on green and green communication. The proposed model contemplates, as the antecedents of green behavior, the general prosocial attitudes, the green consumption values and receptivity to green advertising.

On their study, the authors found that general prosocial attitudes (defined as “the lasting dispositional tendency for individuals to think about the rights and well-being of others, to feel empathy and worry for others” (Joshi & Rahman, 2015, p.3)) positively affect green consumption values which, in turn, positively affect receptivity to green communication (defined as “the attention paid or feelings towards green advertising” (Shiel et al., 2018, p.3)); in addition, green consumption values also affect positively the green individual buying behaviors. Differently, green advertising generates only a weak influence on green buying behaviors. Their findings might therefore direct marketers to create marketing strategies more focused on prosocial values, which proved, in this study, to positively affect green consumption.

Narula and Desore (2016) carried a study to frame the green consumer behavior and found that, though this is a highly researched area, studies are found to be generic and that researched should focus on addressing gaps between consumer perceptions and designing green products, identification of green segments, positioning green products and also inclusion of stakeholders in green marketing process. In the author’s view, “green marketing is not to be implemented only by businesses, but it is a collective activity where all the intermediaries have opportunities to contribute towards sustainability” (Narula & Desore, 2016, p.7).

Therefore, sustainable marketing requires a multi-factor approach that should include each stakeholder involved in the marketing chain, from development and manufacturing, to distribution and retailing. This chain ends up in the consumer, thus sustainable marketing and sustainable consumers are indissociable.

Lim (2017) carried out a study where the concepts of responsible consumption, anti-consumption and mindful consumption are analyzed under the perspectives

of different authors. According to the author, “responsible consumers consider social concerns, environmental concerns, and ethical concerns and translate them into responsibilities expressed through their consumption choices and decisions” (Lim, 2017, p.76). The anti-consumption encompasses the engagement of certain consumers in anti-consumption practices and the mindful consumer is the one who shows a higher temperance in consumption practices. Exploring these concepts might be key to understand how consumers can engage in sustainable consumption practices.

Green Companies

“Green marketing is a major trend in competitive business” (Lu et al., 2013, p.3) and there is an improved perception of companies that protect the environmental cause when compared to regular business. Ottman (2014) states that “green inspires innovative products and services that can result in better consumer value, enhanced brands, and a stronger company” (p. 18). According to Lu et al., (2013, p.3), “regardless of size, companies recognize the benefits of going green”.

A study carried out by the Marketing Research Laboratory in Athens in collaboration with the Sustainability Center revealed that more than 92% of consumers have a positive attitude towards companies and businesses that take ecological issues into account (Papadopoulos, Karagouni & Trigkas, 2010). In addition, the consumers questioned also stated that they were willing to pay an additional 6% for certified wood within the scope of sustainable forest management. This willingness, though, not always translates into real action, and that is the reason why this topic has been so exhaustively studied in different potential markets.

According to Lee and Chen (2019, p.1), “due to rising environmental consciousness, consumers increasingly choose those green products which are harmless to our environment, which drives them to contemplate and purchase the product with the green attributes transparency”. In this study, the authors start out with the assumption that green transparency policy is important for supporting industry level modifications which aim at improving the environment, and that that is an essential requirement to foster Corporate Social Responsibility; thus, the

enterprise that presents higher green corporate transparency will tend to acquire a greater image of Corporate Social Responsibility. The impact of green attribute transparency on green brand image, green brand trust and green brand equity, and consequent impact on willingness to adopt, is also putted to the test. Results confirmed a significant positive effect between corporate transparency, corporate social responsibility image and green brand image; furthermore, corporate social responsibility image exerts significant influences on green brand trust and green brand equity. Green brand image is also found to have a significant positive effect on green brand trust and on green brand equity. As a consequence, this study proves that green brand equity influences the willingness to adopt in a positive way (Lee & Chen, 2019).

Sustainability is a comprehensive concept that can also be applied in the perspective of the long-term chances of survival for companies. Schultz and Block (2015) proposed a new measure, brand sustainability, and defined it as “growing the brand outside the current user base so that the brand continues to expand in terms of both volume and profitability over time in a potentially unlimited way” (p. 340). If past measures of brand value have focused on brand awareness, customer brand equity and brand loyalty, this study proposes a different approach. Though the authors recognize their usefulness, they consider these traditional measures not predictive of the long-term chances of survival of a brand.

Brand sustainability is a crucial feature that might be at risk when companies give up on some positive features of their products to exclusively elevate and work on their green aspects, compromising their value. This can be explained by a phenomenon designated as green-marketing myopia which, according to Ottman et al., (2006), occurs when businesses focus too much on the pure-green attributes of their products, without considering important value drivers that increase the attractiveness of their offerings.

Greenwashing Effect

Since green consumption represents a growing and more attractive market, according to Mendleson and Polonsky, (1995) some organizations appeared to be changing their marketing claims without modifying their products or production

processes to attract green consumers. This is known as greenwashing, “the dissemination of false or incomplete information by an organization to present an environmentally responsible public image” (Furlow, 2010, p.2). This phenomenon arises together with the green marketing and is carried out by manufacturers or companies who promote their products or themselves as green only to attract the environmentally conscious market segment. In the author’s opinion, the two major problems caused by greenwashing is that not only it misleads consumers, but also undermines the efforts of the companies which are truly environmentally friendly, destroying their competitiveness.

In other words, “the negative publicity generated by one firm’s poor environmental marketing performance can have detrimental effects on other firms. It may taint existing and future green marketing activities of these other firms or it may discourage firms which are not yet using green marketing activities from doing so” (Mendleson & Polonsky, 1995, p.4-5). Ultimately, if the consumers take all green claims as being false, companies will no longer benefit nor be motivated to go green, and that will end up harming the environment.

To counteract this, “environmental claims must be honest, sincere and a reflection of the organization’s mission” (Furlow, 2010, p.3). A study conducted by Kumar and Ghodeswar (2015) is in line with this finding, as it states that “marketing of green products should offer consumers facts related to environmental performance of the companies, information related to green products, congruence with their desirable social image and relevance to their lifestyles” (p. 342).

Green Gap

Studies on green marketing and the relationship between environmental concern and the consumption of green products demonstrate some discrepancy between both. Many studies reiterate this flaw in the link between environmental concern and buying attitude, which is called green purchasing inconsistency or green attitude-behavior gap.

Johnstone and Tan (2015) explored the green attitude-behavior gap in a 19 – 70-year-old group consisting of 51 individuals. This study revealed that consumers’

green perceptions may influence their green consumption behaviors. Whilst consumers may be concerned about the environment, and agree that action needs to be taken, they find too hard to go green (perceived sacrifice and commitment); it is not convenient; they can't distinguish green from non-green products; it's worthless; they don't see the immediate impact in the enduring problem; a growing cynicism towards green marketing initiatives is reported. An interesting finding was that some consumers may not adopt greener consumption practices due to their unfavorable perceptions of green consumers. Green consumers are in some cases seen as controlling people who like to monitor other people's consumption habits and impose their beliefs. This was found to be one of the reasons why consumers have a disapproving image from green consumers, which in turn hinders them from adopting green consumption habits (Johnstone & Tan, 2015).

The Theory of Planned Behavior was used in the study that Moser (2015) carried out based on data provided by the German Market Research Institute from a panel of 2012 households. The purpose was to identify major antecedents of everyday green purchasing behavior and to determine their relative importance. Findings were that willingness to pay was the strongest predictor of green purchasing behavior, followed by personal norms. Attitude was not predictive of actual behavior, which may be part of the reasons why there is the attitude-behavior gap when it comes to green purchase. Conclusions are that consumers need to be aware that their consumption behavior can make actual difference in order to feel compelled to adopt new buying habits.

Another study on green gap was carried out by Kim, Oh and Yoon (2016) with 231 south Korean adults, to investigate how consumer and message characteristics affect the consistency between message acceptance and purchase intention for green products. The test of one of the hypotheses showed that environmental commitment and message believability, when combined, strengthen the relationship between message acceptance and purchase intention.

In a study conducted to 116 consumers in Singapore, findings were that individuals have a high level of concern regarding the environment yet they were generally averse to paying high prices for green goods (Rasaputra & Choon-yin,

2015). In practice, the green purchase intention of these customers is not converted into purchase decisions.

In a different study from Braimah (2015) price was also found to be the key variable in purchase decision making. Based on the results, the author encourages industrialists to reduce the cost of green products, and couple that with intensive public education campaigns to enhance the level of green brand consumption.

Even though environmental concerns are a current topic all around the world, in developing countries the green purchasing intention is still not a reality. In a study carried out to 316 individuals from various shopping points in Accra, the capital city of Ghana, the “majority of respondents (54%) familiar with environmental issues confirmed they would not switch from their preferred brands to less fancied brands even if the less fancied brands were more environmentally friendly” (Braimah, 2015, p.1). It was also confirmed in the study that price, brand name and convenience performed better than customer concerns for green issues, in terms of influencing respondents’ purchase decisions.

However, results might not be that different in developed countries: in a study carried out on 30 British females, the majority of respondents viewed price and performance as the most important factors when choosing cosmetics instead of green elements (Lin, Yang & Hanifah, 2018).

Yang (2017) states that “over the past years, both consumer awareness and consumer attitudes toward sustainable, or ‘green,’ brands have increased significantly. However, consumers’ action isn’t aligning with their intent” (p. 160). This study focused on the personal care items market segment and the goal was to explore the effect that brand knowledge has over consumers’ perceptions and brand evaluation. The results, based on 568 validated responses, showed that “perceived quality acts as a linkage between brand knowledge and purchase intention” (Yang, 2017, p.160); both brand image and brand awareness, which incorporate brand knowledge, have a positive influence on consumer’s perceived quality. Moreover, country of origin and knowledge on eco/green products were also found to moderate this effect.

Bahl and Chandra (2018) conducted a mixed (descriptive and quantitative) study on 300 consumers in Uttarakhand, India. In their study, the authors wanted to investigate the impact of the four marketing mix variables (product, price, place and promotion) on the purchase intention of the consumers applied to green products, as well as attitude towards green behavior. Not surprisingly, results showed that marketing mix has a significant effect on purchase intentions and attitude towards green products. The two, combined, have an important impact on purchase intention.

