



Departamento de Marketing, Operações e Gestão Geral

Modelling Consumers' Sustainability Consciousness Impact on Sustainable Purchase Intention

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Tese especialmente elaborada para obtenção do grau de
Doutor em Gestão com Especialização em Marketing

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*“Every time you spend money, you are casting a vote for the
kind of world you want”*

(Anna Lappe)

ABSTRACT

This thesis examines the triggers towards consumers' sustainable consumption, which allows a deeper understanding on an integrated "Triple Bottom Line" perspective the drivers towards the conscious consumption of sustainable products. Thus, the Consumers' Sustainable Consciousness Model is proposed as an alternative to study Sustainability with an integrated approach.

The four proposed constructs of the model were defined using the C-OAR-SE methodology and measured and validated using both exploratory and confirmatory factor analysis with a battery of 46 items and two independent samples. Also in this research the theoretical framework is measured using SEM (Structural Equation Modelling) in order to test the relation between constructs and confirm the eleven research hypotheses.

It was found that is more important to launch the aligned portfolio with the desired products than to develop a sustainably sound brand. The findings also showed that multiple constructs and dimensions lie behind sustainable consumer purchase intention but that overall it is more important to launch a portfolio with the desired sustainable products attributes than to develop a sustainably sound brand. The findings also revealed that it is more relevant to consumers to perceive brand attitudes as righteous than as opportunistic, but this fact doesn't change much consumers purchase intention, even though there is appears to be more relevant to purchase sustainably through trust rather than through accessibility. On contrary, if consumers perceive that products have sound sustainable attributes, this appears to as a much more relevant factor to purchase sustainably specially through trust rather than through accessibility. Finally, theoretical and practical implications of the study are also discussed.

Keywords: Sustainable Products; Consumer Consciousness; Intention; Sustainable Consumption

RESUMO

Esta tese examina as portas de entrada para o consumo sustentável, e permite uma compreensão mais profunda sobre a "Triple Bottom Line" de sustentabilidade numa perspectiva integrada acerca das motivações em relação ao consumo consciente de produtos sustentáveis. Assim, o Modelo de Consciência Sustentável do Consumidor, é proposto como uma alternativa de estudo integrado da temática da sustentabilidade.

Os quatro constructos propostos foram definidos utilizando a metodologia C-OAR-SE, medidos e validados através de análises fatoriais exploratórias e confirmatórias usando uma bateria de 46 itens e duas amostras independentes. Também nesta pesquisa o quadro teórico é medido usando Modelo de Equações Estruturais, a fim de testar a relação entre os constructos e confirmar as onze hipótese de investigação.

Verificou-se que é mais importante lançar uma carteira de produtos alinhados com os atributos expectáveis de sustentabilidade desejados pelo consumidor, do que desenvolver atitudes de marca a serem percebidas pelo consumidor como sustentáveis. De qualquer forma, os resultados também mostraram que é mais relevante para os consumidores perceber as atitudes de marca como verdadeiras do que como oportunistas, mas que por sua vez, este fato não tem um grande impacto na intenção de compra sustentável. Em termos de intenção de compra os factores encontrados revelam que parece ser mais relevante comprar de forma sustentável através da confiança, em vez de através da acessibilidade. Finalmente, as implicações teóricas e práticas do estudo também são discutidos.

Palavras-Chave: Produtos Sustentáveis; Consciência do Consumidor; Intenção de Compra; Consumo Sustentável

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Finally, I hope this thesis can contribute to the understanding and implementation of a world we can be proud to live in.

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List of Definitions

Consciousness - “heightened sensitivity to, awareness of, and connection with our unconscious mind” (Bennet, 2008)

Construct - “a conceptual term used to describe a phenomenon of theoretical interest” (Edwards & Bagozzi, 2000).

Enviropreneurial marketing - "Environmentally friendly marketing practices, strategies, and tactics initiated by a firm in the realm of marketing: (1) to achieve competitive differentiation advantage for the firm's offerings vis-a-vis competitors' offerings, and (2) influenced by the firm's views on the duties and responsibilities of a corporate citizen" (Varadarajan, 1992).

Fair Trade – “a trading partnership, based on dialogue, transparency and respect, which seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalised producers and workers especially in the South.” (Fine, 2001).

Green Consumer - “individual that seeks only to consume products that cause less or no damage to the environment”. Ottman (1994)

Purchase Intention: “individual’s conscious plan to make an effort to purchase a brand” or “a person’s intention to perform behaviours and measured by the subjective probability of performing a behaviour” (Spears, N., et al, 2004). It can also be interpreted as “the person’s motivation in the sense of his or her conscious plan to exert effort to carry out a behaviour” (Eagly and Chaiken 1993, p. 168).

Sustainability - “Meeting the needs of the present without compromising the ability of future generations to meet their needs.” (Brundtland Commission Report, 1987).

