Relationship between green marketing strategies and green marketing credibility among Generation Y
Abstract

Background: Since terms like “sustainability” and “consumer consciousness” were introduced, green products began being integrated into consumers’ lifestyles. Green advertising is the business term given to the specific type of advertising that intends to promote products around the premises of environmental situations. Millennials, individuals born from 80’s to 2000’s, are concerned about environmental issues, and are considered to be the next active purchasing power, which has been valued on 200 billion dollars. Therefore they are described as a great impact generation.

Problem: The identified problem is that consumers refrain to buy green products because they do not trust the advertising released by marketers.

Purpose: The purpose of this thesis is to explore the relationship between green advertising credibility (dependent variable) and price sensitiveness, and the four proposed green marketing strategies: sell functional value, market green status and image, the pure-green approach and the holistic brand (independent variables), in order to provide a marketing solution that reduces the green marketing skepticism inflicted by the greenwashing practices that took place during the 90’s.

Method: A questionnaire conducted through an online platform was distributed among Millennials, producing 190 responses that provided empirical evidence for this study. The data was cleaned from empty cases and manipulated (some items were reversed and the values of the items were re-scaled into a common scale). The obtained data was analyzed by using linear regression method, and Pearson’s correlation on the SPSS software.

Conclusion: The proposed model shows to a level of confidence of 95% that there is a relationship with the independent variables and the dependent variable (p<0.05). Holistic Brand Strategy causes the biggest change in Green Marketing Credibility (beta = .332) therefore it is the statistically significant strategy for explaining credibility. Holistic Brand, Functional Value, and Green Status showed a low correlation with the dependent variable. Millennials are a tough population to please, so a combination of the Holistic Brand Strategy and Selling Functional Value appears to be the optimal to address Millennials and improve Green Advertising Credibility.
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1. Introduction

This chapter includes the context of the current state of green advertising credibility and its relationship with greenwashing. The importance of the study and its impact is emphasized, and is followed by the approach and perspective towards the problem. Subsequently the main purpose of the thesis, the research questions, the delimitations to consider for this study and the basic definitions for the complete understanding of this research are presented.

1.1 Background

Millennials, people who were born between the 1980’s and the mid-2000s, also known as the generation Y, are a new challenge for the current companies (Lu, Bock, & Joseph, 2013). They represent the largest generation alive with 1.8 billion Millennials per 7 billion worldwide (Mckayn, 2010), and according to the marketing research firm Kelton Research, during the next five years they will be the next economically active generation, valuing their purchasing power in 200 billion dollars per year (Aquino, 2012). Due to the large amount of information they have at their disposal every day (through access to the internet), the decision making for buying a product has evolved. Their decisions are based on the evaluation among greatest benefit vs lowest price, and because of this, marketing campaigns that are currently used seem to be useless (Mckayn, 2010). McKayn also assures that although there have been several studies concerning this generation, only few of them have focused on understanding the Generation Y as consumers of green products. According to the results of several studies Millennials care about the environment (Brower, 2012) and are considered a generation with great impact, because they can influence the purchasing decisions of other generations (Mckayn, 2010). Therefore, this is a sector of the population that is worth analyzing.

Since the concept of “sustainability” was introduced more than 20 years ago by the World Commission on Economic Development into consumer consciousness, they are considering products and services that are environmentally friendly (Han, Hsu, & Lee, 2009) (Green, Toms, & Clark, 2015), and integrating them in their lifestyle in order to benefit the
According to Wilbur Green (2015), as the customers’ demands have been modified towards ecological products, sustainability must be of paramount interest for the twenty-first century organizations with market orientation.

With the sustainability trend, other concepts related to ecological marketing were born, studied and adopted by many different authors. Over two decades ago, questions were raised regarding whether the marketing concept leads to misplaced emphasis that the customers “want” satisfaction regardless of the long-run interest of society and the environment (McDaniel & Rylander, 1993). These concerns were addressed while proposing the “societal marketing concept”. McDaniel and Rylander proposed that in order to be labeled socially responsible marketing four considerations in decision making must be taken into account: consumer wants, consumer interests, company requirements, and societal welfare. Green marketing is being adopted either because it is considered a business trend that represents a profitable endeavor or in order to comply with environmental laws and regulations. McDaniel and Rylander (1993) proposed that there are two different approaches to adopt green marketing. The first one is a defensive, where a company does the minimum in order to comply with the minimum government environmental regulations or to avoid tax or penalties, and they have been called “smoke and mirrors”. The second is an assertive approach, on which a company provides the best opportunity for a sustainable competitive advantage, and they are called “first movers”. This implies that some companies implement this environmental concern or “green strategies” in a better way than others, nevertheless both types of companies decide to advertise their image, their products, and/or their services, in the best way they can.

In the beginning of the 80’s the term Green Marketing became prominent after the American Marketing Association (AMA) held the first workshop on ”Ecological Marketing” in 1975, and with it two tangible milestones came in the form of published books, both called ”Green Marketing” (Saxena, 2015). When the 90’s arrived, the number of labels proclaiming that their products were environmentally friendly increased dramatically (Furlow, 2010). This developed into an advertising wave for green products over the years after 1990, the “Earth Decade”, marking the beginning of a new trend, where the creation of “greener” products was instigated and, accordingly, the surge of green marketing (Lu, Bock, & Joseph, 2013). According to Saxena (2015), companies began to emphasize all the attributes that made its “green” products environmental friendly, but without clarifying what they did it or what they did not do in order to produce them. When firms realized the strength of the market for
environmentally friendly products they were eager to exploit opportunities within this market, causing some of them to deliberately mislead consumers about their environmental performance or the environmental benefits of their products (Markham, Khare, & Beckham, 2014). This practice is known as greenwashing, and refers to such deceiving acts, or any company practice that intentionally misleads consumers through false advertising (Vermillion & Peart, 2010). Thereby, an unexpected wave of mistrust started to form amongst the market. This mistrust was enhanced by those unethical practices that include false green claim, exaggerate and lurid language, and ambiguous information (Zhu, 2013) while performing green marketing and has been carried on until the beginning of the new millennium.

Therefore becoming a situation in which, independent of the “assertive” companies’ efforts on becoming green and making a difference, consumers do not trust the “green products or services” anymore. Furthermore, knowing that Millennials have a lot of information at their disposal, companies have to be careful with every bit of information that is released about their products, ensuring that their marketing efforts are focused on the right way to gain the interest of Millennials. This thesis aims to answer the following question: which is the strategy most related with high advertising credibility from the consumers?

1.2 Problem

Companies constantly grapple with the usual challenges such as accounting, competition, incorporation of new technology and tools, when perhaps nowadays the phenomenon of informed skepticism should also enter into their daily challenges list (Upshaw, 2007).

The reality from Upshaw’s point of view is that the generations that grew hand in hand with the internet as a source of information constantly maintain contact with other buyers and can openly discuss their opinion about specific products. They may even contact the companies that manufacture these products and investigate more deeply their concerns, challenging marketers responsible for creating advertising campaigns with the fact that they can not only investigate how true the information promoting their products is, but even inquire about the manufacturing process of these products, jeopardizing the corporate credibility of the companies they represent with every single marketing campaign.
After a thorough investigation the identified problem of this thesis is that some consumers refrain to buy green products because they do not trust the advertising released by marketers. A way to increase consumption of these green products is to practice marketing strategies that are addressing the Millennials effectively and would help recover that lost credibility on the “greenness” of the products.

1.3 Purpose

The purpose of this thesis is to explore the relationship between green advertising credibility and: (1) the four proposed green marketing strategies (sell functional value, market green status and image, the pure-green approach and the holistic brand) and (2) price sensitiveness (important for green products consumption), in order to suggest a marketing solution that reduces the green marketing skepticism inflicted by the greenwashing practices that took place during the 90’s. With the results obtained, it is expected to be able to suggest the marketing strategy that has the strongest relationship with Millennial’s credibility in the green advertising context.

1.4 Research questions

In order to achieve the purpose of this thesis, the following research questions were proposed as guidance:
1. Is there a relationship between the proposed marketing strategies and Green Marketing Credibility?
2. Which green marketing strategy is the most appropriate to change the attitude of the millennial consumer towards credibility of green advertising?

1.5 Delimitations

A limitation of this study is that the results will be there to show that there is “something” worth analyzing, but the possibility of obtaining generalizable conclusions is little. In other words, it will only be possible to conclude whether or not there is or is not a
relationship between advertising credibility and the proposed marketing strategies, without a conclusion applicable for all the Millennials population, which comes from the nature of the chosen sample. Moreover, the fact that no categorization regarding economic sector, nationality, or gender was made would also have the same non-generalizable effects on the findings.

Finally the results of this study are limited to measure the strength of the relationship, if any, and not the other implications such as the channel (TV, internet, radio, etc.) of marketing, or the details of the implementation of the strategies.

1.6 Definitions

- **Greenwashing**: greenwashing is the dissemination of false or incomplete information by an organization to present an environmentally responsible public image (Furlow, 2010).
- **Green marketing**: A strategic effort made by firms to provide customers with environment-friendly (i.e. eco-friendly or green) merchandise (Levy, 2008).
- **Green products**: Also called eco-friendly, organic, or ecological, are all the products produced through eco-friendly processes (Lee, 2011).
- **Eco-friendly processes**: Eco-friendly processes are manufacturing-related processes that are designed specifically to improve the environmental performance of the organization by reducing air emissions, effluent wastes, solid wastes and the use of toxic materials (Lee, 2011).
- **Millennials**: also called the Y generation, or millennial generation, is the demographic cohort that follows Generation X, comprised of the individuals born throughout the 1980s and early 2000s (Lu, Bock, & Joseph, 2013).
- **Credibility**: Can be seen, in general, as an entire set of perceptions that receivers hold toward a source (Newell & Goldsmith, 2001).
- **Informed skepticism**: It is a phenomenon created from the continuous accessibility to information. This term is related to the unreliability of consumers towards a brand or product (Upshaw, 2007).
- **Facebook:** The most popular social networking site. Using the search facilities, members can locate other Facebook members and "friend" them by sending them an invitation, or they can invite people to join Facebook. Facebook offers instant messaging and photo sharing, and Facebook's e-mail is the only messaging system many students ever use (PCMag, 2015).

- **SPSS:** A statistical package from SPSS Inc., Chicago (www.spss.com) that runs on PCs, most mainframes and minis and is used extensively in marketing research. It provides over 50 statistical processes, including regression analysis, correlation and analysis of variance (PCMag, 2015).

- **Google Forms:** It's an application developed by Google with the intent of helping the user to make forms and visualize the collected data online. This application allows the user to use the principles of survey methodology by making a form that can be easily transmitted just by sending a link to the desired population, and it sends all the collected data to an online file that can be used to analyze the information and manage it as it is most convenient to the administrators of the file (PCMag, 2015).

- **Microsoft Excel:** A full-featured spreadsheet for Windows and the Macintosh from Microsoft. It can link many spreadsheets for consolidation and provides a wide variety of business graphics and charts for creating presentation materials (PCMag, 2015).
2. Theoretical Framework

In this section some fragments of the most relevant theoretical information for the understanding of this study are presented. Within this information the green marketing strategies and theories of ecological consumption used in this thesis are included.

The theoretical part of this study starts with a framework on the chosen population, for a better understanding of their behaviors and the range of age considered for this study. Following this, a framework on the “Theory of Consumption Values” is presented, this is important because what is being measured in this study are purchasing behaviors and this theory provides useful insights for better understanding of the topic for both, the authors as well as the reader. After that a framework on green marketing and green consumerism is presented, followed by a review on Greenwashing practices and Green Advertising Credibility. Then a broad review on the Green Marketing Strategies present in current literature. Going further with a deeper explanation on the chosen Green Marketing Strategies chosen for this study and the details of the rational for turning these strategies into measurable constructs. And closing up with a framework on concepts related to the analysis method, like Regression & Correlation Analysis, and definition of Constructs and Items, useful for understanding the use of constructs in a questionnaire.

2.1 Millennials

The twenty-first century introduced the grown Millennial Generation, a new demographic segment comprised of individuals between the ages of 16 and 36. While researchers have yet to establish specific cutoff dates, there is a general consensus that the Millennial Generation is comprised of individuals born throughout the 1980s and early 2000s (Lu, Bock, & Joseph, 2013), but rarely with a specific interval. Some authors define it as from 1982 to 2000 (PwC; University of Southern California & London Business School, 2013), and others from 1980 to 1996 (Inc., Gallup, 2016). For effects of this thesis we try to reach both ends of the ranges used, defining the interval of age for the Millennials from 1980 to 2000, which is the same range used in published articles in the Times (Stein, 2013).
Attracting Millennials is important because younger consumers may influence the purchases of their peers and families. Peer relationships create a social environmental pressure to conform to group norms, such as brand preferences, and in Western society social pressures are found to be a major influence on the green purchase behavior of adults (Lee, 2011). Information Research, Inc. (IRI) estimates that Millennials represent a growing $54.3 billion opportunity (Mckayn, 2010). Moreover, as mentioned by Aquino two years later, according to marketing research firm Kelton Research, during the next five years this generation will be economically active, and values their purchasing power in 200 billion dollars per year (Aquino, 2012).

Following are some insights into this generation’s consumerism behaviors. Firstly, some studies attempting to define characteristics of this generation argue that Millennials are said to be somewhat diverse in ideas, educated, and technologically savvy (Hood, 2012). Some studies have found that this group of consumers is the most environmentally conscious (Vermillion & Peart, 2010). According to Christine Spehar (2006) the College Explorer, 33 percent of college students surveyed favor socially and environmentally friendly brands. Studies have also shown that educated consumers are increasingly worried about the long-term effects of products on their health, community, and environment (Spehar, 2006). Secondly, “With this generation, everything has to be visual and contextual. Millennials process information on an intuitive level. They will form impressions about a product based on how it looks and what it does, not what advertisers say about it” (Aquino, 2012). They have also moved much of their media consumption online: They are more likely to read news online, and two thirds regularly watch television online. Finally, it is said that when it comes to convincing Millennials about a product’s value, nothing beats word-of-mouth marketing (Aquino, 2012).