Dobson (2007) elaborated on the best approach to achieve the necessary change in the behavior of individuals, institutions and organizations for sustainable development. The author categorizes the type of consumers in structuralists and voluntarists. Change in structuralists behavior would be driven by previous changes in deep structures (example: changes in economic structure in the form of fiscal incentives would drive the change for these); for voluntarists, the attitudes and behavior are “relatively independent” of the structures that inform them, so change can be achieved without changing deeper structures. According to his article, behavior change driven by environmental citizenship considerations is more likely to be maintained than behavior change driven by financial incentives. For that reason, marketers should direct the awareness work to the values and beliefs of consumers.

Green Strategies

Papadas, Avlonitis and Carrigan (2017) define green marketing orientation as “the extent to which an organization engages in strategic, tactical and internal processes and activities which holistically aim at creating, communicating and delivering products and/or services with the minimal environmental impact” (p. 240). The authors found that there wasn’t a scale to operationalize “all the organizational facets that are necessary to become a green marketing-oriented company” (p.236). Based on qualitative interviews performed to 22 experts and individuals from multinational companies, from different areas (energy, financial services, retailing, fast-moving consumer goods, cosmetics, etc), the authors generated 36 items that comprise what they consider the three main dimensions of green marketing orientation: strategic green marketing orientation, tactical green marketing orientation and internal green marketing orientation. Strategical

orientation would be “the extent to which organizations integrate the environmental imperative in strategic marketing decisions” (Papadas et al., 2017, p.240); tactical orientation would embody the transposition of environmental values into tactical marketing decision, and internal green marketing decision would encompass the “level of assimilation of corporate environmental values by all internal stakeholders” (Yang, 2017, p.240). By performing a self-assessment using this questionnaire, companies might detect some features that need to be improved on their green marketing strategies. This questionnaire might, therefore, be very useful to companies who need to improve their performance and lift consumers engagement.

Surprisingly, few empirical studies “examine how green marketing is accomplished in the day-to-day practices of corporations” (Fuentes, 2015, p.2). In his study, Fuentes (2015) mentions different marketing practices used at Nordic Nature Shop, a company that “sells green outdoor products as a way to carry out outdoor practices while simultaneously protecting a fragile outdoors and thereby enabling consumers to be good both in and to nature” (Fuentes, 2015, p.11). The goal is to provide guidance on how to operationalize green marketing in business day-to-day practices.

According to Polonsky (2011), “green marketing is not achieving its potential for improving the quality of life of consumers, while improving the natural ecosystem” (p.1311). The author argues that the reason for this failure is the inability of the three main stakeholders – consumers, firms and governments – to integrate macro-marketing perspectives into their micro-decisions. The author suggests three initiatives to fight this, namely 1) marketers to focus their campaigns on real environmental value rather than financial measures, 2) alter the current discourse to highlight the importance of action and also increase education on the issue, and 3) marketers to shift away their focus from the acquisition of goods to create value on satisfaction, since they are not necessarily the same. On top of this, the environment should be contemplated as a stakeholder within the process for which the consumer should be responsible for, not a mere mean to achieve satisfaction.

2.2. Hypothesis Development

Zelezny and Schultz (2000) refer to environmental consciousness as the psychological factors that determine individuals' propensity towards pro-environmental behaviors. According to the authors, "of all the social issues that face us in this millennium, the most daunting are environmental problems" (p.365). The authors also stress that the necessary change to solve our environmental crisis involves changes in individual behavior. In this study, environmentalism comprises "the processes associated with actions intended to lessen the impact of human behavior on the natural environment" (p. 367). The authors include in this framework a variety of psychological constructs, including behavior, intentions, attitudes, beliefs, motives, and values, as well as actions intended to lessen the impact of others on the natural environment, such as activism, public policy, and environmental justice (Zelezny & Schultz, 2000).

"Research indicates that people's concern for the environment has had a definite impact on consumer purchase decisions whereby it is suggested to target consumers according to their environmental beliefs" (Kim, 2011, p. 65-66). According to this author, "consumers who take into account the ecological consequences (including people and nature) of their private consumptions would be more favorable toward the environment and the use of green products compared to the others who do not care about them" (p.67). Therefore, the purchase of green products can be importantly determined by environmental concern of the consumer performing the behavior (Kim, 2011).

According to Alsmadi (2007) "environmental consciousness means showing a strong sense of environmental responsibility (i.e., supporting efforts to protect and preserve the environment as well as advising others to behave accordingly)" (p. 341). His article explores the attitudes of Jordanian consumers regarding both their current environmental consciousness and their willingness to adopt environmentally friendly consumption behavior. This study showed that Jordanian consumers were, generally, concerned about the environment, as they demonstrated reasonably high levels of environmental consciousness relating to various environmental issues. The article also stresses the need to "link consumers' good intentions to actual buying behavior" (p. 339) through an

efficient green marketing strategy that has into consideration the cultural context of the Jordanian consumer.

Consumers with a stronger concern for the environment are more likely to purchase products as a result of their environmental claims than those who are less concerned about the environmental issues (Mainieri et al, 1997). This survey made to 204 middle-class householders covered the following topics: “environmental habits of consumers, confusion about products’ environmental claims, beliefs about environmental consumerism, attitudes of general environmental concern, behaviors related to the environment, and sociodemographics” (Mainieri et al., 1997, p.195). The average scores for environmental buying behavior were substantially lower than the ones on consumer beliefs about their environmental responsibility, as well as proenvironment attitude scores. As such, in this study the results indicate that the surveyed consumers don’t translate their environmental beliefs into action.

Kim and Choi (2005) carried out a survey-based study on 304 undergraduates, where following hypothesis was tested: “Environmental concern directly and positively relates to green purchase behavior. People with a high level of environmental concern are more likely to engage in pro-environmental behavior than are those who are less concerned” (p. 593). This study succeeded to confirm that people with a high level of environmental concern are more likely to adopt a pro-environmental behavior than those who are less concerned about environmental issues.

In another study carried out by Chan (1996), consumers both from Canada and Hong Kong were tested to explore the relationship between environmentally friendly purchases, environmental concern, level of education and family income for the two groups tested. According to the author, while Canada is seen as a land of fresh air and wilderness, Hong Kong has limited land and metropolitan nature, which is why the two opposite countries were chosen for this study. Evidence showed that for both tested consumers, environmentally friendly purchases were more frequently made by people who are more concerned about environmental issues.

Based on these and on the extend literature that supports the relation between the environmental concern and the adoption of green buying practices, following hypothesis is formulated:

H1: People who demonstrate environmental concern are more likely to adopt a GBB

Weinstein and Ryan (2010) refer to prosocial attitudes as an umbrella term characterized by actions that help and/or enhance the wellbeing of others. Under that umbrella, different behaviors might be included such as volunteer work, helpful interventions, donations, among other examples of beneficial actions. A study carried out by Steele et al., (2009) on blood donors, confirmed that these individuals have “high levels of the primary prosocial characteristics (altruism, empathy, and social responsibility)” (p. 43).

According to Shiel et al. (2018), “prosocial attitudes might constitute an important factor for incorporating into any model seeking to explain green behaviors” (p. 3). In this study, the authors define general prosocial attitudes as “the lasting dispositional tendency of individuals to think about the rights and wellbeing of others, to feel empathy and concern for others” (p. 3). Based on the results of the survey applied to the sample, the authors conclude that “general prosocial attitudes, which encapsulate the doing of good for the benefit of others, positively interrelate with the existence of green values” (Shiel et al., 2018, p.19). Therefore, the authors may state that people who care for others and societal wellbeing report higher green values. Furthermore, it is mentioned that general prosocial attitudes have a direct influence on green consumption values, and that green values positively influence green buying behavior and receptivity to green advertising.

A study was carried out to assess the environmental and altruistic attitudes on willingness to pay for Organic and Fair Trade Coffee in Flanders (Maaya et al., 2018). In average, this study showed an increase of 0.5 euros in willingness to pay for fair trade labeled coffee. Findings support that environmental and altruistic attitudes have important roles in driving consumer decisions and willingness to pay for sustainable products. “The positive effect of altruistic social behavior shows that individuals with a collective environmental concern are more likely to

purchase pro-environmental food products like organic and fair-trade coffee” (Maaya et al., 2018, p. 14). Based on these findings, the authors stress the importance of including consumers’ attitudinal questions in market segmentation policies.

Straughan and Roberts (1999) define altruism as “a concern for the welfare of others” (p. 574) and carried out a study to profile the green consumerism amongst the millennials including this new measure. The results showed that the altruism measure was the second most important of all the predictor variables. The authors stress the relative importance of altruism in predicting the ecologically conscious consumer behavior, suggesting firms should be explicit in the link between their environmental strategies and beneficial outcomes, but must also show how other people are better off as a result (Straughan & Roberts, 1999).

Based on mentioned studies, it is conceivable to formulate the hypothesis:

H2: People who have general prosocial attitudes are more likely to adopt a GBB

According to Bailey, Mishra and Tiarniyu (2016), green advertising receptivity is defined as “the extent to which consumers pay attention to and are favorably disposed and responsive to advertising that uses green messages in the marketing of products or a company itself” (p. 8). This receptivity moderates consumer’s attitudes and intentions towards a company and its green initiatives. Therefore, determining receptivity to green communication could help a company focus its efforts on consumers who may be more driven to support green marketing strategies. By using a validated green-receptivity scale, green marketers would be able to “tap into the extent to which members of their target audience are receptive to green advertising and thereby tailor their messages to better appeal to those consumers who may be more receptive to them” (Bailey et al., 2016, p.4). For the authors, it is particularly important to evaluate receptivity to green marketing and communication, especially when modern consumer is well-informed and usually skeptical about green advertising. As a consequence of that, companies are required to do greater efforts “to ‘convince’ their audience about the greenness of their operations and the products/services offered” (Shiel et al., 2018, p.9).

Bailey et al. (2016) created a 9-item validated scale to measure the level of an individual receptiveness to green communications. The goal is to use this scale to drive and support green marketers in their initiatives, guiding their target and focus over consumers who are, naturally, more likely to be receptive to their green communications.

Schmuck, Matthes and Naderer (2018) performed a study to compare the effects of three types of green print ads - a non-green ad, a functional green ad promoting environmental product attributes and a combined nature ad which included a pleasant nature image added addition to functional attributes. Findings in this study revealed that positioning a brand as environmentally friendly by emphasizing environmental brand benefits and using nature imagery in green advertisements may activate, in consumers, cognitive and affective processes that increase their perception of the environmental benefits of a brand. The functional add “enhanced perception of environmental brand benefits, which positively affect purchase intention partially mediated by brand attitudes” (Schmuck et al., 2018, p. 414). This effect is even stronger for combined nature ads, which “activate an additional emotional process of virtually experiencing nature, which positively influences brand attitudes and purchase intention beyond perceptions of environmental brand benefits” (Schmuck et al., 2018, p. 414). The effects of the combined nature ads were even stronger for highly involved consumers.