2.2 Theory of Consumption values

Why do consumers make the choices they do? The theory of consumption values assumes that there are 5 main values that drive consumer choice behavior when making a purchasing decision. The values proposed are: functional, social, emotional, conditional and epistemic values. While it is desirable to maximize all five values, it is often not practical, and consumers usually accept less of one to obtain more of another (Jagdish, Newman, & Gloss, 1991), meaning that the more interest a consumer has for a certain value, the more he or she would be
interested in buying a product that sells this same value. An example of this is provided by McDaniel & Rylander (1993): a consumer may decide to purchase gold coins as an inflation hedge (functional value), and also realize a sense of security (emotional value) from the investment. Social, epistemic, and conditional value may have little influence. In contrast, the same consumer may purchase a gold bracelet because it will fit the tastes of those she or he respects (social value). The other four consumption values may have little influence. These values are independent with each other.

Three fundamental propositions are axiomatic to this theory:

(1) Consumer choice is a function of multiple consumption values, (2) consumption values make different contributions in any given choice situation, and (3) consumption values are independent. The theory has been employed and tested in more than 200 applications, and has demonstrated consistently good predictive validity (Seth, Newman, & Gross, 1991). An explanation of the five values follows:

2.2.1 Functional Value

Perceived utility for consumers lies on the product’s capacity for functional, utilitarian, or physical performance, such as reliability, durability, and price. This is the primary driver for the decision (Seth, Newman, & Gross, 1991). Studies have shown that Millennials agree to purchase green products only if they are not sacrificing quality, performance and other relevant product attributes by doing so (Lu, Bock, & Joseph, 2013), this means, only if the extra price they are paying is “for the environment”.

2.2.2 Social Value

Social value is the perceived utility derived from an alternative association with one or more specific social groups (Seth, Newman, & Gross, 1991). This is especially relevant in products that are constantly reaching the sight of other people. Sometimes this value is more relevant than functional value. This happens when you buy something pretty but non-functional. A highly important companion of this value is the perceived risk of buying a certain product. For example, nobody would buy a moisturizing lotion that gives you pimples. Consumers wishing to avoid negative outcomes are keen to pursue more information sources when facing with social risk. Expert opinion is seemingly a powerful way of reducing consumer perceptions of risk (Aqueveque, 2006).
2.2.3 Emotional Value
Emotional value is the perceived utility derived from an alternative capacity to arouse feelings or affective states (Seth, Newman, & Gross, 1991). Goods and services are associated frequently with emotional responses. Emotional value is often associated with aesthetic alternatives (e.g., religion, causes). However, more tangible and seemingly utilitarian products also have emotional value. For example, some foods arouse a feeling of comfort through their association with childhood experiences, and consumers are sometimes said to have “love affairs” with their cars (Seth, Newman, & Gross, 1991).

2.2.4 Conditional value
Conditional value is the perceived utility derived from an alternative as the result of a specific situation or set of circumstances facing the decision maker (Seth, Newman, & Gross, 1991). Products are often bought according to an upcoming trend, season, and major news, special situations like “once in a lifetime”, or social movement. For example, Christmas cards or one with more subtle conditional associations: popcorn at the movies. Studies of soft drinks, snack foods, beer, and breath fresheners have demonstrated that consumption affects behavior, and that sales and purchases of products are frequently in response to particular situations (Lai, 1991).

2.2.5 Epistemic value
The perceived utility acquired from an alternative’s capacity to arouse curiosity, provide novelty, and/or satisfy a desire for knowledge. An alternative acquires epistemic value by questionnaire items referring to curiosity, novelty, and knowledge. Entirely new experiences certainly provide epistemic value (Seth, Newman, & Gross, 1991). Consumers may wisely decide to seek information that is not "useful" now, but which may assume great importance in the future. A complementary explanation for novelty seeking is that it serves to improve problem-solving skills (Lin & Huang, 2012).

The theory of consumption values provides a useful insight for this study regarding the relationship between a product’s values and the consumer choice. Further in this section, the four relevant marketing strategies for the proposed model of this thesis will be categorized and explained, also based on the literature on the Theory of Consumption Behaviors and these strategies. The attempt of determining which values are the most present in each of the strategies will be made, and this will be useful for further analysis.
A study performed by (Seth, Newman, & Gross, 1991) concluded that, if consumers attach higher emotional value, conditional value, or epistemic value to green products, the probability that they will choose green products is higher. Therefore, in this study, expectations are that a marketing strategy, which enhances any of these three values, will show increases in the credibility that consumers have in the advertising. The next section provides background for what green marketing and consumerism stand for and some insights into how brands market their green products.

2.3 Green Marketing and Consumerism

It may be that in the 1960’s, for example, trying to live an environmentally conscious lifestyle was not an extending trend, but, apparently, time has shown us different. Nowadays, the new tendency appears to be that becoming environmentally conscious should not be considered a trend, but a must. The channels of distribution of green products have evolved to the point where you can even find them even in conventional supermarkets or small retailer stores. Moreover, technology has made it possible to embed “greenness” into the modern day-to-day products (for example, recycled content). Once confined to the tissue boxes or wrappers of days gone by, recycled content is now good enough for Kimberly-Clark’s own Scott Naturals line of tissue products and Staples’ EcoEasy office paper, not to mention an exciting range of many other kinds of products from Patagonia’s Synchilla PCR (post-consumer recycled) T-shirts made from recycled soda bottles, to name just a few (Ottman, 2011). So, technology has made it possible for green products to become more present and slowly replace ordinary products. For the good listening marketer, this sounds like an area of opportunity. There is an increasingly popular notion that environmentally-based product positioning should be an important consideration in consumer marketing (Leigh, Murphy, & Enis, 1988). When advertising environmentally friendly products, the companies are performing what is known as Green Advertising or Green Marketing. Grewal and Levy (2008), defined green marketing as a strategic effort made by firms to provide customers with environment-friendly (i.e. eco-friendly or green) merchandise. In other words, the term "green marketing" has been used to describe marketers' attempts to develop strategies targeting the "environmental consumerism".

Grewal and Levy’s concept Green Marketing is the one that will be used in this thesis. But environmental consumerism is also a term that has come to mean different things for all sorts
of people. This depends on the nature of the products in question, and whether it helps the local economy or if it is a fair trade labeled product from a developing country.

Some studies have shown that the common attribute is the environmental values of the consumer (Gilg, Barr, & Ford, 2005). Environmental values of a person are merely altruistic values that influence the decision of buyers to care about environmental issues.

When speaking of environmental issues, literature diversifies into several specific approaches and perspectives, but they can be summarized in these 4 categories (McDaniel & Rylander, 1993):

1. Landfills, which are called on to handle over 150 million tons of trash per year, are dangerously close to being full.
2. There is water and arable land pollution.
3. Our natural resources, particularly rainforests, are being depleted at an ever-increasing rate.
4. The so-called "greenhouse effect", a potential threat to our planet's long-term survival, is being given more and more serious consideration by leading world scientists (McDaniel & Rylander, 1993).

Green consumerism happens when the interest of caring for any of the above mentioned is decisively influencing the buying decision. It can be said that eco-friendly processes are manufacturing-related processes that are designed specifically to improve the environmental performance of the organization by reducing air emissions, effluent wastes, solid wastes and the use of toxic materials (Lee, 2011). Therefore, “green products” or services, also called eco-friendly, organic, or ecological, are all the products produced through eco-friendly processes (Lee, 2011).

2.4 Greenwashing and green marketing credibility

When attracting a green audience, companies often used claims that sound environmentally friendly, but are actually vague. Although there is no specific date when these practices began spawning, their effects are well known amongst literature and appear to be most notable during the decade of the 90’s (Furlow, 2010). The practices afore mentioned have caused green
consumers to be more cautious in their purchasing decisions, and have also given potential green consumers an excuse not to start being environmental consumers. An example of how common this problem became is that EnviroMedia, Austin, Texas has developed the Greenwashing Index (Greenwashingindex.com) to monitor environmental claims used by manufacturers (Miller, 2008). Other relevant literature has concluded that the believability of green claims has been weakened by the excessive use of the terms of “environmentally-friendly”, “natural”, “sustainable” or “recycled” (Karna, Juslin, Ahoven, & Hansen, 2001). Similarly, it has been claimed that the problem both for marketers and consumers appears to come from the environmental terms that are used for the promotion of their “green” or “ecological” products (Papadopoulos, Karagouni, Trigkas, & Platogianni, 2010). Terms such as “recyclable” and “friendly to the environment” have suffered hard criticism and are today avoided by the enterprises because of the difficulty of their definitions’ documentation (Lampe & Gazda, 1995). In 1990, in the USA, a research showed that the problem faced when promoting “green” marketing was the increased number of consumers not believing in the companies’ environmental statements (Schwartz, 1990).

Very few studies attempt to provide solutions for the negative effects of greenwashing on a company’s green advertising. A possible solution, and apparently very commonly used, against the reduced believability of their green marketing has been for companies to certify their products using a third party certification body. The verification of claims by a third-party can discourage exaggeration, white lies and other greenwashing pitfalls that occur when a company certifies its own products (Hunter, 2014). It could be thought that these parties also tend to bring deep expertise on the standards to which they certify, while the product manufacturers may only have surface-level knowledge of the standards, which is a reason to understand why they tend to be expensive (Ottman, 2011). Certification parties also tend to bring deep expertise on the standards to which they certify, while the product manufacturers may only have surface-level knowledge of the standards. To ensure their impartiality and confirm their competence and knowledge, the certification bodies themselves are regularly audited under an “accreditation” procedure governed by the owner of the standard (Hunter, 2014). For example, the Forest Stewardship Council (FSC), which maintains a standard and certification for “responsibly-managed” forests, is annually audited by Accreditation Services International (ASI), the body that evaluates and determines a certification body’s competence, or accreditation, to a host of standards such as FSC (Hunter, 2014). Ottman (2011) provides five strategies to avoid becoming a greenwash labeled company and establish credibility for a green marketing campaign. There should be a search for third party certification and a
following of the next four points: 1) Walk your talk, which includes practices such as empowering and educating employees, being proactive on the matter of environmental conservation, and being visible and committed to environmental policies (for example through a visible CEO) so you do not become like some companies that avoid promoting positive environmental initiatives out of fear for greenwashing backlash (Hunter, 2014); 2) Be transparent, which is nothing more than providing the information consumers seek to evaluate your brands (it is especially important now that information is easy to obtain for the modern consumer); 3) Do not Mislead, be specific as well as prominent, providing the complete information without overstating or leaving space for assumptions; 4) as mentioned before, seek third party certification and 5) Promote responsible consumption (for example by teaching consumers learn how to properly dispose of the products) or be resource-efficient in their consumption.

It is worth mentioning that although these approaches provide a useful insight on how to avoid greenwash, in this thesis a slightly different approach is sought after. That is the idea of finding a way of addressing the believability of green marketing issues efficiently through marketing itself. On the following section, an overall review of the marketers’ attempts to appeal to green consumerism and to advertise their green products is presented.

2.5 Green Marketing Strategies

There is extensive literature about how to reach the green consumer in the best way or how to appeal for green consumerism and advertise green products. On the other hand, there have been some attempts of summarizing these into categorized “strategies”. In the following paragraphs some attempts regarding the matter are explored.

One approach has been to come up with procedures of how to implement green marketing into a conventional marketing plan, with a 10 step procedure that goes from developing environmental policies, to communicating the actions taken and finally monitoring consumer response (McDaniel & Rylander, 1993). This is with the claim that incorporating green marketing into a regular marketing process is only one side of the problem. Another one focuses on the purchasing behaviors needed of green products, with findings about product attributes and the intent to purchase green products, recyclability or re-usability, and whether it is biodegradable (Lu, Bock, & Joseph, 2013).
Moving closer to this thesis purpose, 3 “tools” for enhancing consumer’s knowledge about environmental friendly products have been explored by (Rahbar & Wahid, 2011), which are eco-brand, eco-label and environmental advertising. Eco-brand is a name, symbol or design that stands for products that are harmless to the environment. Utilizing eco-brand features can help consumers differentiate them in some way from other non-green products (Rahbar & Wahid, 2011). They argue that the purchasing behavior will switch to buying environmental friendly products as a result of considering the benefit produced by green brands. Eco-labeling products are argued to be a significant tool on marketing green products (Rahbar & Wahid, 2011). Sammer and Wüstenhagen (2006) state that labels are a signal to accomplish two main functions for consumers: the information function that informs them about intangible product characteristics such as product’s quality and the value function which provide a value in themselves (e.g. prestige). Environmental advertising, speaking for itself, is communicating the company’s green products through advertising campaigns. An interesting finding is that of Baldwin (1993), who says that environmental advertisings help to form a consumer’s values and translate these values into the purchase of green products. This idea can be supported by the use of the Theory of Consumption Values to further explain how certain values determine the purchasing behavior of the consumer (Jagdish, Newman, & Gloss, 1991). More interesting, J. Ottman Consulting Inc., a consultancy firm expert in green marketing (J. Ottman Consulting, n.d.), has come with a set of fundamentals for green marketing. “Ottman’s fundamentals of good green marketing” aim at fulfilling 6 consumer’s “musts”. The following are taken from J. Ottman’s “The new rules for Green Marketing” (2011): 1) consumers must be aware and concerned of the issues addressed by your green product; 2) consumers must feel empowered to act and be able to make a change; 3) they must understand what the green product purchase brings in for them; 4) they must feel that price premiums coming from green products are worth it; 5) consumers must believe you, backing up any green claims with clear understandable evidence; 6) they must find your brand easily. It could be said that these “fundamentals” are somehow traditional marketing landmarks adapted to the green product market. Finally, a more organized set of green marketing strategies is presented by (Thomas & Pacheco, 2014), who claims that, although some studies argue the marketing of green products has lost its effectiveness, innovative companies have found ways to capture market share and increase profit through environmental marketing. This is done by adapting traditional marketing strategies to become “greener”. The strategies proposed are 1) The pure-green approach, a strategy that focuses mainly on advertising the attributes that make a product “green”, appealing to the authentically environmentally concerned consumer; 2) selling Green Status
and Image, which exploits the level of satisfaction people have of letting their preferences be seen by others, addressing those consumers that buy green products mostly to show their concern to their social environment; 3) the Selling Functional Value strategy, which focuses on advertising the functionality and benefits of the products, addressing the benefit-perception oriented consumer; 4) Target Commercial Markets, which is about changing the focus of a Company’s sales from the consumer to other customers in the supply chain, claiming that opportunities exist for promoting green products to commercial and industrial buyers; 5) Holistic Brand Strategy, where companies choose to become an authentic green entity by taking direct action on environmental issues and advertising the evidence to become a “Green Brand”, which is similar to the concept of “Eco-Brand” (Rahbar & Wahid, 2011), claiming that a more subtle way of advertising their greenness is more effective.

Finding the appropriate strategy and providing a consistent, subtle and authentic message is a critical step in launching and positioning green (Thomas & Pacheco, 2014). Therefore, understanding how to position these products in the market may perhaps be one of the most important determinants of success for companies in this space. Moreover, besides it has been said that the key to understanding the nature of these strategies rests in understanding the value created by offering green products to the customer and embracing them as part of the value proposition of a company (Thomas & Pacheco, 2014), there might be reasons to believe it is not always about creating value for the customer but also about addressing it in the proper way.

The strategies that better encompass all the concepts related to green marketing and provide the best structure for the purpose of this study are the strategies presented by (Thomas & Pacheco, 2014). It is worth mentioning that four of these strategies (strategies 1, 2, 3 and 5) are made from the perspective of the consumer, which is the perspective of interest of the researchers. Therefore, strategy number 4, which has a bias towards business-to-business activities changing the interaction towards another business rather than the consumer, will not be evaluated as a part of this study.

### 2.6 Constructs for the model

There are six constructs used to define the model of this research paper. Four of them are the “Green Marketing Strategies”, then “Advertising credibility” and “Price sensitiveness”.
2.6.1 Green Marketing Strategies as Constructs

The green strategies used by this research will be defined as those provided by Thomas & Pacheco (2014). As mentioned before, four of these strategies focus on the marketing towards the final consumer of the green product, while strategy number 4 (“Target Commercial Markets) focuses on selling to commercial and industrial customers. As this work is intended for the perspective of the consumer, it was decided to remove this strategy from the analysis, so only the other four strategies are considered on this study.

Firstly it must be explained that studying and developing green marketing strategies comes with a great difficulty. Because of the fact that different constructs of green consumption are investigated (e.g. environmental or ecological awareness, consciousness, credibility, concern, attitudes or behavior) and different theoretical frameworks and models are used (Gretzner & Grabner-Kräuter, 2004) it can be difficult to summarize and compare the results of different studies. In this thesis it is attempted to measure, with scales used by previous studies, the construct that best explains the behavior and/or characteristics of the target customer of each strategy.

2.6.1.1 Strategy 1: The pure-green approach

The first strategy constitutes the construct named “Pure Green Strategy”. This emphasizes on the traditional approach to environmental marketing, which is marketing the pure-green attributes of a product or service to consumers who hold values and beliefs that compel them to pay attention to the environmental impacts of the products they purchase (Roper, 2005). This means that advertisings promote the “greenness” of the products or services as being the factor that increases the value and appeal of a product or service, so consumers understand that the only added value they are obtaining is less environmental damage. A marketing strategy mainly focused in Pure-Green attributes may be risky especially when the products have a much higher price than the competitors, they are of low quality, and do not add any other customer value rather than environmental concern (Thomas & Pacheco, 2014). Studies suggest that altruism is what drives pure green approaches. A person can be seen as altruistic when he or she buys a green product that requires some self-sacrifice (Smith & Brower, 2012). In addition, the reasons why people buy purely environmental attributes are not entirely clear, but they appear to be at
least partially linked to a concern for the welfare of others (perhaps altruism) and values of individual responsibility (Seth, Newman, & Gross, 1991).

The scale used to measure this construct is called “Voluntary Simplicity - ecological awareness” (See scale #2 on Appendix 1). It is a scale that measures the degree to which a person reports engaging in behaviors that can be interpreted as helping to preserve the environment. This “pure-green” strategy is aimed directly at the authentic green consumer, who shows values aligned to environment preservation and a clear preference for products with lower environmental impact and may be willing to pay more for those attributes, even if those attributes provide no additional value for them beyond lower environmental impact (Ginsberg & Bloom, 2004). That is the reason why this scale was chosen to measure our “Pure Green Strategy” construct.

2.6.1.2 Strategy 2 - Market green status and image

Understanding that individual’s purchasing decisions can also be influenced by social status and peer opinion is the basis of this strategy which constitutes the next construct: “Market Green Status and Image Strategy”. An example of this condition is that as customers are attracted to the status received from the purchase of a designer’s clothes, many customers want to send a green signal through their purchases. Their reasons can go from showing how concerned they are about the environment itself, to showing how much they know about cutting-edge technology or even trying to influence others in their surroundings (Thomas & Pacheco, 2014).

However, an interesting notation here is that the capacity of consumers with the purchasing power to base their buying decisions purely on their social status may be correlated to income status, and might be difficult to relate their purchasing behaviors as “green consumerism” for they are not guided by environmental values. This matter comes up as the reason why the 6th construct was added, which will be discussed further.

Summing up, this strategy is centered on image-conscious consumers who, not only value environmental responsibility, but who are also willing to pay more for designs that suit their discerned tastes and preferences (Thomas & Pacheco, 2014).

This scale is called General Scale to Measure Involvement with products (GSMI – see Scale #3 in Appendix 1) and is used to determine the involvement of the purchaser of a product with the product. This scale was chosen to measure the “Market Green Status and Image Strategy” construct because it measures to what degree the purchasing decision of a person is influenced
by his/her desire to cause a certain impression on his/her social status and his/her concern for that impression.

2.6.1.3 Strategy 3 - Sell functional value

The next construct is defined “Functional Value Strategy”. A superior approach to environmental marketing for many companies is to offer and promote functional value or the benefits that go beyond the pure-green and status attributes of green products to target a broader audience. This strategy has proven successful, in numerous industries from organic foods to green buildings (Thomas & Pacheco, 2014).

Many green products are not of inferior quality (a common criticism of them in the past) (Ginsberg & Bloom, 2004), but instead offer several benefits or “gains” such as increased efficiency, cost effectiveness or better health and safety. Of course these vary from industry to industry (for example, in the energy industry the increased efficiency benefit is easily perceived, whereas the food industry has to put more effort on demonstrating the benefit of better health).

It has become increasingly obvious that some green products just perform better than their alternatives. Two attributes that drive this belief are decreased cost of ownership (the cost you pay to have ownership over the product) and cost of disposal (the cost incurred at the end of the product’s life). An example of cost of ownership is the light bulb industry, which reduced this cost by allowing you to have to change the light bulbs less often. An example of cost of disposal is disposing of electronics wastes, house cleaning chemicals and paints, which may require an extra trip to a dedicated facility for disposal (Thomas & Pacheco, 2014).

The scale used to measure this construct is called “Benefit perception (Composite)” (See scale #4 in Appendix 1). It measures the probability that a customer will associate the purchase of any product (in this case, a green product) with six types of gain. The reason to use this scale to measure this construct is that, according to Thomas & Pacheco (2014) this “Sell functional value strategy” is aimed toward customers that prioritize benefits such as: increase efficiency and cost effectiveness (FINANCIAL GAIN), health and safety (PHYSICAL AND PSYCHOLOGICAL GAINS), convenience (CONVENIENCE), and overall quality and performance (PERFORMANCE).

2.6.1.4 Strategy 5 - The holistic brand
The last construct related to the green marketing strategies is “Holistic Brand Strategy”. This is promoting the environmental activities or attributes of their products via occasional subtle press releases instead of aggressive advertising campaigns. These companies have some of the most authentic value-driven businesses, with active sustainability programs and impressive environmental performance in their industries (Thomas & Pacheco, 2014). In other words, companies show values of Corporate Social Responsibility. Companies applying this strategy are focused on building a green brand as well as an environmental and social reputation for the long term. Thus, while they prioritize the quality of their product in their promotional efforts, they soft-sell their environmental action and performance. This Holistic Brand promotes the “epistemic” value, as it fulfils the desire for knowledge and curiosity that come with researching a company’s background activities. Summing up, their environmental performance and activities help create and support a holistic brand image that is consistent with their product and business strategy.

The scale used to measure this construct is “Social role of corporations: Attitudes toward the social role of corporations” (See scale #5 in Appendix 1). As it has being argued that understanding the complex relationships between the environmental attributes of a product, a company, and a brand image is by combining high quality products, with authentic environmental and social behaviors (Thomas & Pacheco, 2014). Hence, this scale was chosen because the Holistic strategy focuses on customers interested in firms whose practices are considered as Socially Responsible Companies that share the customer’s social interests and this scale measures to what degree the subject is interested in the social role of companies.

2.6.2 Price sensitiveness

When talking about green products the notion of price always comes up. Price is known to be a critical factor when purchasing ecological products (Lu, Bock, & Joseph, 2013), and this is because people assume the environmentally friendly attributes come with a rising in the price. Consequently for this study, a category where consumers not interested in environmental issues or not susceptible to the marketing strategies proposed is needed. These consumers would be more concerned about what they spend their money on rather than a deeper meaning for their purchases. Therefore, a construct for this was integrated and defined as “Price sensitiveness”.

The scale used to measure this construct is called “Price Consciousness” (See scale #6 in Appendix 1). This scale studies the willingness to expend the time and energy necessary to shop around, if need be, to purchase grocery products at the lowest prices, this scale measures the degree of concern the consumer has towards the price of products. Price sensitiveness has to be added because it is a factor embedded in all of the marketing strategies studied, and this construct will be helpful to categorize the customers that are not interested or concerned with environmental issues.

2.6.3 Green Advertising Credibility

“Green Advertising Credibility” is how the next construct is defined. Since the premises of this work state that credibility on green advertising has been decreased, then this matter is the core concept of the work. The notion affected by greenwashing is the level of “believability” companies’ green claims count for, meaning the Advertising itself is more important than a specific company. A further clarification to this notion is that it’s different from “source credibility” which has to do with the reputation of the source in terms of trustworthiness and expertise (Ohanian, 1990).

According to a study made by (Taken Smith & Brower, 2012) for the 3 year period from 2009-2011, advertising has the second highest impact on consumers when considering the environmental merits of a product. It is common knowledge that advertising is the way of communication between the company’s necessity for selling and the consumer’s necessity for buying. In addition, when thinking in modern Global Marketing, notions such as being different, innovative, and creative automatically come up, but let us go back to the basics. What makes a “Winning Brand” is that which combines powerful, meaningful, inspirational messages delivered (through their advertising) in ways that touch their audiences (Greenwald, 2014). Moreover, according to the Theory of Consumption Values, the decision of the purchase of a product or service is dependent on the relationship between a specific set of values or behaviors of the customer and how the referred product succeeds to mirror that value (Jagdish, Newman, & Gloss, 1991). The same applies to advertising, where the attitude towards the ads depends to the degree to which it mirrors a customer’s interests or behaviors. Finally, it has been proved that there is a relationship between the attitude towards the ad and attitude towards advertising in general (ALT, SĂPLĂCAN, & VERES, 2014), therefore a marketing strategy
that fits the customer’s interests is needed for a better attitude towards the ads. In other words, depending on the consumers’ interests and the features of the products or services that are highlighted by companies towards its advertisings, the consumption of the products/services is higher or lower according to the affinity of the interests’ profile of the end consumer.

The scale used to measure this construct is “Skepticism toward advertising” (See scale #1 on Appendix 1). This scale measures the degree to which customers fail to believe in advertising. As Skepticism is the attitude of doubting the truth of something, such as a claim or statement (Merrian-Webster's Learner's Dictionary, Search: Skepticism, 2011), skepticism towards advertising is the tendency toward disbelief of advertising claims. The fact that this construct is called “Advertising credibility” while the scale is measuring “Skepticism” may produce a sense of incongruence. Skepticism comes up as a negative-oriented noun whereas the rest of our constructs are positive-oriented nouns (e.g. benefit perception, environmental awareness). To maintain the order in keeping this pattern the construct’s name was changed into another positive-oriented noun: “Advertising credibility”.

2.7 Framework on the tools for analysis

The following are concepts the authors believed to be important for a clearer understanding of the method of analysis chosen.

2.7.1 Multiple Linear Regression analysis

According to the book “A handful of statistical analysis using SPSS” (Landau & Everitt, 2004), multiple linear regression is a method of analysis for assessing the strength of the relationship between each of a set of explanatory or independent variables and a single response or dependent variable. The results of the application of this analysis include a set of regression coefficients (one for each explanatory variable). These coefficients give the estimated change in the response variable for a unitary change on the corresponding explanatory variable, given that the rest of the variables remain constant. The fit of a multiple regression model can be judged in various ways (for example, calculation of the multiple correlation coefficient or by the examination of residuals). The following summary of points and assumptions are taken from Landay et. Al, (2004), Chapter 4 “Multiple Linear Regression: Temperatures in America and Cleaning Cars”: 
The multiple regression model for a response variable, \( y \), with observed values, \( y_1, y_2, \ldots, y_n \) (where \( n \) is the sample size) and \( q \) explanatory variables, \( x_1, x_2, \ldots, x_q \) with observed values, \( x_{1i}, x_{2i}, \ldots, x_{qi} \) for \( i = 1, \ldots, n \), is:

\[
y_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \cdots + \beta_q x_{qi} + \varepsilon_i
\]

The variation in the response variable can be partitioned into a part due to regression on the explanatory variables and a residual term. The latter divided by its degrees of freedom gives an estimate of \( \sigma^2 \), and the ratio of the regression mean square to the residual mean square provides an F-test of the hypothesis that each of the coefficients takes the value zero.

A measure of the fit of the model is provided by the multiple correlation coefficient, \( R \), defined as the correlation between the observed values of the response variable and the values predicted by the model. The square value of this \( R \) (which is called \( R \) square) gives the proportion of variability for the response variable accounted for by the explanatory variables. In other words, this value will explain how well the model works for predicting a value for Green Advertising Credibility.

There are several “assumptions” that are made about the data when making a regression analysis. Assumptions are characteristics of the data required for utilizing a certain statistical method of analysis. Their importance lies on the statement that if any of these are violated, the statistical relevance of the study could easily be in question. Therefore, it is important to consider checking them. The following summary is taken from chapter 4 of “SPSS Survival Manual” (Pallant, 2005).

- **Sample Size:** Some authors provide guidelines that say that multiple regression should be made with data sets of at least 15 observations per explanatory variable (Stevens, 1996, pág. 72). Other “rules of thumb” by (Tabachnick & Fidell, 2001) say that there should be at least \( N > 50+8m \) or \( N > 104+m \) (where \( m = \) number of explanatory variables and \( N = \) number of observations).

- **Multicollinearity:** This refers to the relationship among the independent variables. Multicollinearity exists when the independent variables are highly correlated with each other (\( r = .9 \) and above). Another deeper analysis can be presented on the Collinearity Diagnostics (provided by SPSS output, for an example see Figure 8 in “Results”). This table provides two magnitudes: the Tolerance value and the VIF value. If the values for the “Tolerance” column are lower than 0.1, there is high possibility of multicollinearity, and for the “VIF” column, the values should not be above 10.