Another study carried by Kim and Kim (2008) showed that shoppers with high receptivity to advertising messages (high-RTAM) tend to perceive each of the six value dimensions, (i.e. monetary cost saving, time cost saving, energy cost saving, post-sale customer support, engaging store environment, and personal leisure experience) as the more important when making a retail choice decision. According to the authors, not all consumers are receptive to advertising messages, therefore retail advertisers must focus their attention on those with high receptivity in order to make the best use of their limited resources (Kim & Kim, 2008). This suggests that receptivity to green advertisings can result in improved marketing performance, i.e., improved sales.

Existing literature proves that receptivity to advertising affects positively the buying behavior. If extended and adjusted that verification to the green marketing field, we can elaborate the following hypothesis:

H3: Receptivity to green communications has a positive effect on GBB

According to Sweeney, Soutar and Johnson (1999), “the most common definition of product value is the ratio or trade-off between quality and price” (p. 79). In this study, the authors stand that both marketing practitioners and scientists have come to recognize the major influence that perceived value has on consumer behavior. Due to that, extensive research has been carried out on perceived value as this is recognized as having a positive effect on marketing performance.

Chang and Chen (2012) describe “green perceived value” as a “consumer’s overall appraisal of the net benefit of a product or service between what is received and what is given based on the consumer’s environmental desires, sustainable expectations, and green needs” (p. 510), referring to (Patterson & Spreng, 1997). In this study, the authors consider green perceived value and green perceived risk as the two main determinants of green purchase intentions, mediated by green trust. They were able to establish a positive relationship between green perceived value, green trust and green purchase intentions; contrarily, green perceived risk negatively influences both. In addition, green trust partially mediates both green perceived value and green perceived risk, the two antecedents of green purchase intentions. Therefore, enhancing green trust can increase the extent of the positive relationship between green perceived value and green purchase intentions and decrease the extent of the negative relationship between green perceived risk and green purchase intentions.

Based on the empirical results, the authors stress out that firms should apply green marketing strategies to “enhance perceived value of their products and reduce the perceived risk of their products with respect to environmental consideration to raise their competitive advantage” (Chang & Chen, 2012, p.503).

Patterson and Spreng (1997) carried out a study to determine the impact of perceived value in concert with satisfaction and repurchase intentions in the business-to-business (services) sector. The authors consider consumer value “a key strategic variable to help explain repeat purchase behavior, brand loyalty and

relationship commitment” (p. 416). The authors stress that previous studies have found perceived value to influence intentions directly, yet these “findings clearly show value (as well as each performance dimension) is completely mediated through satisfaction in influencing repeat purchase behavior” (Patterson & Spreng, 1997, p.429). In this study, different studies are referenced to justify that perceived performance or quality are direct antecedents of value, which, in turn, is considered “a direct driver of purchase/repurchase intentions” (p. 416).

Based on the definition of Thaler (1985) that breaks down the perceived value into two parts - transaction utility and acquisition utility - Zhuang, Cumiskey and Xiao (2010) carried out a study to evaluate the impact of perceived value on the intention of buying running shoes. Despite the evident limitation of this study in regards to product category, it proved that acquisition utility and transaction utility, i.e. perceived value, is positively related to buying intention. Patterson and Spreng (1997) proved that not only perceived value impacts the buying decision, it will also reinforce the chance of a repurchase. In addition Kim, Zhao and Yang (2008) were able to prove in their study, based on 232 questionnaires to online shopping customers, that perceived value affects both trust and commitment to a relationship - in this case, to a product or brand.

In another study carried out on hybrid cars owners, Hur, Kim and Park (2013) analyzed how consumer value relates to loyalty and price consciousness through consumer satisfaction. In this study, perceived value was split into four components - functional, economic, emotional, and social value. Findings were that perceived value impacts loyalty intentions toward the manufacturer.

Considering mentioned studies, a fourth hypothesis is formulated:

H4: Perceived value positively correlates to the interest in adopting a GBB

According to Berger and Corbin (1992), perceived consumer effectiveness is an “evaluation of the self in the context of the issue” (p. 80).

Perceived consumer effectiveness reflects whether what people believe they do as individuals makes a difference (Straughan & Roberts, 1999). This definition becomes relevant since an individual may feel very concerned about an issue

and at the same time totally helpless in his or her ability to have an impact on the problem through his or her own consumption.

Results from Straughan and Roberts (1999) study show that “individuals must be convinced that their actions will be effective in fighting environmental deterioration” (p. 568). The authors state that this finding supports the acknowledgement that environmental-based marketing efforts should be “explicitly linked with beneficial outcomes” (Straughan & Roberts, 1999, p. 568). In the author’s opinion, simply claiming to be “green” is no longer enough - instead, marketers must show how consumers are helping to preserve the environment by choosing green products (Straughan & Roberts, 1999). Results from this study showed that perceived consumer effectiveness was the most important of all correlates in ecologically conscious consumer behavior.

Gupta and Ogden (2006) consider perceived consumer effectiveness as the extent to which a person believes that an individual consumer can be effective in fighting the ongoing environmental disorders, namely, in pollution abatement. In their study, through literature review, the authors seek to determine which factors could undermine the attitude-behavior gap reported in green consumerism. They settle the level of consumer involvement with the environmental issue and the perceived consumer effectiveness as the two moderators to strengthen the attitude-behavior relationship. Based on existing literature, the authors define four types of consumer based on 1) level of involvement with the environmental cause, and 2) perceived consumer effectiveness: intentionally green, idealist consumer, accidental purchaser and sometimes green. The consumer that shows high levels of both features will be the intentionally green and will display the highest levels of attitude-behavior consistency.

Regarding perceived consumer effectiveness, Kim (2011) states that “consumer attitudes toward environmental issues might not be straightly translated into pro-environmental behaviors; however, the effect of environmental attitudes on green behavior can become greater when consumers believe more strongly that their individual efforts are effective in improving environmental state” (p.75). Correspondingly, “self-efficacy beliefs may influence the likelihood of performing green purchase behavior” (Kim & Choi, 2005, p. 593). This study applied a value-attitude-behavior conceptual framework to identify key antecedents of green

purchase behavior. The results suggest that collectivism has a positive effect over people's beliefs about consumer effectiveness, which in turn influence green buying behavior. Perceived consumer effectiveness was, hence, related to environmental attitude (Kim & Choi, 2005).

A fifth hypothesis is formulated based on mentioned studies:

H5: Perceived consumer effectiveness has a positive impact in GBB

If a product is green certified, usually materials which the product is made of are more difficult to harvest or work with, the product suffered a reengineering process, or it is less available. Therefore, a certified green product is more likely to be more expensive (Chekima et al., 2015).

Dangelico and Pujari (2010) hold that "one of the reasons why pace of green product introduction is still slow in several industries is not the lack of adequate technologies, but high development and manufacturing costs that make their price noncompetitive" (p. 480). According to a testimony analyzed in this study, the green solutions that exist for fuels, automotive, paper, ink, leather, etc own a price that excludes them from any possible preference from industrial and final consumers (Dangelico & Pujari, 2010).

According to Laroche, Bergeron and Barbaro-Forleo (2001), "there is an increasing number of individuals who are willing to pay more for environmentally friendly products" (p. 503). Based on extensive literature review, the authors identified several factors that influence this willingness to pay an additional value for green products. These factors were categorized into demographics, knowledge, values, behavior and attitude. Under the demographics category, literature review portrays a highly socially conscious person as female, pre-middle aged, with a high level of education (finished high school) and above average socioeconomic status (Laroche et al., 2001a). In regards of eco-literacy, impact of this factor in the eco-friendly buying behavior is sometimes contradictory (Laroche et al., 2001). While in this study results showed that ecoliteracy was not a good predictor of consumers' willingness to pay more for green products, the majority of studies show that people who exhibit a high level of environmental awareness and concern tend to be more likely to pay a higher price for green products (Laroche et al., 2001).

The additional value paid, however, differs amongst samples: Japanese consumers were reported to be willing to pay a premium of 8–22% for green food products (Sakagami, Sato & Ueta, 2006); Argentinean, though, reported a broader range of 6-300% more (Rodriguez, Lacaze & Lupin, 2009).

A study carried out by Michaud and Llerena (2011) used experimental auctions to bring out the willingness to pay for remanufactured products. Findings from this study showed that “consumers have the tendency to value the remanufactured product less than the conventional one unless they are informed about their respective environmental impacts” (Michaud & Llerena, 2011, p. 408). Results showed no evidence that consumers are willing to pay more for green products, however, when they are informed about the environmental impact of the products, the willingness to pay for the conventional (most polluting) product “decreases significantly” (Michaud & Llerena, 2011, p. 408).

A study carried on United States hotel guests showed that the guests with higher degrees of environmental concerns, measured by the New Ecological Paradigm Scale (NEP) declare a “higher willingness to pay premiums for hotels’ green initiatives” (Kang, Stein & Heo, 2012, p. 562). Results of a study carried on a sample of 102 food consumers showed that organic and Fair Trade labels increased consumer’s willingness to pay (Didier & Lucie, 2008).

Xu, Zeng and Fong (2012) studied the willingness of Chinese consumers to pay for green and eco-labelled seafood. Findings suggest that Chinese consumers are willing to pay more for green products for the protection of individual benefits, as well as for eco-labeled seafood, in this case for the protection of societal benefits. It shall be weighted that, in this study, 94% of the respondents demonstrated concerns about the safety of seafood, which might, in part, explain the willingness to pay more for green and eco-labelled seafood. In addition, these consumers, particularly those more educated and with a higher consumption of seafood expenditure, were willing to pay more for eco-labeled seafood. Therefore, “Chinese consumers’ willingness to pay not only reflects their desire for safer food to protect themselves from potential food borne hazards, but also reflects their concerns for the societal benefits of protecting the wild seafood resources” (Xu et al., 2012, p. 81). In the author’s opinion, this willingness shown

in the study results from the awareness-raising that Chinese consumers are gaining towards the over exploration of wild species.