- **Singularity:** Happens when one independent variable is actually a combination of other independent variables. The total score of a scale includes other scale’s sub scores or when
both are included separately on the analysis. This assumption has to do with manipulation of the data.

- **Outliers**: These are very high or very low scores with respect of the mean. These can be spotted from the standardized residual plot. Tabachnick et. Al (2001) defines outliers as those with standardized residual values above about 3.3.

- **Normality**: the residuals should be normally distributed about the predicted Dependent Variable scores. This is analyzed with a scatterplot called “P-P Scatterplot”, which can be obtained from the output of SPSS;

- **Homoscedasticity**: the variance of the residuals within the predicted Dependent Variable scores should be the same for all predicted scores. This is analyzed using a scatter plot of the standardized residuals of each independent variable (X axis) vs the dependent variable (Y axis), also easily obtained from SPSS output.

- **Linearity**: the residuals should have a straight-line relationship with predicted Dependent Variable scores. This is analyzed by making a partial regression plot of each variable towards the dependent variable.

The use of linear regression analysis inherently requires the formulation of hypotheses around the proposed model. The hypotheses are formulated with the objective of proving if there exist any relationship between the independent and dependent variables. The hypotheses are similar to those of Simple Linear Regression, but adapted to a set of explanatory variables instead of just one (Pallant, 2005). The chief null hypothesis is $H_0: \beta_1, \beta_2, ..., \beta_q = 0$, and the corresponding alternative hypothesis is $H_1: \beta_1, \beta_2, ..., \beta_q \neq 0$. If the null hypothesis is true, we can say that there is no statistical evidence that the coefficients of explanatory variables are different from zero. Therefore they have no effect on the response variable. The other alternative is that at least one of the coefficients is different from zero and has an effect on the response variable. Because this hypothesis is inherent to Regression analysis, it is explained in more detail on part 3.7.1 “Statistical Hypotheses”.

### 2.7.2 Pearson’s Correlation Analysis

While regression analysis will gives information about the validity and accuracy of the model, a Pearson’s Correlation analysis is useful for measuring the degree to which the proposed independent variables and the dependent variable are related. This analysis is used to
describe the strength and direction of the linear relationships themselves (Pallant, 2005). There exists a significant amount of statistics that are available from SPSS, though the procedure utilized in this research was the Pearson product-moment correlation. This statistic is designed for interval level (continuous) variables, such as scores. With the SPSS software Package two types of correlation are given. The first one is known as zero-order correlation and gives a simple bivariate correlation (two variables), whereas on the other hand the second one explores the relationship between two variables while controlling another variable, and it is called a partial correlation. The following summary was rephrased from Julie Pallant’s SPSS Survival Manual, chapter 11.

The value of interest for interpreting this analysis is called “Pearson’s Correlation Coefficient” (which is denoted as “r”), which can take on only values from -1 to +1. The sign indicates whether a correlation is positive (as one variable increases, so does the other), or a negative correlation (as one variable increases, the other decreases). A perfect correlation of -1 or +1 indicates that a variable can be determined exactly by knowing the value on the other variable. If these values were put into a scatterplot, a straight line would be seen. A correlation of 0, on the other hand, indicates that there exist no correlation between the variables, if the data is put into a scatterplot in this case it would show a circle of points with no pattern evident (Pallant, 2005). To interpret the values of the coefficients, Cohen (1988) suggests the following guidelines:

<table>
<thead>
<tr>
<th>r Value Range</th>
<th>Correlation Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>r = .10 to .29 or r = -.10 to -.29</td>
<td>small</td>
</tr>
<tr>
<td>r = .30 to .49 or r = -.30 to -.49</td>
<td>medium</td>
</tr>
<tr>
<td>r = .50 to 1.0 or r = -.50 to -1.0</td>
<td>large</td>
</tr>
</tbody>
</table>

Finally, the assumptions related with this analysis are shared with the Multiple Linear Regression analysis, more specifically those of checking for outliers, homoscedasticity, normality and linearity. All of which have been previously defined for the Multiple Linear Regression analysis.

**2.7.3 Constructs and items**

The introduction of the concept of latent variables and manifest variables is needed for this study. Some attributes can be measured directly for example, weight, height and age, which
are *manifest* variables. But other attributes cannot be measured directly and require being measured through other manifest variables, which are the *latent* variables (Widaman, n.d.).

Because of the nature of the scales used on this study, their subjects of measure are behaviors. When measuring behavioral outcomes in the social sciences, the personal characteristic to be assessed is called a construct (Cronbach & Meehl, 1955). The construct is a proposed attribute of a person that often cannot be measured directly, but can be assessed using a number of indicators or manifest variables (in this thesis they are often also called “items”). Prior research provides a valuable context for work on measuring a construct (Cronbach & Meehl, 1955). Moreover, if prior attempts to assess the same construct have met some success, then current efforts can be informed by these successes (Widaman, n.d.). For simplicity, for this thesis the constructs and scales used to measure them are obtained from previous studies from the books “The Marketing Scales Handbook” (Bruner, Hense, & James, 1992), and “Handbook of Marketing Scales” (Bearden & Netemeyer, 1999).

3. Methodology

*In this chapter the details of the case study, sample, sample size and sampling method are mentioned, and the procedure to process and compute the data is described.*

3.1 The study

Because some hypotheses are provided with the intention of exploring and analyzing the relationship between some variables, this study is considered an exploratory research\(^1\). There are two different types of data: qualitative and quantitative. The way to differentiate them is simple, the quantitative data is in the numerical form, while the qualitative it is not. According to the nature of the information that was collected in this research, the quantitative approach

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\(^1\) *Exploratory research:* Personal investigation which involves original field interviews or surveys on a limited scale with interested parties and individuals with a view to secure greater insight into the practical aspects of the problem. The objective of exploratory research is the development of hypotheses rather than their testing, whereas formalized research studies are those with substantial structure and with specific hypotheses to be tested (Kothari, 2004).
was the most accurate and its analysis tools were the best option in order to solve the problematic previously presented.

Within the quantitative approach there exist different collecting data methods, but the *questionnaires*\(^2\) are quite popular. Some of the main reasons of preferring this method among others is that it is considered very practical and the large amount of information that can be collected in a short period of time and in a relatively cost effective way make it an attractive way to collect information. With the help of technology, the results of these *questionnaires* can usually be quickly and easily quantified either by the researcher or using a software package. Moreover, this method can be analyzed more objectively than other forms of research (Ackroyd S. & Hughes, 1981). Thereby the chosen methodology of data collection was distributing *questionnaires* through an online platform.

As mentioned in the introduction and literature review, the millennials are an important generation in which most companies should invest in market research, as broadly they represent a large percentage of the world population and is the next economically active generation, which makes them valuable potential customers. Since the professional level represents a high level of education and at the same time gathers a large number of people from the Y generation, for this research was considered convenient to approach people who were students, though it was not a mandatory requirement to fulfill. The following section contains deeper details of the sample, its delimitations and sampling method.

### 3.2 The sample

As mentioned before, for this particular research, the chosen population was the Y generation regardless of origin, occupation or gender, which means any man or woman who were born between 1980 and 2000. Before starting to describe the sample studied in this paper, it is worth mentioning some of the facts that make the millennials an attractive generation for companies which offer ecological products.

The *questionnaires* were sent to relatives and friends of the researchers. Therefore, the sample can be defined as a non-probability convenience sample. Acknowledging that all members of the general population did not have the same chance to be chosen as participants in the sample. However, given the different backgrounds and experiences of the researchers,

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\(^2\) *Questionnaire*: It’s a type of survey in which a group is handed a set of structured questions for them to answer (Trochim, 2001)
the contacts considered as candidates for the sample are from various nationalities, an attempt made to obtain a sample that may represent a miniature version of the population, increasing the possibility of obtaining representative results for analysis and enabling the chance of obtaining a worldwide overview (Henry, 1990). Moreover, it was intended that this worldwide overview allowed to “identify trends and/or patterns, in a more global way”, which might be useful for future studies.

Although the convenience samples are usually not recommended due to their lack of bias, they are useful in pilot studies, and recommended when evaluating a variety of issues related to customer satisfaction, and user needs (Henry, 1990). If a study based on this sampling model is carefully conducted, useful data can be generated. Some of the improvements that were implemented on this research were the following: control and assess the sample’s representativeness (a miniature version of the population), add diversity (avoid assumptions, give everyone the opportunity), and use more data (an attempt to use a larger sample was made). According to Gary T. Henry’s book Practical sampling (1990) there are three main reasons why nonprobability samples are used: lack of resources, inability to identify members of a population, and need to establish the existence of a problem. Moreover in this specific research conducted by bachelor students, this list can be expanded to include a fourth reason: lack of research experience.

Based on the information stated before the sample for this research can be defined as:

- Individuals between the range of ages 16 and 36, from different provenance. No restrictions regarding their economic status (economically active or not) or who see themselves working over the next five years.

### 3.3 Sample size

Due to the fact that the current millennial population is so big, the optimal sample size would be too difficult to calculate with the regular procedures, or would be too big to be feasible. Instead of this, the researchers used a sample size big enough to cover the minimal sample size from one of the assumptions made on the SPSS survival manual for using linear regression as the analysis tool for the study (See Theoretical Framework), which specifies that it should be at least $N>50+8m$ or $N>104+m$ (where $m$=number of explanatory variables).
3.4 Question Wording & Choosing of Scales

Given that the data obtained from the surveys are the most important information to carry out the analysis and then provide a solution to the research questions raised in the first chapter, it can be said that the “wording” of these questions is one of the parts of the research that should be done thoroughly. As in any research that requires the use of data collection through questions, the purpose of the study has to be reflected in them. Regardless of whether the sample size was the accurate and the participants have done their contribution correctly, if the questions are not clear enough it may lend itself to misunderstandings and the answers will not be optimal for the study. On the other hand, if these are formulated as clear and understandable as possible, the data are significant in the investigation. In order to perfectly lead to the construct, the question wording must be precise, clear and understandable. This is the main reason why it was decided that the questions included in the questionnaires were written and proved in advance in order to obtain significant and reliable data. Hence, two different editions of Gordon Bruner’s book "Marketing Scales Handbook" (Bruner, Hense, & James, 1992), were used as source for looking for previously tested scales to apply in this study. This book provides information on hundreds of proven studies which were made with different sample size and offer reliability values that provide a degree of reliability and validity for further investigations.

For this particular study, the most sensible thing was to start asking about the characteristics of the participants, to filter surveys of individuals who meet the requirements of the sample from those who do not. Even if the only requirement was the age, other questions were put for further analysis of the sample. In this first section questions about their age, origin, level of interest on the environmental care, and regarding whether they see themselves working over the next five years were made. Later on, the questions related to our constructs where made. These questions were written on an e-survey software template from the google family called Google Forms.

Google Forms provide not just a fast way to create an online survey, but among other online questionnaires templates, the responses are collected in an online spreadsheet and Google Forms provide the raw data in an excel sheet while also provides the option to visualize in real time graphics for every single answered question.
3.5 Distribution channel

In order to reach the set number of questionnaires answered and due to lack of time, Facebook was used as the main communication tool to ask the people from the contact list. Inbox messages allowed to establish private conversations where the researchers were able to persuade people to answer the e-survey. Even though posting the online survey on the wall of a Facebook profile may seem like a good idea to collect data more easily, personal requests to answer the survey proved to be the most efficient way to collect survey answers. It is worth mentioning that in an attempt to increase diversity and strength the sample, the researchers tried to be objective at all times when distributing questionnaires, by not making judgments about who should be asked to participate in the study (for example, don’t make assumptions about who is or is not a student). Giving everyone on the contact list an opportunity to fill out a questionnaire (Patten, 2002).

3.6 Quantify the answers

As this investigation is quantitative, the scale to quantify the results was the Likert scale, except for some questions in the first section that were answered openly. Usually the values of this scale can go from 1 to 5 or 1 to 7. For this research the scales varied depending on the construct scale. An example of how a Likert scale with values ranging from 1 to 5 looks as follows:

1 = strongly unfavorable to the concept  
2 = somewhat unfavorable to the concept  
3 = undecided  
4 = somewhat favorable to the concept  
5 = strongly favorable to the concept

To quantify the responses obtained the next step is to compute the inter-correlations between all pairs of items, based on the ratings of the judges (individuals from the sample). According to Trochim (2001) there are several analyses that can be done, but first the data must be filtered based on the answers to the questions that made reference to the requirements for this specific study (personal information of the individual), with the aim of selecting the data.

---

3 Likert Scale: Is a unidimensional scaling method which tries to define what it is what it is trying to be measured (Trochim, 2001).
that is valuable from the one that is not. Once this is done the selected data need to be organized and processed in order to introduce them into the software package SPSS and start the analysis.

3.7 Defining the model

It is worth to mention again that the scales chosen to provide the items for the definition of the constructs was decided to be made through scales established by previous literature studies, with the aim of increasing the reliability of this particular study through previously tested scales. On the same way, to avoid the process of developing entirely new questions which would have then needed to be subjected to reliability tests and pilot tests before sending them to obtain the required empirical data. Thereby came the idea of using previous studies’ test from a reliable source.

The procedure followed to choose the appropriate scale for each of the constructs was guided by how literature defined each of the constructs utilized. Take for example the Pure Green Strategy construct. Literature says that this strategy aims to address the consumer who is authentically concerned for environmental issues and ecological activities, but on the other side, literature also suggests that there is prove that environmental concerned behaviors include “altruism” or altruistic related values. After that, one or two “attributes” were defined for each construct. The attribute served to define a single concept that described the construct, and after this, a scale that measures this specific attribute (or similar) was selected from Gordon Bruner’s book "Marketing Scales Handbook" (Bruner, Hense, & James, 1992). Due to the nature of the scales’ selection, it is worth mentioning that the number of usable scales was reduced to those available in two different books of marketing scales: “The Marketing Scales Handbook” (Bruner, Hense, & James, 1992) and “Handbook of Marketing Scales” (Bearden & Netemeyer, 1999), this is why the researchers had to look for a scale whose definition best fitted the attribute of each construct. In the case of Pure Green Strategy construct, for example, two attributes were selected, “altruism” and “environmental awareness”, while searching for the scales it was found that the scale with the description and measures that fitted the best to what literature said about Pure Green Strategy was one that measured “Ecological awareness”, therefore the attribute was adapted and “altruism” attribute disposed of. A similar process was followed for the rest of the constructs.
The following diagram shows the described model explaining the relationship between the green marketing strategies proposed by Thomas J. Dean and Desiree F. Pacheco (2014), price sensitivity and Green Advertising Credibility.