Finally, in a study based on a survey carried out by the Qingdao Urban Social-Economic Survey Team to a 500 people sample from Qingdao, 71.6% of individuals claimed to be willing to financially support green products, by paying a premium price. According to the authors, “individuals willing to pay more for the green products are more likely to exhibit real green purchasing behavior” (Zhao, Gao & Wu, 2014, p.4).

Considering that green products are usually more expensive than conventional products, being willing to pay more for a green product can enhance the real chances of buying it. Based on that, next hypothesis is designed:

H6: The willingness to pay more for green products affects positively the GBB

“As a result of the media focus on initiatives related to ecology, environmental protection, environmental degradation, and climate change, individuals are increasingly concerned about the planet” (Do Paço & Reis, 2012, p. 147). This created new opportunities for marketing professionals who started to “integrate the claim “green/environmentally friendly” in communications and green messages also started spreading across various communication platforms, such as word-of-mouth, reference groups, opinion leaders, media activities, advertisements, Internet marketing, and mobile marketing” (Do Paço & Reis, 2012, p.148). According to the same authors, skepticism in relation to environmental appeals has arisen together with the growth of green communication.

Goh and Balaji (2016) define green skepticism as a state where there is “a tendency to doubt the environmental claims or environmental performance of green products” (p. 5). A highlight is made to the fact that green skepticism is seen as a state, not a personality trait, and therefore can be changed. According to this author, “widespread societal concern that firms are disseminating false or ambiguous environmental information has led to a growing number of customers becoming skeptical about the environmental performance and benefits of green products” (Goh & Balaji, 2016, p. 0). This author carried out a study on 303 retail

customers to investigate the mediating roles of environmental concern and environmental knowledge in the relationship between green skepticism and green purchase intentions in Malaysia, an emergent economy. Findings revealed that “green skepticism lowers customers’ environmental knowledge and environmental concern, in turn adversely impacting their purchase intentions for green products” (Goh & Balaji, 2016, p.0).

Do Paço and Reis (2012, p. 148) stress that “with the increase in environmental advertising, some critics have been pointing out that there is great confusion among consumers regarding the green claims of some products. The reasons for this include unclear meanings of claims and no generally accepted definitions of expressions such as ‘biodegradable,’ ‘environmentally friendly,’ ‘ozone friendly,’ and so on” (Do Paço & Reis, 2012, p. 148) . The authors studied a sample of Portuguese consumers to evaluate if consumers who show environmental concerns and who adopt green buying behaviors feel skeptical about the communication issued by companies who intend to be judged as green. The results indicated that “the more environmentally concerned an individual is, the more skepticism he or she will be toward green claims exhibited on packages or featured in ads” (Do Paço & Reis, 2012, p.147).

Greenwashing (“dissemination of false or incomplete information by an organization to present an environmentally responsible public image” (Furlow, 2010, p.2)), mentioned previously, might contribute to this generalized skepticism.

Lastly, overuse and misuse of the green claims can saturate the market to the point that the greenness of the product may become meaningless to the consumer (Zimmer, Stafford & Stafford, 1994).

Considering the mentioned studies, seventh hypothesis is formulated:

H7: Green skepticism has a negative effect on GBB

In general terms, “the credibility of green advertising is considered to be relatively low” (Do Paço & Reis, 2012, p. 148). According to Banerjee and Iyer (1993, p. 3), “given the growing attention placed on environmental issues and the heavy reliance of the consuming public on mass media, the dire lack of credibility in

green advertising is a shocking state". That might, in part, be due to the "increasingly difficult to discern the legitimacy of the rationale for inclusion of green claims on some product labels" (Spack et al., 2012, p. 441-442). On top of that, the greenwashing effect, consisting of advertising in which the green claims are misleading, insignificant, or even false (Les Carlson & Kangun, 1993) cannot be ignored. In the author's opinion, "there are a number of reasons for suspicion and confusion among consumers concerning green advertising" (p. 28).

First, there are many terms used in green advertisement which don't have a clear meaning (examples given: "environmentally friendly", "degradable", "ozone friendly"); second, the scientific knowledge required to understand issues underlying many environmental claims is often complex and subject to change, making it difficult for the general public to understand the message; third, the comparisons made between products are frequently limited to a single environmental benefit, and therefore they become incomplete and potentially misleading (Les Carlson & Kangun, 1993).

In this study, the types and frequency of environmental claims appearing in advertisements were identified in parallel with the extent to which these were judged to be deceptive and/or misleading. In general, results showed a higher number of misleading/deceptive claims than containing "elements that were deemed acceptable" (Les Carlson & Kangun, 1993, p. 35). The product-oriented and image-enhancing dominated the claims considered as misleading, contrarily to those claims based on environmental facts and the process-oriented ones.

The authors stress that certain types of claims can disappoint consumers and cause confusion, preventing them from reaching their marketing purpose; therefore, particular attention must be paid to these type of claims and they should be pre-tested before release (Les Carlson & Kangun, 1993).

Prendergast, Liu and Poon (2009) carried out a questionnaire-based study on two hundred Hong Kong shoppers. The purpose of this study was to identify which type of products and services advertised were considered as being less credible, as well as the media for which this effect is more noticed. Findings suggest that advertisings considered least credible were the ones for weight-loss products. "The broadcast media (radio, broadcast television and cable television)

were considered the most credible advertising media, while direct mail and the internet were considered the least credible” (Prendergast et al., 2009, p.1).

Existing literature about general advertising credibility is vast and focuses mainly in online advertising credibility. “Practitioners and academicians recognize that building credibility is important in this relatively new environment” (Choi & Rifon, 2002, p.12) and seek to understand if traditional theories of advertising effects can be copied to this new medium. That is why the author focus his study on online advertising credibility, namely, how credibility is transferred from non-web advertising to web advertising.

Choi and Rifon (2002) also focused their study on the role of source credibility in determining web advertising effectiveness. The role of source credibility in general and, specifically, in comparative advertising is also explored by different authors, as it is in the study carried out by Gotlieb and Sarel (1991).

The use of celebrities and its effect in the credibility of advertisements is also a hot topic studied by Wang and Scheinbaum (2018) and reviewed by Bergkvist and Zhou (2016), who identified six areas of research on celebrity endorsements based on 126 published articles.

Extensive literature reports how advertising credibility shapes the consumer’s perception towards a product or a brand, ultimately affecting the buying behavior. As such, advertising credibility may also influence other aspects that determine the green buying behavior. Based on that, it can work as a moderating hypothesis:

Moderator: Advertising credibility moderates the relationship between determinants of green buying behavior and green buying behavior

The combination of the hypothesis built based on existing literature results in the following theoretical model, which will be tested in this research (Fig. 1):

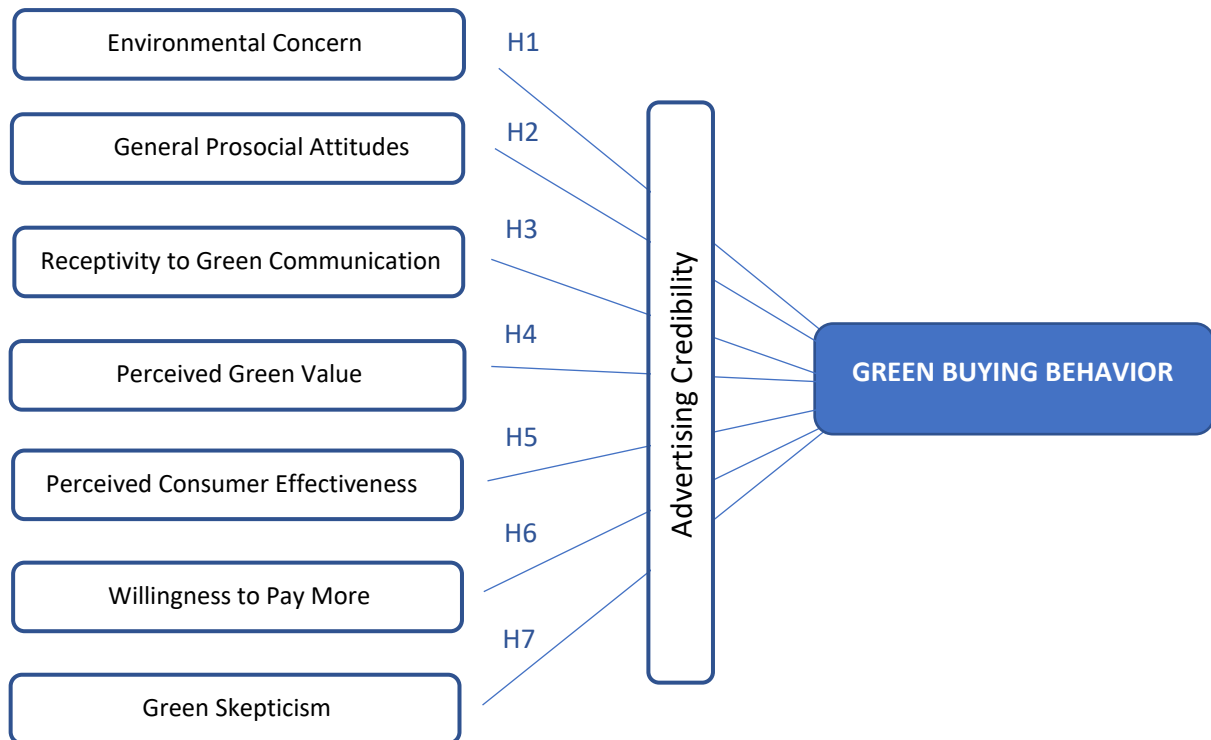


Figure 1 – Study model.

3. Methodology

3.1. Research design

The method used in this investigation consisted of submitting a questionnaire to a random sample of respondents. The questions, originally in english, were translated to portuguese, since it would be applied to a group of portuguese respondents, and subsequently a reverse translation was done to assure that the translation was as reliable as possible. The questionnaire was then applied to a group of 5 people to test it and comment about its comprehensiveness. The comments received mentioned the fact that some of the questions sounded the same, as if the same question was asked in different wording. Since the original questionnaires were unchanged, all the questions included, which were part of the validated studies, were kept the same as they originally were, hence no further changes were made.

The final questionnaire included 57 questions in addition to the sample characterization questions (gender/age/education/income) and an estimated completion time of 15 minutes.

3.2. Sample, population and participants

In this study, the population under study includes all consumers adults, regardless if they actively purchase, or not, green products. The questionnaire was, therefore, randomly applied to a group of consumers adults.

Our sample included a total of 155 respondents with ages ranging from 21 to 66 years old. More than 2/3 of the sample, 67%, is between 21-40 years old (“young adults”). The other third part is above 40 years old (Fig. 2):

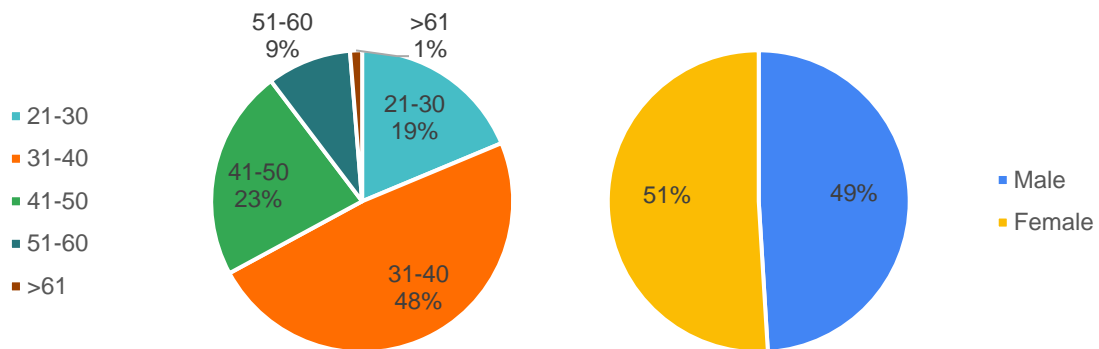


Fig. 2- Age distribution

Figure 3 – Gender distribution

N = 155 (Source: author's data)

In terms of gender distribution, this is an equilibrated sample since it was composed of 49% males vs 51% females (Fig. 3).

To characterize the sample used in this study, 5 intervals of annual gross income were defined. The highest level of income accommodates 35% of the sample analyzed, and a total of 54% of the respondents lie in the two top levels of income (Fig. 4):

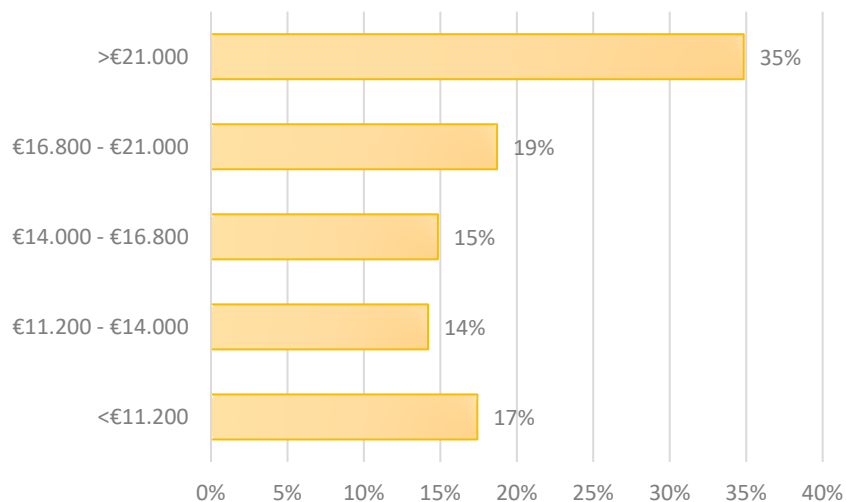


Figure 4 – Income level; N = 155 (Source: author's data)

Within the sample analyzed, 80% had a higher education or PhD, reflecting a very educated group of people (Fig. 5). This might be eventually related with the high income observed in the previous chart (Fig. 4).

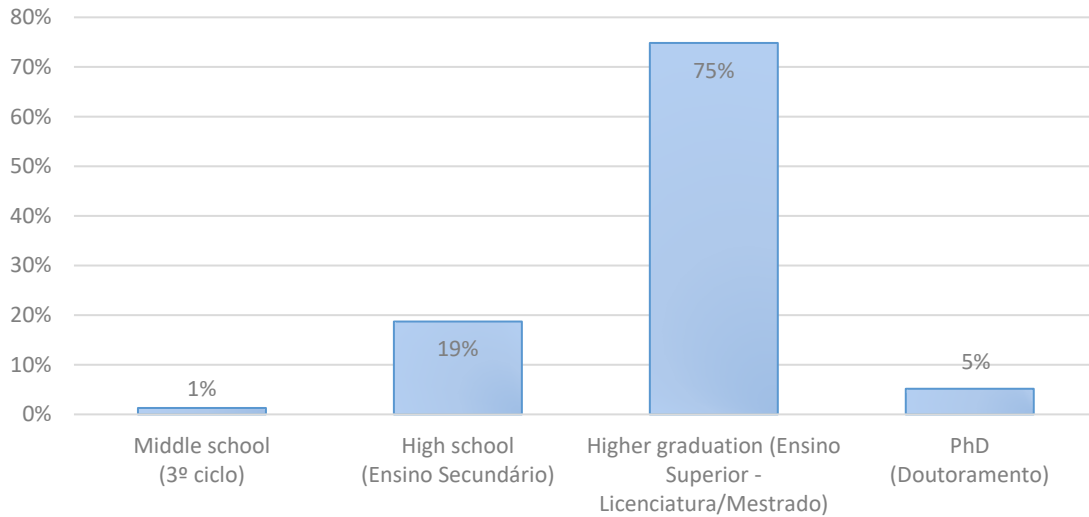


Figure 5 – Education level; N = 155 (Source: Author’s data)

Based on the data collected, the sample under analysis might be considered, broadly speaking, as a group of young adult people, highly educated and with a income above average, uniformly distributed between the two genders.

3.3. Measures, data collection and variables

The questionnaire used in this study was the result of the consolidation of nine published studies, in which the authors defined questions and scales to evaluate each of the variables of this study (Table 1):

Variable	Scale	Author(s)
Environmental consciousness	Agree/Neutral/Disagree	Alsmadi (2007)
General prosocial attitudes	Likert Scale	Shiel et al. (2018), adapted from Osgood and Muraven (2015)
Receptivity to green communication	Likert Scale	Bailey et al. (2016)
Perceived green value	Likert Scale	Lin, Lobo and Leckie (2017)

Perceived consumer effectiveness	Likert Scale	Wei, Ang and Jancenelle (2018) adapted from Wesley, Lee and Kim (2012); Kim and Choi (2005); Roberts (1996)
Willingness to pay more for green products	Likert Scale	Adapted from (Laroche et al., 2001)
Green skepticism	Likert Scale	Mohr, Erođlu, and Ellen (1998)
Advertising credibility	1 = describes very poorly to 7 = describes very well	Appelman and Sundar (2016)
Green buying behavior	Likert Scale	Straughan and Roberts (1999)

Table 1 – Measurement of variables and scales used.

In general, the questions pulled from the above stated studies were kept unchanged. With the exception of Environmental Consciousness, all the other variables were measured using the 5-point Likert scale, where 1 = strongly disagree, 5 = strongly agree.

For the environmental consciousness variable, one of the statements from the original study (*I always admire those who rationalize energy consumption*) was removed since rationalizing energy consumption can be a behavior driven by economic reasons.

The statements used to evaluate the willingness to pay more were pulled from a study initially adapted from Laroche et al. (2001). In this study, the original questions, exclusively focused on the percentage extra cost that the respondent is willing to pay for green products, are product-specific, namely *“I would pay more for custom t-shirts that are made using environmentally friendly materials”*. For the purpose of this study, these questions were adapted to become more generic, thereby instead of *“custom t-shirts”* the term was broadened to *“products”*.

The perceived green value required a practical example of a green brand, therefore communication issued by a green company was selected so that the respondent could score the statements based on that reference. The example

chosen was a green communication issued in the website of The Body Shop, a green-cosmetics company worldwide recognized by the ecological and social causes that it stands. This message was pulled from the company brazilian page at <https://www.thebodyshop.com.br/p/valorizar-o-planeta>.

Regarding advertising credibility, the measurement of this variable required also the use of two green advertisings which should be evaluated in terms of *accuracy*, *authenticity* and *believability*.

Two advertisings with ecological features, therefore considered to be green advertisings, were selected. As criteria, it was decided to select two advertisings from different types of products (plastic bags from a grocery store delivery service and an electric car) in two distinct platforms: an advertising video and a printed message, both published in the correspondent company's website.

3.4. Data analysis procedure

The final (validated and translated) survey was inserted into Google Forms and the correspondent link was shared via WhatsApp with friends and acquaintances. It took 12 days to collect all 155 answers.

The results were extracted directly from Google Forms into a Microsoft Excel spreadsheet and all the answers that were not numerical (gender, income, age, etc) were converted into numbers, making them suitable to be subject to statistical treatment. The converted results were then analyzed through *SPSS Statistics*.

4. Results

4.1. Descriptive statistics and correlations

4.1.1. Cronbach's alpha

The cronbach's alpha is used in statistics to determine the reliability of a scale used to measure a given variable. Results must be between 0-1, and the reliability of a variable is considered acceptable when α is greater than 0.7.

Variable	Cronbach α -test	Validation
Environmental consciousness	0.36	X
Green skepticism	0.45	X
General prosocial attitudes	0.916	✓
Receptivity to green communication	0.918	✓
Perceived green value	0.816	✓
Perceived Consumer Effectiveness	0.858	✓
Advertising credibility	0.33	X
Willingness to Pay More	0.915	✓
Green buying behavior	0.872	✓

Table 2 – Results from Cronbach α -test per variable. (Source: SPSS)

All the listed α -values are > 0.7 for the variables included in this study, with the exception of: environmental consciousness, green skepticism and advertising credibility. It was not possible to validate the scales to measure these three variables, therefore they were removed from this study.

This study will from here be performed with the remaining six validated variables.

4.1.2. Average, standard deviation, minimum and maximum

The Table 3 (below) includes the measures of central tendency for the six validated variables:

	General prosocial attitudes	Receptivity to green communication	Perceived green value	Perceived Consumer Effectiveness	Willingness to Pay More	Green buying behavior
Sample (n)	155	155	155	155	155	155
Min	2,5	1,89	1,75	2,33	1	1,78
Max	5	5	5	5	5	5
Average	4,34	3,86	3,58	4,01	3,33	3,7
Standard deviation	0,549	0,634	0,581	0,539	0,949	0,642

Table 3 – Measures of central tendency per variable. (Source: SPSS)

The variable General prosocial attitudes showed the a higher minimum and also a higher average value. The Willingness to pay more showed the lowest minimum value, the lowest average value and the highest standard deviation, reflecting a greater dispersion of results. Based on these values, Willingness to pay more was also the only variable that got the lowest answer possible – 1. For all the tested variables maximum results (5) were reported.