![Diagram of the model](image)

*Figure 1*: Relation scheme between constructs and variables.

The way that this scheme of relations (*Figure 1*) was developed can be understood more simply reading the diagram from right to left, but the way those defined the constructs should be read from left to right. The dotted circles on the left are the names of the scales used to measure the constructs, which in this case are the strategies proposed to solve the problem of the credibility of brands and conform the third column of circles. On the second column we have the attribute which defines the values or behavior of the target customer each of the green marketing strategies reaches. The same order applies to the construct of Green Marketing Credibility, although it has to be read from right to left.

### 3.7.1 Statistical Hypotheses

Lastly, due to the nature of this study and the use of multiple linear regression and correlation analysis the following hypotheses are formulated for testing the significance of the model and the relationships between the variables. The hypothesis “H1” tests the significance of the proposed model. In other words, it tests if there is or not a linear relationship between the Green Marketing Strategies & Price Sensitiveness and Green Marketing Credibility. The hypothesis reads as follows:

- **H10**: The coefficients of the model are not different to zero
- **H1a**: At least one of the coefficients is different to zero.
The rejection or not-rejection of these will give us information regarding whether there is a relation between the independent variables and the dependent, or not.

Hypotheses “H2” to “H6” give us information about the relationship of each of the independent variables through their regression coefficients. In other words, to test the degree of the effect each of the Green Marketing Strategies and Price Sensitiveness have on Green Marketing Credibility. Therefore, the hypotheses look like this:

H2o: The regression coefficient of “PureGreen” construct is not different to zero
H2a: The regression coefficient of “PureGreen” construct is different to zero

H3o: The regression coefficient of “Status” construct is not different to zero
H3a: The regression coefficient of “Status” construct is different to zero

H4o: The regression coefficient of “Functional” construct is not different to zero
H4a: The regression coefficient of “Functional” construct is different to zero

H5o: The regression coefficient of “Holistic” construct is not different to zero
H5a: The regression coefficient of “Holistic” construct is different to zero

H6o: The regression coefficient of “Price” construct is not different to zero
H6a: The regression coefficient of “Price” construct is different to zero

The rejection or not-rejection of these will give us information regarding the effect of each independent variable over the dependent variable.

3.8 Preparing the data for SPSS

Two different alternatives of software were used for data manipulation, Microsoft Excel and IBM’s SPSS. Excel was used because of convenience, the exported file from Google Questionnaires comes as an Excel file. SPSS provides an easy-to-use interface and
straightforward process for realizing statistical analysis, moreover there are several guides that provide step by step manuals and aid on working with this software and interpreting its output. Data manipulation includes retrieving the answers of the questionnaires, filtering observations as usable or non usable and cleaning the data, reversing necessary values, re-scaling into a common scale (from 1 to 10), defining the constructs and conducting a reliability test with Cronbach’s alpha coefficient.

3.8.1 Retrieving the answers and data cleaning

First, the answers of the questionnaires are retrieved from google, a total of 203 responses were conducted. This data is exported to a "Microsoft Excel" file. Then the observations which answered that their age was >36 or <16 were eliminated, a total of 4 responses were thrown out. The second filter was the observations which the answers were not completely filled in, a total of 9 items were removed, leaving the study with 190 useful observations. One of the restrictions set on the questionnaire was that every question was required to be answered in order to pass to the next section of the questionnaire, therefore, it was inferred that the incomplete observations were existent because the subject quit the questionnaire or closed the page without answering 100% of it.

3.8.2 Reversing the Data

After that, given that the scales were adapted from different studies, they all had their own rankings and scale measures. For simplicity of data manipulation it was decided to follow the logic: the higher the value of the response, the higher the attainment to the construct (See Appendix 1 & Appendix 2). For addressing this purpose two strategies were implemented. First, the values for questions 36, 38, 39, and 40 were reversed because their "direction" was negative oriented (direction refers to the way a statement is set, either if it is positively or negatively). Secondly, the values for questions 7 to 15 were also reversed, this time it was done because within the ranking order the value 1 means "Strongly Agree", the reversion was needed so that the value of “1” meant "Strongly disagree" so that the logic of the answers to these questions follow the logic stated before (e.g. question 15: Most advertising provides consumers with essential information, with the new reversed value, the higher the value of the answer the more agreement to the construct of credibility).
3.8.3 Adapting to a common-scale

After this the data was inserted into the SPSS software. Heading to the "Variable View" to define the names of the variables for SPSS (See Appendix 3). Then the last modification to the data was that of re-scaling all the items to a common scale. A literature review from (Dawes J. , 2008) found that little work has been done on this issue, therefore the authors decided to prove if there was a modification on the analysis of data that was re-scaled. There is some evidence that the psychological ‘distance’ between Likert-type scale points are not equal, for example Bendixen and Sandler (1994) and Kennedy, Riquier and Sharp (1996), the reasoning behind this is that the “strongly agree” opinion has greater impact the greater the scale range is, meaning that a “1” on a scale from 1 to 5 is not the same as a “1” on a scale from 1 to 7, the second example would represent more attainment with the statement. Nevertheless, the study of Dawes (2008) found that, if re-scaled to a common scale of 1 to 10, the five and seven-point scales produced the same mean score as each other. This is a matter of discussion because it may seem obvious that for analysis purposes all the constructs should be rated on the same scale. For this thesis the procedure used to re-scale was that of Dawes (2002), this is a simple arithmetic procedure whereby the scale end points for the 5 and 7-point versions are anchored to the end points of the ten-point scale. The formula provided by Dawes to define the size of the interval, or range, is \[ k = \frac{M-1}{m-1} \], where \( k \) represents the range of the interval, \( M \) represents the maximum value of the new scale, and \( m \) represents the maximum value of the original or previous scale. The intervening scale values are inserted at equal numerical intervals. For example, for re-scaling the 5-point scale to ten points, one remains as one, five is re-scaled to ten, the mid-point of 3 on the 5-point scale is adjusted to be the mid-point between 1 and 10, which would be 5.5 and so on, a more graphical explanation of the corresponding values is shown on Table 1.

<table>
<thead>
<tr>
<th>Five-point Scale</th>
<th>Seven-point scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Value</td>
<td>Re-Scaled Value</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>3.25</td>
</tr>
<tr>
<td>3</td>
<td>5.5</td>
</tr>
</tbody>
</table>
Table 1: Values for the data before the re-scale and after the re-scale.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>7.75</td>
<td>4</td>
<td>5.5</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>8.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Range here is \( k = \frac{(10-1)}{(5-1)} = 2.25 \)

Range here is \( k = \frac{(10-1)}{(7-1)} = 1.5 \)

3.8.4 Defining the constructs

Then it is time to define the constructs. The 6 constructs are defined by their respective items (See Appendix 1), with SPSS the procedure is the following: Clicking on the "Transform" tab --> "Compute Variable". Then naming the 6 new variables (which will be the 6 constructs) and selecting the "items" (or "variables" in SPSS language) that will conform each of them. The value for each construct is computed by the software by adding up the scores from the items that make up each scale to give an overall value formed by the responses of the items of the questionnaire. The names given to the constructs were Credibility, PureGreen, Status, Functional, Holistic, and Price.

3.8.5 Scale Reliability Test

After computing the constructs a scale reliability test was conducted on SPSS. This was made in order to achieve two objectives, firstly to verify that the value of the reliability test’s alpha\(^4\) of the scales used on the questionnaire was similar to the reliability presented on the studies on the previous studies (See Table 2). And secondly to verify if there was a difference on the reliability of the scales before and after the re-scale process. After that, a preliminary analysis to ensure that no there are no violations to the assumptions of sample size, normality, outliers, homoscedasticity, and linearity; this also helps to get a better idea of the nature of the relationships between each independent variable and the dependent. For avoiding violations on the “singularity” the researchers were very careful on computing the values for the constructs.

\(^4\) Cronbach Alpha: Most commonly used statistic to measure the internal consistency of the reliability. This test provides an indication of the average correlation among all of the items that make up the scale. Values range from 0 to 1, with higher values indicating greater reliability (Pallant, 2005).
The results for the reliability tests and these preliminary analyses are presented later on. After that, the multiple linear regression and Pearson’s correlation analyses were carried on.

4. Results

*In this section the data obtained from the questionnaires conducted are presented. The output results from the linear regression and correlation are provided as well.*

The final amount of responses obtained was 203 responses. As mentioned before, the responses that are out from the ideal range (16-36 years old) were eliminated from the sample population considered for this study and the responses from the *questionnaires* that were incomplete were removed. Leaving a total amount of 190 usable responses. The first section of the *questionnaire* was composed from 6 questions which had the main objective of filter the data and obtain the sample that fits to the requirements set for this study. The results are presented in the following order, first the raw results from the responses obtained. Secondly, the results for the Regression Analysis, including the Assumptions. Thirdly the results of the correlation analysis.

4.1 Direct Responses

Although the described sample in the methodology does not care about the precedence, occupation, gender or any other specific preference; the researchers considered important to include questions regard occupation (more specific if the person was currently studying or not) and precedence in order to inquire more deeply on the results and with the purpose of trying to find tendencies or patterns while analyzing the data. This is why on the second question of the survey that ask the participants if they are currently studying (see *Appendix I*), 94.2% of the people answered they are currently studying, without making any specification on the level of studies, while the remain 5.8% is not.
Figure 2: Distribution of occupation. Considering a population of 190 people.

The third and the fourth questions asked for the precedence and current country of residence of the participants (see Appendix 1). The responses of the third question which refers to the precedence of the participants, include the following countries: Argentina, Australia, Austria, Azerbaijan, Belgium, Canada, China, Czech Republic, Ecuador, El Salvador, Estonia, Ethiopia, Finland, France, Germany, India, Iran, Ireland, Italy, Japan, Latvia, Mexico, Netherlands, Nicaragua, Norway, Pakistan, Portugal, Romania, Russia, Spain, Sweden, Taiwan, Thailand, Turkey, Uganda, Ukraine, United States, and Venezuela. The percentages regard the precedence, and where the people who answered the questionnaires currently live can be visualized on the following charts:

Figure 3. Country of precedence of the individuals from the studied sample. Considering a population of 190 people.
Figure 4. Country of residence of the individuals from the studied sample. Considering a population of 190 people.

The list of the countries included on the answers of the third question of the survey was reduced from 37 countries into 25 countries of residence which are the following: Australia, Austria, Belgium, Canada, China, Czech Republic, Ecuador, Finland, France, Germany, Ireland, Italy, Japan, Latvia, Mexico, Netherlands, Norway, Russia, Spain, Taiwan, Thailand, United States, Chile and Hungary.

Taking into consideration the requirements for the studied sample, one of the most important questions from the survey was if the participants see themselves working over the next five years. The answers to this question are important in the sense that would reflect the amount of people who will become economically active in the future. For this question the 88.9% of the people said that they are completely sure of seeing themselves working over the next five years, 6.3% are not really sure about it and just 4.7% of the participants do not see themselves working over the next five years.

For the sixth question, the researchers asked directly if the participants were concerned about the environmental preservation. The answers for this question were that 16.3% of the people maintains a neutral concern, while 74.7% of the people is really concerned about it, and just 8.9% of the people is not concerned on the topic.
Figure 5. This graph depicts the percentage of people who see themselves economically active in the future. Considering 190 individuals and “future” as the period over the next 5 years.

Figure 6: Environmental concern distributions. Considering a population of 190 individuals.

From the second section on, the details of the answers can be visualized on the graphics provided on the Appendix 6.

4.2 Scale’s Reliability Test

After that, the results relevant for the regression analysis are the following. Starting from the scale reliability test, the Cronbach’s alpha coefficient values of this test can be observed on Table 2.
The third column called “Reliability Alphas after Re-Scale” contains the values of the reliability test done after the re-scale for the Likert values (from 1-5 or 1-7, to 1-10). As it can be observed the Cronbach’s alpha coefficient values from the marketing scales Handbook do not vary that much from the ones calculated for this study, except from the values obtained for the construct “Green” where a big difference with the book’s value can be seen. It is because of this, and because the reliability value for this construct is lower than 0.6, that this construct was removed from the data analyzed on the linear regression test.

### 4.3 Linear Regression

#### 4.3.1 Checking for violations of the Assumptions

Before analyzing the results of the Linear Regression, the corresponding preliminary analyses were performed with the aim of searching for any statistical evidence of possible violations of the assumptions to Linear Regression.

Following the order of the assumptions in part 2.7.1, the first assumption (leaving aside “Singularity”) is “sample size”, it has already been explained that the researchers took cover by utilizing 190 observations. The proposed values literature suggested are:

\[ n = 50 + 8(6) = 90 \]

\[ n = 104 + (6) = 110 \]

\[ n = 15*6 = 90 \]

Therefore there is no evidence to suggest a violation to this assumption.

For the second assumption, multicollinearity, it can be seen that the correlations between the independent variables are much lower than 0.9, indicating no risk of
multicollinearity between the independent variables. This can be seen on the right side of figure 7 (for example, the correlation between Functional and Holistic is 0.199). Another analysis is with the values under the “Collinearity Statistics” (the far right end on figure 8 “Coefficients”). There are no signs of possibility of multicollinearity since the Tolerance Values are not below 0.1 and the VIF values not above 10.

### Correlations

<table>
<thead>
<tr>
<th></th>
<th>Credibility</th>
<th>Status</th>
<th>Functional</th>
<th>Holistic</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>Credibility</td>
<td>1.000</td>
<td>.128</td>
<td>.138</td>
<td>.221</td>
</tr>
<tr>
<td></td>
<td>Status</td>
<td>.128</td>
<td>1.000</td>
<td>.432</td>
<td>.192</td>
</tr>
<tr>
<td></td>
<td>Functional</td>
<td>.138</td>
<td>.432</td>
<td>1.000</td>
<td>.199</td>
</tr>
<tr>
<td></td>
<td>Holistic</td>
<td>.221</td>
<td>.192</td>
<td>.199</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>.033</td>
<td>-.177</td>
<td>.087</td>
<td>-.022</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>Credibility</td>
<td></td>
<td></td>
<td>.029</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Status</td>
<td>.039</td>
<td></td>
<td>.000</td>
<td>.004</td>
</tr>
<tr>
<td></td>
<td>Functional</td>
<td>.029</td>
<td></td>
<td>.000</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Holistic</td>
<td>.001</td>
<td></td>
<td>.004</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>.326</td>
<td></td>
<td>.117</td>
<td>.382</td>
</tr>
<tr>
<td>N</td>
<td>Credibility</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td>Status</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td>Functional</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td>Holistic</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>190</td>
<td>190</td>
<td>190</td>
<td>190</td>
</tr>
</tbody>
</table>

**Figure 7:** Correlations table. Output of SPSS.

Nevertheless, it seems important to note that the correlations between the explanatory variables and the response variable are very low. According to Cohen (1988), a correlation coefficient lower than 0.29 means weak correlation, and all the coefficients for the constructs here have values under 0.29. This could lead to believe that there will be weak statistical results on the regression model’s coefficients.

### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Correlations</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.25183</td>
<td>5.469</td>
<td>.4665</td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td>.089</td>
<td>.103</td>
<td>.071</td>
</tr>
<tr>
<td>Functional</td>
<td></td>
<td>.081</td>
<td>.114</td>
<td>.065</td>
</tr>
<tr>
<td>Holistic</td>
<td></td>
<td>.322</td>
<td>.155</td>
<td>.195</td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td>.058</td>
<td>.007</td>
<td>.044</td>
</tr>
</tbody>
</table>

a: Dependent Variable: Credibility

**Figure 8:** Coefficients table. Output from SPSS.
The third assumption is composed of several concepts to consider. Firstly, taking precautions for outliers, it was set on the options of the multiple regression analysis in SPSS that the outliers outside a 3.3 times the standard deviation were taken out, to avoid violation of this assumption. Secondly, the normality of the residuals. SPSS provides a plot of the standardized residuals (See Figure 9), since the scattered dots follow the linear pattern there is evidence to say that there is no violation of the assumption of normality of residuals.

[Image: Normal P-P Plot of Regression Standardized Residual]

*Figure 9*: Normal probability plot of the standardized residuals. SPSS Output.

The fourth assumption is *homoscedasticity*. For this, scatterplots with the dependent variable on the Y-axis and the standardized residuals of the independent variable are made, a scatterplot for each independent variable. With the use of a linear trend line on the scatter plots it can be seen if the variance of the residuals of each independent variable varies by observing if there is variation on the distances of the dots regarding the trend line. From the scatter plots on figure 10 it can be said that the *homoscedasticity* assumption has not been violated.
Finally for the assumption of linearity amongst the independent variables, a scatter plot of each independent against the dependent variable was analyzed, figure 11 shows them. If the trend line is not flat, it can be said that there is a linear relationship with the construct, even if it is very little. The scatter plot for the construct “Price” has a trend line with very little inclination, nevertheless it has some inclination, which suggests that the regression coefficient could be very small after the regression analysis is made. The scatter plots in figure 11 suggest that there is no violation of this assumption.
4.3.2 Regression Analysis output

The model, which includes promote Green Status, sell Functional Value, create a Holistic Brand strategies and Price Sensitivity, explains 6.3 per cent of the variance of Green Marketing Credibility. In figure 12, the value given under the heading of R Square can be seen, which is 0.063. For this study, a level of significance of 0.05 was used. The significance of the model was reported as $F(4,185) = 3.088, p=.017$ (Figure 13). Of these 4 variables, Holistic makes the largest contribution ($\beta=.332, p<.01$), its $p$ value implies that this contribution is significant. While the other variables made a lower statistically contribution and their $p$ values suggest that their contribution is not significant to the model. Status ($\beta=.089, p>.05$), Functional ($\beta=.091, p>.05$), Price ($\beta=.058, p>.05$), these can be seen on Figure 14.
The following is a summary of the rejection or non-rejection of the Null Hypotheses for this study according to the corresponding significance values obtained from the ANOVA test (Figure 13) and the t-tests for the coefficients (Figure 14):

- **H1:** Reject null hypothesis (p<.05)
- **H3:** Fail to reject null hypothesis (p>.05)
- **H4:** Fail to reject null hypothesis (p>.05)
- **H5:** Reject null hypothesis (p<.01)
- **H6:** Fail to reject null hypothesis (p>.05)

Hypothesis H2 is not presented because the construct it tests was removed from the analysis (Pure Green construct).
4.4 Pearson’s Correlation Analysis

Even though the results of major focus for this thesis are those of the linear regression analysis, the relationship between Green Advertising Credibility and our 4 defined constructs can also be investigated using the Pearson correlation coefficient for further conclusion.

Moving forward to Pearson’s correlation output on Figure 7, it is worth noting that the N (N=190) is equal for all the variables, meaning that there were no missing data. According to Cohen’s (1988) guidelines, the relationship between Green Advertising Credibility and the constructs Price \[ r=0.033, n=190, p>.05 \]. The \( p \) value of this construct suggests that it affects in no significant way the credibility towards green advertising. The strength of the relationships between the other three variables is stronger, yet none of the coefficients is big enough to call it a strong or moderate relationship. Being \[ r=0.221, n=190, p<.01 \] the strongest correlation present, with the construct “Holistic”, followed by \[ r=0.138, n=190, p<.05 \], with “Functional” construct, and lastly \[ r=0.128, n=190, p<.05 \], with “Status” construct. These three coefficients determine a “small” (significant to the level of 0.05) correlation with the construct and Green Advertising Credibility.

4.5 Results not related to the purpose of this study

After analyzing the results of direct interest for the purpose of this study, it came into mind the fact that there could be more use for the data collected. Therefore it was considered
it might be relevant not to leave aside the mean values of the answers of the questionnaires. This information is presented because it could be valuable for future research and analysis on the Millennials purchasing behaviors.

Table 3 contains the data obtained by dividing the mean of summed scores of each construct by the amount of items on the scale used to measure it. These values are useful for further analysis on the Millennials’ behaviors.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mean of the summed scores</th>
<th>Amount of items of the scale</th>
<th>Scale Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Green Advertising Credibility</td>
<td>40.5355</td>
<td>9</td>
<td>4.5039</td>
</tr>
<tr>
<td>2  Pure Green Strategy</td>
<td>21.5737</td>
<td>4</td>
<td>5.3934</td>
</tr>
<tr>
<td>3  Market Green Status Strategy</td>
<td>34.0105</td>
<td>6</td>
<td>5.6684</td>
</tr>
<tr>
<td>4  Sell Functional Strategy</td>
<td>36.8447</td>
<td>6</td>
<td>6.1408</td>
</tr>
<tr>
<td>5  Holistic Brand Strategy</td>
<td>21.4553</td>
<td>4</td>
<td>5.3638</td>
</tr>
<tr>
<td>6  Price Sensibility</td>
<td>31.3368</td>
<td>5</td>
<td>6.2674</td>
</tr>
</tbody>
</table>

Table 3: Calculations for the means of the constructs obtained from the observations.

5. Analysis and interpretation

In this section the analysis of the results obtained from the linear regression test is presented. Some interpretations regarding to the explanation of the data are also provided.

It is important to keep in mind that the main focus of this thesis is under the premise that several marketing practices in the 90’s have diminished the credibility of Green Marketing. Moreover, this thesis tries to determine which marketing strategies are the most effective in order to reach higher credibility in green marketing for Generation Y. Nevertheless, the
findings suggest that there is little material to state clear conclusions about the relationship between the presented Marketing Strategies and Green Marketing Credibility.

It is also important to understand the results. According to the Theory of Consumption Values, customers prefer products and marketing that relate to the behavior they value the most (or that fits with their personality). Moreover, the literature review found that advertising credibility is related to the attitude towards advertising, which in time, is related to attitude towards the ads. Hence, if the advertising connects with the customer’s interests, attitude and credibility would be improved. Additionally, the higher the value for one of the constructs related to marketing strategies means a higher attainment of the values and behaviors that the strategy brings up from the customer’s perspective. Therefore, the proposed model tries to find which type of interests the consumer is likely to link with more credibility in the marketing.

The first thing that comes into mind to analyze is why it was decided that the Pure Green strategy was to be removed from the analysis. The authors of this thesis discussed the low reliability value (alpha=0.475) of the scale and came up with a possible reason for explaining it. They believed that the questions of this scale (See Appendix 1, section 3) were highly directed towards behaviors of people that are really concerned with environmental care, excluding the behaviors of people with a lower degree of concern. Moreover, comments were received from some of the respondents describing these questions as “weird”, “judgmental”, or that “it somehow suggests you to answer in a certain way” (this idea was further studied by the researchers who found the term suggestibility\(^5\). Since the scope of this study lies separately from the issues of this scale’s reliability it is only suggested that the items of this scale be revised.

Moving on to the interpretation of SPSS output, the independent variables explain little of the variance of Credibility with a R Square value of .063, which is seen as well on the value of the F statistic (F=3.088), which indicates that the variance explained by the coefficients is 2.088 times the variance explained by the error. The mistake of concluding that there will be no significant relationship between the variables can be made from analyzing solely the R Square, especially if it is a low value like 6.3%. More analysis has to be made for the significance of the model. The results from the ANOVA test for the significance of the model show that the null hypothesis H1 is rejected with a confidence level of 95% (p=0.017), indicating that at least one of the independent variables is statistically significant. Then the regression coefficients can be further analyzed. The null hypotheses H3, H4 and H6 failed to

\(^5\) *Suggestibility:* Noun for suggestible; Likely to believe that what someone says is true or may be true: easily influenced, (Merrian-Webster’s Learner’s Dictionary, Search: Suggestibility, 2015)
reject, which removes these variables from the resultant model, and the null hypothesis H5 failed to be rejected, meaning that the only construct entering the model is “Holistic”. Given the findings on the literature review for Generation Y, the authors of the thesis expected different results. This generation has proven to be educated and better informed in ways of researching the products in which they are interested. They are also more interested in knowing their features, are concerned about their expenses, they are mostly environmentally conscious, and are interested in clearly stated benefits that can be obtained from these products. It is because of these findings and because the degree of information provided in regards to green products having a big impact on green advertising credibility, that the results expected were to see the highest regression coefficients on the constructs of Price Sensitiveness and Sell Functional Value Strategy. Contrarily, the results show that the consumers with higher levels of credibility towards advertising are the ones that are also more concerned about the Holistic Brand approach (beta= 0.332). Coming second are the Functional Values (beta=0.091), then the Green Status and Image (beta=0.089), and lastly Price Sensitiveness (beta = 0.058). This suggests that the Millennials that have more interest in getting to know more about the companies’ activities and non-marketed environmental actions (attainment to Holistic Brand Strategy) are more likely to believe in advertising. The fact that the null hypotheses H3, H4 and H6 failed to be rejected, means that there should not be any statistical conclusions around the coefficients for Green Status and Functional strategies, and Price Sensitivity.

The strength of the relationships investigated through the correlation analysis reflects that there is a small relationship between Green Advertising Credibility and Holistic (r=.221, n=190, p<.01), Functional (r=.138, n=190, p<.05) and Status (r=.128, n=190, p<.05); and no relationship with price sensitiveness (r=.033, n=190, p<.05). It is still possible to conclude that the most effective strategy, compared to the other strategies in this study, for addressing credibility is to be a Holistic Brand. Still, the p-value indicates, with a level of certainty of 95%, that these coefficients are statistically significant to the response variable on the model, and moreover, given the large sample (100 or more), even if the coefficient is low, the variable can still have significant effect on the dependent variable (Pallant, 2005).

Finally, one positive side effect of the data generated by this study is that there is a possibility to create a profile for the “International Millennial”. Keeping in mind that this results are somewhat different to this study’s focus, as explained on part 4.5. With the means of the data collected for each of the constructs, the authors of this thesis believed that degrees of preference for a Marketing Strategy could be identified. Taking a look into the mentioned means (See Table 3), the means were analyzed in three stages: credibility, green marketing
strategies, and price sensitiveness. The mean for Green Advertising Credibility (M = 4.5) is below the midpoint (taking into account the values range from 1 to 10), and therefore, it can be said that Millennials have little trust in what advertising presents, which is in line with the literature review that suggests that generations that grew hand-in-hand with technology (Millennials) often show high levels of skepticism (or low credibility) when it comes to advertising (Upshaw, 2007). For the 4 constructs defining the Green Marketing Strategies, the procedure is slightly different. Due to the fact that we are comparing four means, a test for the difference of means should be carried out to be able to compare them and obtain solid conclusions with statistical weight. The authors of this thesis would propose to run Tukey’s “Honesty Significant Difference” test in order to obtain further statistical analysis. Since the purpose of this thesis does not include heavy analysis on this matter, they decided that analysis of the means should be complementary rather than strictly necessary to achieve the main goals of this paper. Even though the mean values of the constructs are observed, it is possible to notice that the mean for Functional Value Strategy (M = 6.14) is higher than the other means (Pure Green with M = 5.4, Green Status with M = 5.67, Holistic Brand with M = 5.36), which also supports the finding of (Seth, Newman, & Gross, 1991). On the other hand, the Price Sensibility construct has the highest mean. This implies that the main concern for Millennials across the world is their economy. This also goes in accordance to the findings of the literature review about Millennials. The high means of Functional Value and Price Sensitiveness may indicate that Millennials consider the cost-benefit relation a priority on their purchasing decisions.

6. Conclusions

In this section the major findings are presented as a summary and the conclusions of this paper are provided.

In relation to the first research question, the proposed model on this thesis shows that there exists a relationship between the marketing strategies selected and the concept of Green

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6 An easy and frequently used pairwise comparison technique was developed by Tukey under the name of the honestly significant difference (hsd) test. The main idea of the Hsd is to compute the honestly significant difference (i.e., the hsd) between two means using a statistical distribution defined by Student and called the q distribution. This distribution gives the exact sampling distribution of the largest difference between a set of means originating from the same population (Abdi & Williams, n.d.).
Marketing Credibility. It was found that this model, that explains Green Marketing Credibility with a statistically significant (p<0.05), shows a low explanation of the dependent variable’s variance (R Square=0.063).

On behalf of the second research question, the regression analysis showed that the only independent variable that should enter the model is the one representing Holistic Brand Strategy (beta=.332). From the correlation analysis, results show that Holistic Brand Strategy, Sell Functional Value, and Market Green Status and Image have a small correlation with Green Marketing Credibility, with the creation of a Holistic Brand as the strategy with the biggest Pearson Coefficient (r = .221, r = .091, r = .089 respectively). Of this it can be concluded that companies should focus more attention into developing a good image through press conferences and the non-marketed activities, the authentic actions that demonstrate their commitment to help solving environmental issues, and focusing less attention on marketing the effect on Status or the Functional Value of their products.