4.1.3. Frequencies

The variable General prosocial attitudes concentrates a higher number of replies between values 4 and 5. The resulting average reflects this coherence, with a value of 4,34.

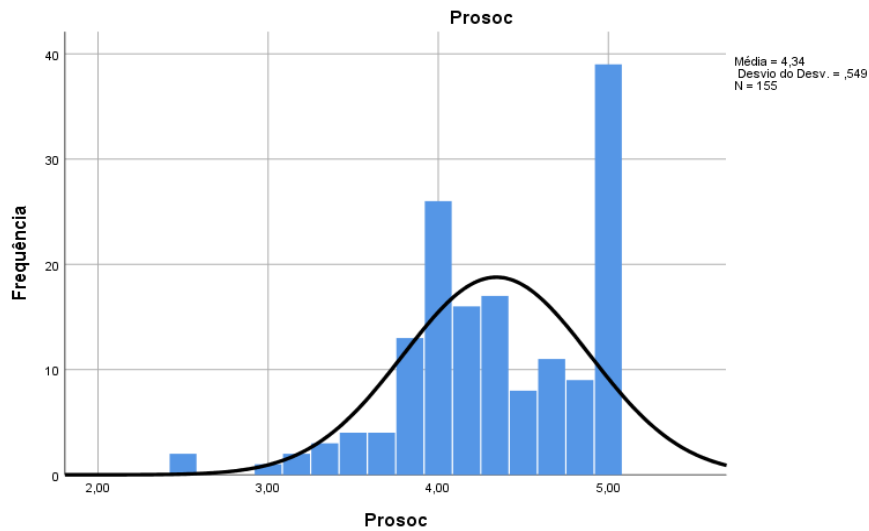


Figure 5 – Hystogram of the variable *General prosocial attitudes*. (Source: SPSS)

Receptivity to green communication has the highest frequencies around values 3 and 4, resulting in an average value of 3,86, yet, there is an increased numbers of answers around value 4.

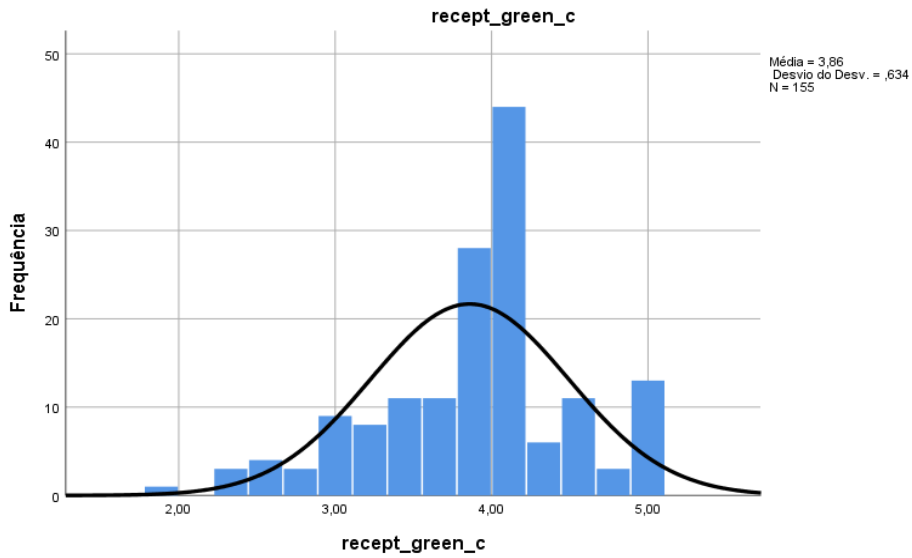


Figure 6 – Histogram of the variable *Receptivity to green communication*. (Source: SPSS)

For Perceived green value, the majority of answers lies between 3-4, around the average (3,58). Consideration should be given to the fact that the respondents might be more or less familiar with the brand chosen to measure this variable.

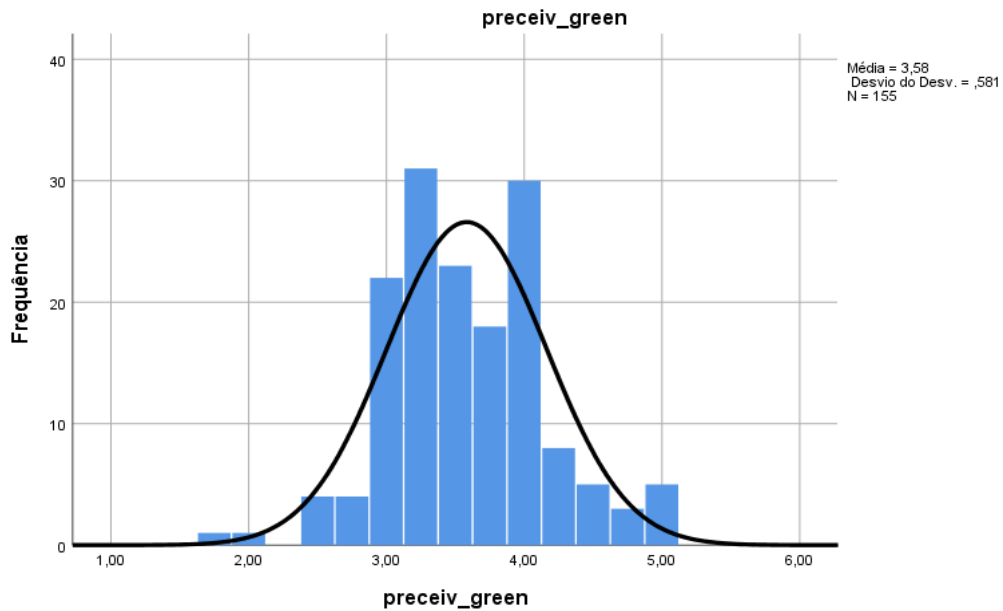


Figure 7 – Histogram of the variable *Perceived green value* (Source: SPSS)

For Perceived consumer effectiveness, all the answers lie between 2,33 and 5, with a higher concentration of answers around 4,01, the average value reported for this variable.

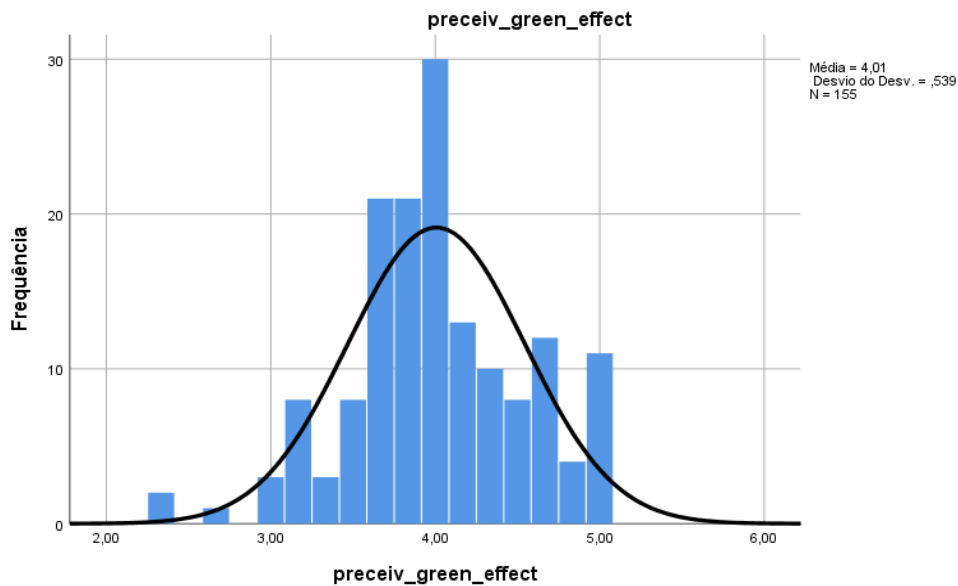


Figure 8 – Hystogram of the variable *Perceived consumer effectiveness*.
(Source: SPSS)

Willingness to pay more showed the higher frequency for the minimum value (1) but most of the answers fall between 3 – 4, resulting in an average value of 3,33. It is shown, however, a higher concentration of answers around 4. There is a great dispersion of results, reflected in the highest standard deviation reported for all variables – 0,949.

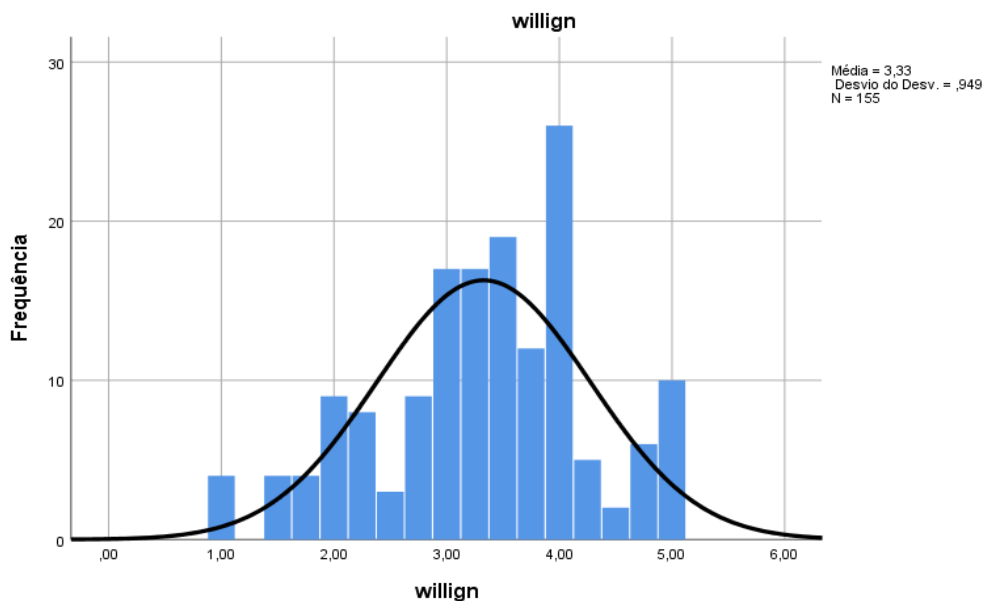


Figure 9 – Hystogram of the variable *Willingness to pay more*. (Source: SPSS)

For the variable Green buying behavior there is a stand out peak of answers around value 4, but most of the answers fall between 3-4, resulting in an average of 3,70. , reflects this distribution on the results. The dispersion of results was one of the highest observed, with a standard deviation of 0,642.