From the complementary study of the means of the constructs it was found that the value of the Price Sensibility (M=6.27) and Sell Functional Strategy (M=6.14) imply that the millennials really care about the maximum benefits that they can obtain for the lowest cost. This is comprehensive and supports the theory of (Lu, Bock, & Joseph, 2013), that “...consumers will not sacrifice product characteristics such as convenience, availability, price, quality and performance in place of green or eco-friendly characteristics.” Millennials are a tough population to please (Aquino, 2012). As literature review suggested, they seem quite critical against what is sold to them through advertising and have especial interest on their personal economy. The best way to address them is by addressing to the Functional Behavior of the products.

Summing up, the communion of the results from the regression analysis and analysis of the means highlights that companies may want to consider taking the time and strategic planning of becoming a Holistic Brand and advertising the functional behavior of the products. This strategy results as a combination of the findings in this study and should be a good measure for both, addressing the millennial generation and trying to improve the credibility rate of the Green Advertising of the company.
7. Other findings and recommendations

This section includes important information to consider for further investigations on the topic. It is recommendable to read this section if a similar research needs to be carried out.

At the end of this study, we believe that there are some important points to consider for further investigations on this field. As mentioned before, the multicultural nature of the sample might have affected the variability of the answers. The reason why the other constructs (Sell Functional, Green Status, and Price Sensitiveness) appeared to be so little correlated towards the dependent variable could be due to the fact that the sample was not filtered into a population with a single nationality. The psychic distances between cultures may have affected the responses because different cultures may have different opinions about green products, and therefore they might be influenced by different marketing strategies. A narrower sample might have provided different results. Therefore, an interesting approach following up this study could be making separate studies per country of citizenship in an attempt to find cultural-based tendencies.

Regarding a different topic, it is important to mention that when the re-scale process was carried out, we considered necessary to test twice the linear regression. The first attempt was made with the original data (before re-scale, Likert scales with a rank from 1-5, 1-7), and the second one contemplated the re-scaled values (ranked from 1-10). The results from the two different tests, regarding the coefficients, significance tests, and R Square value) were the exactly the same, as it can be observed on the Appendix 5. Because it was the first time we carried on a study like this (measured with two different Likert ranks), we believed that the best option was to trust in the literature review found; conserve the re-scaled data and analyze its results obtained from the linear regression analysis. For further studies, it would be recommendable to choose the scales with the same ranking intervals, instead of using a combination of 5-point and 7-point ranking intervals.

When the survey was built, the first intention was to formulate the questions that best suits the study, rather than selecting tested scales and accept the questions that were included there. Although it was considered more important that the tested scales had a reliability to measure the constructs. But it would also be interesting to formulate the questions, conduct the surveys and run the test again with the new data with the objective of comparing the difference that this test might have shown.
When it comes to the raw data results, we noticed that some of the surveys were filled without precaution. Some of the data, as is mentioned on the methodology, was not entirely filled. It can be implied that the participants did not really take care about answering in a precise way or even complete the survey, perhaps because of lack of time or interest. Affecting at some point the results on the linear regression analysis. As it is mentioned on the section before, the lack of interest and motivation from the participants of the survey may have affect the results for this study.

Finally, referring to the sample, it is necessary to state that with a narrow scope, centering on a single nationality, and selecting a specific sector of the population (occupation, economic level), it could be that the results show a pattern that would have helped to visualize what the more important aspects that they take into consideration while buying are.

8. Future research

_In this section some recommendations are presented regarding to what could be done on future investigations related to this topic or similar studies._

As it is stated on the last section, perhaps the lack of time and motivation from the participants of the survey may have affect the results for this study. A way to avoid this is to incentivize the participants in order to increase the motivation, so they take more care while filling it in, and feel more interested on doing it correctly.

The results of this work cannot state definitive conclusions, it will have to be left for future research to look further into what type of marketing increases credibility of green marketing. This could be approached by analyzing the credibility of the source, or credibility of advertising in general. Moreover, going further into credibility of the source with variables such as Historical Data or Perceived Reputation. Because some studies say how important the credibility of the source is for the results of the reception of the advertising claims (Newell & Goldsmith, 2001). This is an area of further research.

Another consideration for future research is the one related to the results from section 4.5. The possibility of describing the Millennial’s purchasing behaviors is presented with these results, nevertheless it would require a more direct study and better statistical tools, which can be taken over by future research.
Finally, as mentioned before, the multi-cultural population might have influenced the results. Therefore it would be interesting for future research to develop a study with a narrower focus, by selecting a specific nationality for the population, to find if there are any clearer trends. Moreover, more research should be done on the area of adapting scales from 5-point to 7-point and so on. Because the little amount of literature makes it less reliable to trust few sources on their point of view of the process of re-scaling.

9. References


Dawes, J. (2008). Do data characteristics change according to the number of scale points used? International Journal of Market Research, 50(1).


10. Appendices

In this section all the appendices are displayed.

10.1 Appendix 1. Questionnaire and Marketing Scales

The questionnaire is divided into 7 sections. Section 1 is formed by demographical data. Each of the sections from 2 to 7 intends to measure each one of our constructs. As mentioned on the thesis’ framework, each of the constructs was measured using a scale from a previous study. On this annex information about the scales used to measure each construct is presented. The questions forming the scales were not modified.

Section 1

Millennials, demographic data
1. How old are you?
   a. < 16
   b. 16 - 36
   c. > 36
2. Are you a student?
   a. Yes
   b. No
3. Where are you living? (Country)
   a. ______________________________
4. Where are you from? (Country)
   a. ______________________________
5. Do you see yourself working over the next five years?
a. Strongly disagree
b. Disagree
c. Undecided
d. Agree
e. Strongly Agree
6. Are you concerned about environmental issues?
   a. Strongly disagree
   b. Disagree
c. Undecided
d. Agree
e. Strongly Agree

Section 2

Scale #1
Our Construct that measures: Green advertisement credibility (Believability)
Scale name: Skepticism toward advertising
Book Source: (Bearden & Netemeyer, 1999), p. 305
Sample size: 174 undergraduates.
Reliability: alpha of 0.85
Scale’s construct definition: Skepticism toward advertising is defined as the general tendency toward disbelief of advertising claims. Skepticism is hypothesized as a general trait that varies across individuals and is related to general suggestibility. The measure assesses a generalizable characteristic rather than responses to specific ads or ad claims.
Scale description: The unidimensional scale consists of nine items operationalized using a five-place response format ranging from strongly agree to strongly disagree. The summed scores can range from 9 to 45, with high scores representing higher skepticism.
Why this scale?
Skepticism towards advertisement is defined as the general tendency toward disbelief of advertising claims. Skepticism is hypothesized as a general trait that varies across individuals and is related to general suggestibility. The measure assesses a generalizable characteristic rather than responses to specific ads or ad claims (Bearden & Netemeyer, 1999).
Comments:
The fact that this construct is called “Advertising credibility” while the scale is measuring “Skepticism” may produce a sense of incongruence. Skepticism (an attitude of doubting the truth of something (such as a claim or statement), (Merriam-Webster's Learner's Dictionary, 2015) comes up as a negative-oriented noun whereas the rest of our constructs are positive-oriented nouns (e.g. benefit perception, environmental awareness) it is in order to keep this pattern that we change the construct’s name to another positive-oriented noun: “Advertisement credibility”
Range: Strongly agree 1-2-3-4-5 Strongly disagree
Questions forming the scale:
1. We can depend on getting the truth in most advertising
2. Advertising’s aim is to inform the consumer
3. I believe advertising is informative
4. Advertising is generally truthful
5. Advertising is a reliable source of information about the quality and performance of products
6. Advertising is truth well told
7. In general, advertising presents a true picture of the product being advertised
8. I feel I’ve been accurately informed after viewing most advertisements
9. Most advertising provides consumers with essential information.

Section 3
Scale #2:
Our Construct that measures: Pure green strategy (ecological awareness)
Scale name: Voluntary Simplicity (ecological awareness)
Book Source: (Bruner & Hensel, 1996) p. 751
Sample Size: 86 people from northeastern college town and 119 people from a northeastern rural area.
Reliability: 0.62
Scale description: A four-item, five-point, summed ratings scale measuring the degree to which a person reports engaging in behaviors that can be interpreted as helping to preserve the environment.
Why this scale?
This strategy is aimed directly to the authentic green consumer, who shows values aligned to environment preservation and a clear preference for products with lower environmental impact and may be willing to pay more for those attributes, even if those attributes provide no additional value for them beyond lower environmental impact (Ginsberg & Bloom, 2004) which is directly related to the definition of ecological awareness on this scale.
Range: Nearly ever 1-2-3-4-5 Almost always
Questions forming the scale:
1. Recycled newspapers used at home
2. Recycled glass jars and bottles used at home.
3. Intentionally eat meatless meals.
4. Contribute to ecological or conservation organizations

Section 4
Scale #3
Our Construct that measures: Market green status and image (Social Status)
Scale name: General scale to measure involvement with products (GSMI)
Sample: 280 students
Reliability: alpha is 0.92
Scale’s construct definition: Involvement is a consumer response to a product, message, medium or situation. Furthermore, involvement is a response that reflects an individual’s sense of self identity and is activated by external stimuli.
Scale description: The GSMI is a six-item scale composed of Likert-type statement scored on a seven-point basis (disagree to agree). The scale is considered applicable to a wide range of products and is also considered unidimensional. An overall GSMI score can be derived by summing up the scores on the items.
Why this scale?
This scale was chosen because it measures to what degree does the purchasing decision of a person is influenced by his/her involvement with the green product based on external social stimuli, so as to cause a certain impression on his/her social status.
Comments: For this questions, the following message was included on the instructions:
Assume that the words “this product” refer to any green product.
Range: Strongly Disagree 1-2-3-4-5-6-7 Strongly Agree
Questions forming this scale:
1. When other people see me using this product, they form an opinion of me.
2. You can tell a lot about a person by seeing what brand of this product he uses.
3. This product helps me express who I am.
4. This product is “me”.
5. Seeing somebody else use this product tells me a lot about the person
When I use this product, others see me the way I want them to see me.

**Section 5**

**Scale #4**

**Our Construct that measures**: Self Functional Value strategy (Benefits)

**Scale name**: Benefit perception (Composite)

**Book Source**: Vol II p. 122.

**Scale Source**: Murray, Keith B. (1985, "Risk perception and information source use for products differing in a service attributes" Arizona State University, Tempe Arizona.

**Sample**: 256 students

**Reliability**: 0.878

**Scale description**: Six item, seven point summated ratings scale measuring the probability that a consumer perceives the purchase of some specified product to be associated with six types of gain.

**Why this scale?**

According to the (Thomas & Pacheco, 2014) this self functional value strategy is aimed toward customers that prioritize benefits such as: increase efficiency and cost effectiveness (FINANCIAL GAIN), health and safety (PHYSICAL AND PSYCHOLOGICAL GAINS), convenience (CONVENIENCE), and overall quality and performance (PERFORMANCE).

**Comments**: The space “_________” was filled with the phrase: “ecological product”

**Range**: Improbable 1-2-3-4-5-6-7 Probable

**Questions forming this scale**:

1. What is the probability that a purchase of an unfamiliar alternative for a ____________ will lead to a FINANCIAL GAIN for you because it would function extremely well and exceed your expectations relative to the amount of money required to pay for it?

2. What is the probability that a purchase of an unfamiliar alternative for a ____________ will lead to a PERFORMANCE GAIN for you because it would function extremely well and it would serve your needs, desires, and expectations very well?

3. What is the probability that a purchase of an unfamiliar alternative for a ____________ will lead to a PHYSICAL GAIN for you because it would be safe and beneficial?

4. What is the probability that a purchase of an unfamiliar alternative for a ____________ will lead to a PSYCHOLOGICAL GAIN for you because it would fit in well with your self-image or self-concept?

5. What is the probability that a purchase of an unfamiliar alternative for a ____________ will lead to a SOCIAL GAIN for you because your friends and family would think more highly of you?

6. What is the probability that a purchase of an unfamiliar alternative for a ____________ will lead to a GAIN IN CONVENIENCE for you because you wouldn’t have to waste a lot of time and effort before having your needs satisfied?

**Section 6**

**Scale #5**

**Our Construct that measures**: Holistic brand strategy (Social values)

**Scale name**: Social role of corporations: Attitudes toward the social role of corporations. (Williams, 1982).

**Book Source**: (Bearden & Netemeyer, 1999), p. 342.


**Sample**: 145 business students

**Reliability**: alpha is 0.75

**Scale description**: Scale consisting of 23 items, each operationalized using a 5-place scale ranging from strongly disagree to strongly agree, item scores can be summed for an overall index, or summed within factors for factor indices.
Why this scale?

“The key seems to lie in understanding the complex relationships between the environmental attributes of a product, a company, and a brand image. By combining high quality products, with authentic environmental and social behaviors...” (Thomas & Pacheco, 2014). Meaning that this strategy focuses on customers interested in firms whose practices are considered as Socially Responsible Companies (that share the customer’s social interests).

Comments: This scale comes on the book (Bearden & Netemeyer, 1999) as a compilation of several scales, adding up to 23 questions. The questions taken for this study are questions 1, 2, 3, and 7 of that compilation. This is because the 23 questions were distributed amongst different populations, including: public, private, intuitive, rational, management, outsiders, and compassion, each of them measuring something different. Questions 1, 2, 3, and 7 were for the public and measured the construct which was most useful for us.

Range: Strongly Disagree 1-2-3-4-5 strongly agree

Questions forming this scale:
1. A large corporation is like university, because both have as their central purpose, serving the public interest.
2. The role of the president of a firm like Eastman-Kodak, is that of a public servant.
3. The management of a corporation is responsible to many definable interests in society.
4. The purpose of the corporation can be quite simply summarized as service to society.
   a. This is number 7 in Bearden & Netemeyer’s book.

Section 7
Scale #6

Our Construct that Measure: Price Sensibility (Consciousness)

Scale name: Price Consciousness

Book Source: (Bruner & Hensel, 1996), p. 487

Scale Source: Liechtenstein, Donald R.; Netemeyer, Richards, G.; Ridgway, Nancy M. (1993)


Sample: 582

Reliability: alpha is 0.85

Scale description: A five point scale, seven point Likert type scale measuring a consumers willingness to expend the time and energy necessary to shop around if need be to purchase grocery products at the lowest prices

Why this scale?