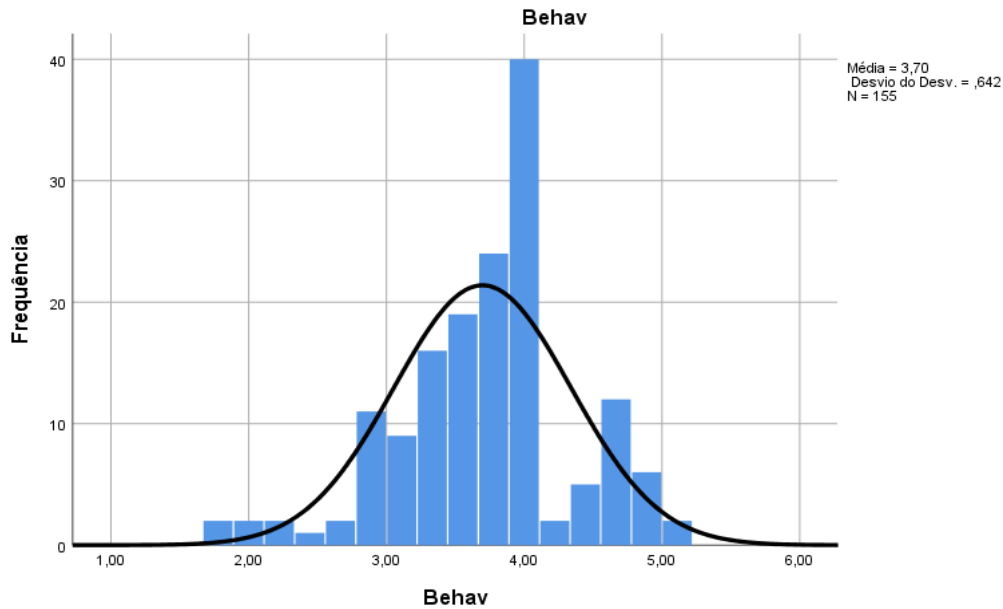


Figure 10 – Hystogram of the variable *Green buying behavior*. (Source: SPSS)

4.2. Hypothesis Test

	General prosocial attitudes	Receptivity to green communication	Perceived green value	Perceived consumer effectiveness	Willingness to pay more	Green buying behavior
General prosocial attitudes	1	--	--	--	--	--
Receptivity to green communication	0,345**	1	--	--	--	--
Perceived green value	0,407**	0,588**	1	--	--	--
Perceived consumer effectiveness	0,355**	0,651**	0,530**	1	--	--
Willingness to pay more	0,249**	0,565**	0,456**	0,528**	1	--
Green buying behavior	0,316**	0,624**	0,481**	0,625**	0,514**	1

Table 3 – Results from Pearson correlation test (Source: SPSS).

**p>0,01

Pearson's correlation coefficient measures linear correlation between two variables. The correlation coefficient ranges from -1 to 1 . A value of 1 represents a total positive linear correlation, while -1 reports a total negative linear correlation.

As described in the table above, all correlations are >0.01 - positive, which indicates that all relations between variables are significant. The closer to 1 that value is, the stronger is the relation.

Considering that the scales used to measure Environmental concern, Green skepticism and Advertising credibility failed to be validated in α -Cronbach test, the hypothesis associated with these variables could not be tested in this study.

H2: People who have general prosocial attitudes are more likely to adopt a GBB

The correlation test proves that there is a positive relation between the general prosocial attitudes and the adoption of a green buying behavior. This indicates that people who demonstrate prosocial attitudes, are more likely to buy green products. These results are aligned with the findings from Shiel et al., (2018) who established a relationship between prosocial attitudes, including the doing of good for the benefit of others and the existence of green values which, and an influence in the adoption of green buying habits. For the authors, prosocial attitudes might constitute an important factor to incorporate into any model seeking to explain green behaviors.

Another study carried out to assess the willingness to pay for organic and fair-trade coffee reported that people who showed environmental and altruistic attitudes were more likely to pay more for and purchase pro-environmental food products (Maaya et al., 2018). Accordingly, Berger (2019) found a positive correlation between willingness to pay more for green products and prosocial values and trustworthiness.

The tested hypothesis is aligned with the findings from all mentioned studies.

H3: Receptivity to green communications has a positive effect on GBB

This hypothesis was confirmed with the test, suggesting that there is a positive relationship between receptivity to green communications or advertisements and the adoption of green buying habits. These findings are aligned with the results published by Shiel et al. (2018), where it is stated that those consumers who are more attentive and responsive to green advertising messages would be more driven to support green marketing strategies. Bailey et al. (2016) created a scale to measure green advertising receptivity based on this same assumption: green advertising receptivity moderates consumer's attitudes and intentions towards a company and its green initiatives (Bailey et al., 2016). Broadly speaking, advertising has proven to influence consumer's perceptions, intentions and behaviors, so it is expected that green advertising will also affect consumers differently depending on their high or low receptivity to messages. These findings reinforce the belief that those consumers who are more inclined to receive such messages and/or especially open and responsive to them are more likely to perceive them and change their behaviors accordingly.

H4: Perceived value positively correlates to the interest in adopting a GBB

This hypothesis passed the correlation test and therefore it has been proved that the value perceived by the consumer positively influences the adoption of a green buying behavior. This finding goes against the results from Patterson and Spreng (1997) study where perceived value was proven to influence pre-purchase intentions directly as well as the repeat of a purchase behavior, mediated through customer's satisfaction. In other words, the results from our study suggest that if a consumer has a positive judgement on the benefits brought by a product and recognizes the additional value that it brings him, then he will be more interested in purchasing that product.

In line with results from present study, Chang and Chen (2012) also define Green perceived value as one of the two main determinants of green purchase intentions (together with green perceived risk). In the author's opinion, reinforced by the results of current study, "Firms should apply green marketing strategies to enhance perceived value of their products and reduce perceived risk of their

products with respect to environmental consideration to raise their competitive advantage” (Chang & Chen, 2012, p.503).

The positive relation between the perceived value and the adoption of green buying habits is in line with the findings described by Zhuang et al. (2010) in their study about running shoes as well as with Hur et al. (2013) and their results regarding perceived value and the loyalty towards the manufacturer of hybrid cars.

H5: Perceived consumer effectiveness has a positive impact in GBB

This hypothesis was proven to be truth in the correlation test, which means that, in order to “go green”, the consumer must be convinced that his or her actions will have a real and noticeable impact and will positively influence the outcome of the environmental problems. Gupta and Ogden (2006) defined perceived consumer effectiveness as the extent to which a person believes that an individual consumer can be effective in fighting the ongoing environmental disorders. In their study, the consumers that show high levels of both perceived consumer effectiveness and level of involvement with the environmental cause were the ones that displayed the highest levels of attitude-behavior consistency, namely, the actual adoption of green buying habits. The results from this study are, therefore, in line with the ones from Gupta and Ogden (2006).

Straughan and Roberts (1999) defend the same idea, stating that environmental-based marketing efforts should be explicitly linked with beneficial outcomes. In their study, perceived consumer effectiveness was the most important of all correlates in ecologically conscious consumer behavior. Kim and Choi (2005) reached similar findings in another study carried out to 304 undergraduates, where results showed that effectiveness perceived by the consumer influences green buying behavior.

H6: The willingness to pay more for green products affects positively the GBB

The Willingness to pay variable is particularly important since green products are, usually, more expensive than non-green products due to the investment needed for reengineering, technology or certification processes. Therefore, being

receptive to pay a premium price is often crucial for consumers to have access to these products. Otherwise, their good intentions will not translate into actual behavior.

The correlation test proved that there is a positive correlation between the two variables, confirming that those consumers who are willing to pay more for green products are more likely to adopt a green buying behavior.

The study carried out by Kang et al. (2012) showed consistent results, when guests with higher degrees of environmental concern declared a higher willingness to pay more for hotel's green initiatives. Another study performed by Xu et al. (2012) showed equivalent results, when findings suggested that Chinese consumers were willing to pay more for green and eco-labelled seafood. (Berger, 2019) assumes the same on his study where Willingness to pay more is considered as a driver for green consumerism among Swiss students.

When reviewing existing literature on the subject, Willingness to pay is definitely one of the most decisive driver of green consumerism, just as the unwillingness to pay the green premium price is one of the main obstacles preventing consumers from going green.

5. Conclusions

5.1 – Discussion of results and implications for theory

The results obtained in this study provide further insights about some of the key driving factors that affect the adoption of a green buying behavior.

An important finding that goes in line with other literature reviews is that people who have prosocial attitudes are more likely to adopt a green buying behavior. This means that these people might be one step closer to adopt green habits than those who show no altruistic values, a self-centered type of people who are not much concerned or empathetic with the welfare of others. Altruism might, therefore, be a good predictor of green values, which in turn may translate into green purchases.

The second validated hypothesis states that receptivity to green communications is positively related with the adoption of a green buying behavior. Based on these results, it can be concluded that the consumers who are more receptive, more

favorably disposed to pay attention to green advertising messages, will more likely change his habits in favor of a green attitude, as well as his intentions towards the company that issues those green messages.

The third hypothesis validated was the positive correlation between perceived value and the interest in adopting a green buying behavior. If the perceived value is positive, e.g., the consumer has a positive perception of the green benefit that he will take from a product or service, based on his green beliefs, then he will more likely buy that green product or service. Focus should, hence, be made on increasing the perceived green value of the products or services advertised by these companies. Furthermore, since most people tend to put their personal desires ahead of their ecological principles, it is crucial to assure that product attributes are improved in order to captivate these people driven by egocentric motives into the green zone.

Receptivity to green communications and perceived value were strongly correlated. This might be an indicator that if a consumer is receptive to green advertisements, he will more likely recognize value on the green product; equivalently, a consumer that recognizes a great benefit in an ecologically friendly product (*high perceived value*) can possibly be someone originally more receptive to green messages. This suggests that both variables should not be dissociated but, instead, worked together in order to improve the performance of marketing strategies.

Perceived consumer effectiveness was also proved to have a positive impact on green buying behavior. If the consumer is convinced, or has the perception, that his buying choices will be effective in improving the environment state, then he will adopt green habits more often. This belief that his individual efforts will have an impact in a greater cause will more likely translate into intentionally green purchases.

The Willingness to pay more also proved to have a positive impact in the green buying behavior. Since green products are usually more expensive than conventional products, being willing to pay more will increase the chances that the consumer will translate his good intentions into action.

According to this study, all analyzed variables proved to have a direct impact in the adoption of a green buying behavior. From all the hypothesis tested, Perceived consumer effectiveness and Receptivity to green communications were the variables that showed a stronger correlation to green buying behavior.

In addition, results also show that all variables correlate among them, indicating that they should not be addressed individually but as a whole, where each one configurates a small piece of the complex structure that comprises the green buying behavior.

5.2. Implications for management

This research allows to deepen the understanding about the drivers of green consumerism by providing further insights about the factors that motivate the adoption of environmentally sustainable buying habits.

In order to maximize the positive impact of green marketing initiatives, marketers should contemplate the following topics analyzed in this investigation:

- Segment the market based not only on demographic, but also on psychological characteristics: direct the marketing strategies to altruistic people.
- Consider the importance of receptivity to green communications, i.e. designing their communications in such ways that might boost the attentiveness and responsiveness of the audience. The measurement of the audience's receptivity to green communications might be a useful tool to monitor this parameter.
- Work on the green benefits of the product and communicate them efficiently so that the green value perceived by the consumer can be enhanced.
- Provide the consumers with clear information about the positive impact that their buying choices will have in the overall state of the environment, convincing them that their individual choices do have an impact in the environmental cause.
- Direct the marketing strategies to those consumers that are willing to pay more, as well as work on their willingness to pay more by highlighting the positive features of their products.

- Tailor their messages and initiatives to make them credible, particularly for the well-informed and skeptical audience.

5.3. Limitations and future research

As in every investigation, this study has some limitations which should be mentioned in order to be addressed in the future by other researchers. The sample analyzed consisted mainly of high educated people from medium-high class, not representing most of the Portuguese population. A wider study applied to a more heterogeneous population could provide more representative results.

Two of the variables tested failed the Cronbach's alpha test and therefore the hypothesis could not be tested. One of them was environmental concern, an independent variable, and therefore we could not test the hypothesis "People who demonstrate environmental concern are more likely to adopt a GBB". This is one of the most studied variables under green consumerism, as such it would be important to test it in this study as well.

The other variable that failed to be validated was the moderator variable, advertising credibility. Advertising credibility and its effect on the other variables that affect green buying behavior was the main topic to be studied in this investigation and represented the additional contribution that the investigator sought to add to existing knowledge on this matter. This was particularly interesting considering the increasing misbelief and skepticism reported in literature towards green advertising. Though this objective will not be achieved, the present investigation is still a comprehensive and innovative study where six determinants of the green buying behavior were tested together, providing an important contribution to the existing knowledge about green consumerism.

These two topics, particularly advertising credibility and how it can influence the other determinants of green buying behavior, should be explored in future research.

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7. Appendices

Attachment 1 – Questionnaire

Determinantes do comportamento de compra do consumidor verde

*Obrigatório

Idade *

Sua resposta _____

Género *

- Masculino
 Feminino

Formação *

- 1º Ciclo
 2º Ciclo
 3º Ciclo
 Ensino Secundário
 Ensino Superior (Licenciatura/Mestrado)
 Doutoramento

Rendimento anual bruto *

- <€11.200
 €11.200 - €14.000
 €14.000 - €16.800
 €16.800 - €21.000
 >€21.000

1. Aprecio viver num meio ambiente saudável e limpo *

- Concordo
 Discordo
 Neutro

2. Respeito os esforços feitos para manter e preservar o ambiente *

- Concordo
 Discordo
 Neutro

3. Compreendo que o ambiente é para mim e para as gerações futuras, como tal deve ser mantido e preservado *

- Concordo
 Discordo
 Neutro

4. Recomendo às outras pessoas que mantenham o ambiente limpo *

- Concordo
 Discordo
 Neutro

5. Acredito que o homem e a natureza têm de viver em harmonia, em prol da sobrevivência *

- Concordo
 Discordo
 Neutro

6. Respeito as regras e leis existentes para manter e preservar o ambiente *

- Concordo
 Discordo
 Neutro

7. Compreendo que os recursos naturais são escassos, como tal devem ser usados de forma sensata *

- Concordo
 Discordo
 Neutro

8. Fico aborrecido quando alguém contamina o ambiente *

- Concordo
 Discordo
 Neutro

9. Tenho consciência do impacto que a explosão populacional tem em todas as dimensões do meio ambiente *

- Concordo
 Discordo
 Neutro

10 – É importante, para mim, que as outras pessoas estejam felizes *

- Discordo totalmente
 Discordo
 Não concordo nem discordo
 De acordo
 Totalmente de acordo

11 – É importante ajudar alguém que esteja a passar necessidades *

- Discordo totalmente
 Discordo
 Não concordo nem discordo
 De acordo
 Totalmente de acordo

12 – Eu quero ajudar os outros *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

13 – O bem-estar dos outros é importante para mim *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

14 – As necessidades dos outros são importantes *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

15 – É importante que todas as pessoas sejam felizes *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

16 – Eu apoio marcas que defendem o meio ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

17 – Tenho tendência a prestar atenção a mensagens publicitárias que se referem ao meio ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

18 – O uso de mensagens ambientais nos anúncios publicitários afeta a minha atitude perante esses mesmos anúncios *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

19 – Respondo favoravelmente a marcas que usam mensagens ambientais nos seus anúncios *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

20 – Sou o tipo de pessoa que responde favoravelmente quando as marcas usam mensagens ambientais nos seus anúncios *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

21 – Eu penso que a publicidade ecológica (green) tem valor *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

22 – A publicidade ecológica (green) é uma forma necessária de publicidade *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

23 – Sou o tipo de consumidor que está disposto a comprar produtos verdes, amigos do ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

24 – Tenho tendência a prestar atenção a mensagens publicitárias ecológicas *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

25 – Com base nesta mensagem, classifique a seguinte frase: "A responsabilidade ambiental desta marca é muito importante para mim" *



CRIAR BIO-PONTES, PROTEGENDO E REGENERANDO 75 MILHÕES DE METROS QUADRADOS DE HABITAT, AJUDANDO COMUNIDADES A VIVER DE FORMA MAIS SUSTENTÁVEL

Por que isso é importante?

A perda de habitat, em grande parte causada pela expansão da agricultura e colheita intensiva de alimentos florestais, é um dos maiores riscos para a biodiversidade do nosso planeta. Isso é um desafio para nós, como cidadãos do mundo, mas também, uma ação direta para a criação de uma sociedade mais sustentável. Como uma empresa que prioriza o compromisso ambiental, cuidar habitat, assegurar e dar importância para a The Body Shop.

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

26 – Esta marca é amiga do ambiente *



- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

27 – Esta marca tem mais benefícios ambientais que outras marcas *



- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

28 – Esta marca demonstra maiores preocupações ambientais que outras marcas *



- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

29 – Sinto que consigo ajudar a resolver os problemas ambientais *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

30 – Eu posso proteger o ambiente ao adquirir produtos que são amigos do ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

31 – Eu sinto que consigo ajudar a resolver os problemas ambientais através da compra de produtos amigos do ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

32 – Os produtos que adquiro enquanto consumidor têm impacto nos problemas ambientais globais *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

33 – O comportamento de cada consumidor pode ter um efeito positivo na sociedade através da compra de produtos que são amigos do ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

34 – Cada pessoa pode, individualmente, fazer a diferença na qualidade do ambiente ao escolher cuidadosamente os produtos que adquire *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

35 – Eu pagaria mais por produtos que são feitos à base de materiais amigos do ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

36 – Eu estou disposto a gastar mais para comprar produtos que são amigos do ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

37 – Eu acredito que é aceitável gastar mais por produtos que são feitos à base de materiais amigos do ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

38 – Considero aceitável pagar até 25% mais por produtos que são feitos à base de materiais amigos do ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

39 – A maioria dos claims (argumentos) ambientais que existem nos rótulos dos produtos ou na publicidade são verdadeiros *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

40 – Como os claims (argumentos) ambientais são exagerados, seria preferível que fossem eliminados dos rótulos e da publicidade *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

41 – A maioria dos claims (argumentos) ambientais nos rótulos dos produtos e na publicidade em geral destinam-se a iludir, mais do que a informar, o consumidor *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

42 – Não acredito na maioria dos claims (argumentos) ambientais dos rótulos ou da publicidade no geral *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

Numa escala de 1 a 7, como descreve o seguinte conteúdo em termos de exatidão? *



- 1
- 2
- 3
- 4
- 5
- 6
- 7

Numa escala de 1 a 7, como descreve o seguinte conteúdo em termos de autenticidade? *



- 1
- 2
- 3
- 4
- 5
- 6
- 7

Numa escala de 1 a 7, como descreve o seguinte conteúdo em termos de credibilidade? *



- 1
- 2
- 3
- 4
- 5
- 6
- 7

Anúncio Renault EcoPlan



Available at: https://youtu.be/_5fnu46oTo4

Numa escala de 1 a 7, como descreve o "Anúncio Renault EcoPlan" em termos de exatidão? *

- 1
- 2
- 3
- 4
- 5
- 6
- 7

Numa escala de 1 a 7, como descreve o "Anúncio Renault EcoPlan" em termos de autenticidade? *

- 1
- 2
- 3
- 4
- 5
- 6
- 7

Numa escala de 1 a 7, como descreve o "Anúncio Renault EcoPlan" em termos de credibilidade? *

- 1
- 2
- 3
- 4
- 5
- 6
- 7

49 – Tento comprar eletrodomésticos e equipamentos eficientes em termos energéticos *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

50 – Evito comprar produtos que têm embalagem excessivo *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

51 – Quando existe alternativa, escolho o produto menos poluente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

52 – Já mudei de produtos/marcas por motivos ecológicos *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

53 – Faço todos os esforços para comprar produtos de papel à base de papel reciclado *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

54 – Uso sabonetes e detergentes amigos do ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

55 – Já convenci membros da família ou amigos a não comprar produtos que são prejudiciais para o ambiente *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

56 – Sempre que possível, compro produtos embalados em embalagens reutilizáveis *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo

57 – Tento comprar produtos que possam ser reciclados *

- Discordo totalmente
- Discordo
- Não concordo nem discordo
- De acordo
- Totalmente de acordo