Price sensitiveness has to be added because it is a factor embedded in all of the marketing strategies studied. Moreover, price is proven to be a critical factor for Millennials when purchasing ecological products (Lu, Bock, & Joseph, 2013) and moreover, this construct will be helpful to categorize the customers that are not interested or concerned of environmental issues.

Range: Strongly disagree 1-2-3-4-5-6-7 strongly agree

Questions forming this scale:
1. I am not willing to go to extra effort to find lower prices. (r)
2. I will grocery shop at more than one shop to take advantage of low prices.
3. The money saved by finding low prices is usually not worth the time and effort. (r)
4. I would never shop at more than one shop to find low prices. (r)
5. The time it takes to find low prices is usually not worth the effort. (r)

10.2 Appendix 2. Table of Values for Re-Scaling

<table>
<thead>
<tr>
<th></th>
<th>Five-point Scale</th>
<th>Seven-point scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

66
<table>
<thead>
<tr>
<th>Original Value</th>
<th>Re-Scaled Value</th>
<th>Original Value</th>
<th>Re-Scaled Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>3.25</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>3</td>
<td>5.5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>7.75</td>
<td>4</td>
<td>5.5</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

Range here is \((10 - 1)/(5 - 1) = 2.25\)  
Range here is \((10 - 1)/(7 - 1)\)

### 10.3 Appendix 3. Table of variables and its correspondent questions, direction, and ranking range (without modifications)

<table>
<thead>
<tr>
<th>Question #</th>
<th>Variable Name</th>
<th>Corresponding Question</th>
<th>Value for 1</th>
<th>Direction</th>
<th>Last Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Skepticism1</td>
<td>We can depend on getting the truth in most advertising</td>
<td>Agree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Skepticism2</td>
<td>Advertising's aim is to inform the consumer</td>
<td>Agree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Skepticism3</td>
<td>I believe advertising is informative</td>
<td>Agree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Skepticism4</td>
<td>Advertising is generally truthful</td>
<td>Agree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Skepticism5</td>
<td>Advertising is a reliable source of information about the quality and performance of products</td>
<td>Agree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>Skepticism6</td>
<td>Advertising is truth well told</td>
<td>Agree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>Skepticism7</td>
<td>In general, advertising presents a true picture of the product being advertised</td>
<td>Agree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>Skepticism8</td>
<td>I feel I've been accurately informed after viewing most advertisements</td>
<td>Agree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>Skepticism9</td>
<td>Most advertising provides consumers with essential information</td>
<td>Agree</td>
<td>Positive</td>
<td>5</td>
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<td></td>
</tr>
<tr>
<td>16</td>
<td>Green1</td>
<td>Recycled newspapers used at home</td>
<td>Never</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>Green2</td>
<td>Recycled glass jars and bottles used at home</td>
<td>Never</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>Green3</td>
<td>Intentionally eat meatless meals</td>
<td>Never</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>Green4</td>
<td>Contribute to ecological or conservation organizations</td>
<td>Never</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>20</td>
<td>Status1</td>
<td>When other people see me using this product, they form an opinion of me</td>
<td>Disagree</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>21</td>
<td>Status2</td>
<td>You can tell a lot about a person by seeing what brand of this product he uses</td>
<td>Disagree</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>22</td>
<td>Status3</td>
<td>This product helps me express who I am</td>
<td>Disagree</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>23</td>
<td>Status4</td>
<td>This product is &quot;me&quot;</td>
<td>Disagree</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>24</td>
<td>Status5</td>
<td>Seeing somebody else use this product tells me a lot about the person</td>
<td>Disagree</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>25</td>
<td>Status6</td>
<td>When I use this product, others see me the way I want them to see me</td>
<td>Disagree</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>26</td>
<td>Functional1</td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a FINANCIAL GAIN for you because it would function extremely well and exceed your expectations relative to the amount of money required to pay for it?</td>
<td>Improbable</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>27</td>
<td>Functional2</td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a PERFORMANCE GAIN for you because it would function extremely well and it would serve your needs, desires, and expectations very well?</td>
<td>Improbable</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a <strong>GAIN</strong> for you because it would be safe and beneficial?</td>
<td>Improbable</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
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</tr>
<tr>
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<td>Functional3</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a <strong>PSYCHOLOGICAL GAIN</strong> for you because it would fit in well with your self-image or self-concept?</td>
<td>Improbable</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>29</td>
<td>Functional4</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a <strong>SOCIAL GAIN</strong> for you because your friends and family would think more highly of you?</td>
<td>Improbable</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>30</td>
<td>Functional5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a <strong>GAIN IN CONVENIENCE</strong> for you because you wouldn't have to waste a lot of time and effort before having your needs satisfied?</td>
<td>Improbable</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>31</td>
<td>Functional6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A large corporation is like university, because both have as their central purpose, serving the public interest</td>
<td>Disagree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>32</td>
<td>Holistic1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The role of the president of a firm like Eastman-Kodak, is that of a public servant</td>
<td>Disagree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>33</td>
<td>Holistic2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The management of a corporation is responsible to many definable interests in society</td>
<td>Disagree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>34</td>
<td>Holistic3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The purpose of the corporation can be quite simply summarized as service to society</td>
<td>Disagree</td>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>35</td>
<td>Holistic4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Price1</td>
<td>I am not willing to go to extra effort to find lower prices</td>
<td>Disagree</td>
<td>Negative</td>
<td>7</td>
</tr>
<tr>
<td>---</td>
<td>--------</td>
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<td>---</td>
</tr>
<tr>
<td>37</td>
<td>Price2</td>
<td>I will grocery shop at more than one shop to take advantage of low prices</td>
<td>Disagree</td>
<td>Positive</td>
<td>7</td>
</tr>
<tr>
<td>38</td>
<td>Price3</td>
<td>The money saved by finding low prices is usually not worth the time and effort</td>
<td>Disagree</td>
<td>Negative</td>
<td>7</td>
</tr>
<tr>
<td>39</td>
<td>Price4</td>
<td>I would never shop at more than one shop to find low prices</td>
<td>Disagree</td>
<td>Negative</td>
<td>7</td>
</tr>
<tr>
<td>40</td>
<td>Price5</td>
<td>The time it takes to find low prices is usually not worth the effort</td>
<td>Disagree</td>
<td>Negative</td>
<td>7</td>
</tr>
</tbody>
</table>

10.4 Appendix 4. Table of the variables and its correspondent questions, direction, and ranking range (after reversion data, the change values are in bold style)

<table>
<thead>
<tr>
<th>Question #</th>
<th>Variable name</th>
<th>Corresponding Question</th>
<th>Value for 1</th>
<th>Direction</th>
<th>Last Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Skepticism1</td>
<td>We can depend on getting the truth in most advertising</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Skepticism2</td>
<td>Advertising’s aim is to inform the consumer</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>Skepticism3</td>
<td>I believe advertising is informative</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>Skepticism4</td>
<td>Advertising is generally truthful</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>Skepticism5</td>
<td>Advertising is a reliable source of information about the quality and performance of products</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>12</td>
<td>Skepticism6</td>
<td>Advertising is truth well told</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>13</td>
<td>Skepticism7</td>
<td>In general, advertising presents a true picture of the product being advertised</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>14</td>
<td>Skepticism8</td>
<td>I feel I’ve been accurately informed after viewing most advertisements</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
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<td>---</td>
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<td>---</td>
<td>---</td>
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</tr>
<tr>
<td>15</td>
<td>Skepticism9</td>
<td>Most advertising provides consumers with essential information</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>16</td>
<td>Green1</td>
<td>Recycled newspapers used at home</td>
<td>Never</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>17</td>
<td>Green2</td>
<td>Recycled glass jars and bottles used at home</td>
<td>Never</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>18</td>
<td>Green3</td>
<td>Intentionally eat meatless meals</td>
<td>Never</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>19</td>
<td>Green4</td>
<td>Contribute to ecological or conservation organizations</td>
<td>Never</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>20</td>
<td>Status1</td>
<td>When other people see me using this product, they form an opinion of me</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>21</td>
<td>Status2</td>
<td>You can tell a lot about a person by seeing what brand of this product he uses</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>22</td>
<td>Status3</td>
<td>This product helps me express who I am</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>23</td>
<td>Status4</td>
<td>This product is “me”</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>24</td>
<td>Status5</td>
<td>Seeing somebody else use this product tells me a lot about the person</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>25</td>
<td>Status6</td>
<td>When I use this product, others see me the way I want them to see me</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>26</td>
<td>Functional1</td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a FINANCIAL GAIN for you because it would function extremely well and exceed your expectations relative to the amount of money required to pay for it?</td>
<td>Improbable</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>27</td>
<td>Functional2</td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a PERFORMANCE GAIN for you because it would function extremely well and it would serve your needs, desires, and expectations very well?</td>
<td>Improbable</td>
<td>Positive</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>28</td>
<td>Functional3</td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a PHYSICAL GAIN for you because it would be safe and beneficial?</td>
<td>Improbable</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>29</td>
<td>Functional4</td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a PSYCHOLOGICAL GAIN for you because it would fit in well with your self-image or self-concept?</td>
<td>Improbable</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>30</td>
<td>Functional5</td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a SOCIAL GAIN for you because your friends and family would think more highly of you?</td>
<td>Improbable</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>31</td>
<td>Functional6</td>
<td>What is the probability that a purchase of an unfamiliar alternative for an ecological product will lead to a GAIN IN CONVINIENCE for you because you wouldn't have to waste a lot of time and effort before having your needs satisfied?</td>
<td>Improbable</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>32</td>
<td>Holistic1</td>
<td>A large corporation is like university, because both have as their central purpose, serving the public interest</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>33</td>
<td>Holistic2</td>
<td>The role of the president of a firm like Eastman-Kodak, is that of a public servant</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>34</td>
<td>Holistic3</td>
<td>The management of a corporation is responsible to many definable interests in society</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>35</td>
<td>Holistic4</td>
<td>The purpose of the corporation can be quite simply summarized as service to society</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>Statement</td>
<td>Agreement</td>
<td>Positive</td>
<td>Value</td>
</tr>
<tr>
<td>---</td>
<td>-------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>36</td>
<td>Price1</td>
<td>I am not willing to go to extra effort to find lower prices</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>37</td>
<td>Price2</td>
<td>I will grocery shop at more than one shop to take advantage of low prices</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>38</td>
<td>Price3</td>
<td>The money saved by finding low prices is usually not worth the time and effort</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>39</td>
<td>Price4</td>
<td>I would never shop at more than one shop to find low prices</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
<tr>
<td>40</td>
<td>Price5</td>
<td>The time it takes to find low prices is usually not worth the effort</td>
<td>Disagree</td>
<td>Positive</td>
<td>10</td>
</tr>
</tbody>
</table>

10.5 Appendix 5. Results comparison table, before and after re-scale

The values shown are just a few of all the output from SPSS, this is because only this values were considered relevant to show. NOTE: The p values for significance were not changed after the re-scale either. The columns of “ordinal” and “scale” show the type of variable selected on the interface of SPSS, no changes were detected either for this matter.

### Results comparison table

<table>
<thead>
<tr>
<th>Analysis with original Scale</th>
<th>Highest Coefficient Regression</th>
<th>Highest Coefficient Correlation</th>
<th>R Square of model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orinal</td>
<td>Ordinal 0.332</td>
<td>Holistic 0.221</td>
<td>0.063</td>
</tr>
<tr>
<td>Scale</td>
<td>Holistic 0.332</td>
<td>Holistic 0.221</td>
<td>0.63</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis with the Re-Scale</th>
<th>Highest Coefficient Regression</th>
<th>Highest Coefficient Correlation</th>
<th>R Square of model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orinal</td>
<td>Holistic 0.332</td>
<td>Holistic 0.221</td>
<td>0.063</td>
</tr>
<tr>
<td>Scale</td>
<td>Holistic 0.332</td>
<td>Holistic 0.221</td>
<td>0.63</td>
</tr>
</tbody>
</table>

10.6 Appendix 6. Distribution of the responses for sections 2-7 of the questionnaire

The numbers on the columns represent the amount of responses for each of the answer values (column named “answer”).

### Distribution of the responses for section 2

<table>
<thead>
<tr>
<th>Answer</th>
<th>Question # 7</th>
<th>Question # 8</th>
<th>Question # 9</th>
<th>Question # 10</th>
<th>Question # 11</th>
<th>Question # 12</th>
<th>Question # 13</th>
<th>Question # 14</th>
<th>Question # 15</th>
</tr>
</thead>
<tbody>
<tr>
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<td>11</td>
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<td>2</td>
<td>3</td>
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<td>11</td>
</tr>
<tr>
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<td>43</td>
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<td>17</td>
<td>23</td>
<td>16</td>
<td>26</td>
<td>19</td>
<td>47</td>
</tr>
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<td>63</td>
<td>65</td>
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<td>90</td>
<td>76</td>
<td>75</td>
<td>60</td>
</tr>
<tr>
<td>5</td>
<td>23</td>
<td>20</td>
<td>14</td>
<td>29</td>
<td>36</td>
<td>40</td>
<td>32</td>
<td>30</td>
<td>7</td>
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</tbody>
</table>
### Distribution of the responses for section 3

<table>
<thead>
<tr>
<th>Answer</th>
<th>Question # 16</th>
<th>Question # 17</th>
<th>Question # 18</th>
<th>Question # 19</th>
</tr>
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<td>65</td>
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</tr>
<tr>
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<td>38</td>
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<td>42</td>
<td>63</td>
</tr>
<tr>
<td>4</td>
<td>39</td>
<td>56</td>
<td>26</td>
<td>34</td>
</tr>
<tr>
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<td>57</td>
<td>20</td>
<td>9</td>
</tr>
</tbody>
</table>

### Distribution of the responses for section 4

<table>
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<th>Question # 21</th>
<th>Question # 22</th>
<th>Question # 23</th>
<th>Question # 24</th>
<th>Question # 25</th>
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</thead>
<tbody>
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<td>8</td>
<td>13</td>
<td>35</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>15</td>
<td>18</td>
<td>33</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>20</td>
<td>32</td>
<td>31</td>
<td>34</td>
<td>33</td>
</tr>
<tr>
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<td>37</td>
<td>45</td>
<td>46</td>
<td>38</td>
<td>51</td>
</tr>
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<td>64</td>
<td>48</td>
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</tr>
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<td>44</td>
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<td>25</td>
<td>10</td>
<td>15</td>
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### Distribution of the responses for section 5

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