Triple Bottom Line - Integrated cornerstones of the topic represented in a marketing mix perspective of the “3Ps”: Profit – Economic Benefits; People – Social Benefits; and Planet - Environmental Benefits (Placet et al., 2005).

List of Abbreviations

C-OAR-SE - Construct definition, Object Classification, Attribute classification, Rater identification, Scale formation, and Enumeration and reporting.

CFA – Confirmatory Factor Analysis

CPSBA – Consumers’ Perception towards Sustainable Brand Attitudes.

CPPSA – Consumers’ Perception on Product Sustainable Attributes.

CPSPI – Consumer’ Perception on Sustainable Purchase Intention.

CSC – Consumer’ Sustainability Consciousness.

EFA – Exploratory Factor Analysis.

QR – Qualitative Research.

SEM – Structural Equation Model.

Chapter 1. Introduction

This thesis presents a path from the moment consumers start to become aware of sustainability topics to the point of intention to consume in a more sustainable way, therefore leading towards a new consumption paradigm that is more environmentally friendly, socially responsible and economically fair.

The terms ‘sustainability’ and ‘sustainable’ appeared for the first time in the Oxford English Dictionary during the second half of the 20th century and were first used in German forestry circles by Hans Carl von Carlowitz in *Sylvicultura Oeconomica* in 1713. Later on, in the 1970s, a great environmental awakening by the hand of Schumacher (1973), was considered to be a main tipping point in western societies. For many individuals all over the world, this brought about a greater awareness of environmental and social issues and their relation with actions. This awareness was a great influence in the following decades, from an economic standpoint to the development of awareness around sustainability in western societies.

Even though the literature focuses mainly on the separated study of the environmental and/or social perspectives, where even in the stream of research on ethical issues (which considers two sides of sustainability - environmental and social are considered), no model was found to fit the integrated scope of the present research (see chapter 6). The scattered information around the topic has led us to address these limitations as a research opportunity. In this sense, the research objective of this thesis is to provide a contribution for an integrated view on how consumers’ sustainability consciousness impacts their intention to purchase sustainably and how organizations can start integrating “*principles, philosophy, requirements, strategies and solutions of sustainability at a corporate strategic level, in order that they may understand their role more deeply*” (Borland, 2009: 555).

The theoretical framework of the proposed model from consumer’s sustainable consciousness to sustainable purchase intention, mediated by consumers’ perception on sustainable brand attitudes and sustainable product characteristics, is presented and will focus on a consumer analysis as a way to contribute for sustainable marketing strategy formulation as to integrate corporate goals, policies and actions into a coherent whole organization that provides products and services that can indeed meet consumers’ real needs, while respecting the environment and society as a whole.

Each of the constructs of the suggested model was developed and validated with the purpose of bringing a consistent and coherent methodology to the analysis. For this reason, one starts to present qualitative methodology and results in chapter 2, while chapters 3, 4 and 5 follow exactly the same methodology and keep the same structure. Moreover, the final model is also developed and validated in chapter 6 integrating the constructs and validating the eleven research hypotheses of the study. The main conclusions are finally presented in chapter 7.

Nevertheless, this chapter will briefly introduce the conceptual model, main hypothesis, methodology and outline of the thesis as a way to provide a fluid understanding of the whole analysis presented in-depth in the following chapters 3 to 6 which are presented in the format of studies submitted for publication in scientific journals.

1.1 Conceptual Model

The model proposed in this study assumes that the importance attached to consumer consciousness in terms of environmental, economic and social issues, is a key factor during the whole purchasing process. After analysing the literature and results from the qualitative research, it became clear that even with the existence of a direct relationship between consumers' sustainability consciousness and intention to purchase sustainably, the relation with two mediators also had to be approached. This was taken into consideration because consumers would have to clearly understand and demand certain product sustainable attributes, as well as understand and trust brand sustainable attitudes beforehand. Thus, it is imperative that the strategies and launch portfolios, as well as brands' reasons for doing so, are fully comprehended (Borland, 2009). Moreover it is known that corporations need to offer products and services with the desired positioning and attributes. Following classification schemes of generic positioning strategies (Aaker, 1996), a brand can be positioned by functional attributes and/or by emotional benefits. Aaker and Joachimsthaler (2000) define brand positioning as the part of the brand identity and value proposition that is to be actively communicated to the target audience. Consequently, brand positioning is based on the interaction of all marketing tools, with an accentuated role for marketing communications because of its relevance in the process of shaping distinct consumer perceptions. By handing over information on environmentally sound product attributes, a green positioning strategy, which bases itself on functional brand attributes intends to build brand associations. This

positioning strategy ought to base itself on the product's pertinent environmental assets, as opposed to competing conventional products, which could possibly reference production processes, product use and/or product elimination (Peattie, 1995). With this in mind, the proposed constructs of Consumers Perception towards Sustainable Brand Attitudes and Product Sustainable Attributes serve to mediate the emotional and functional path that consumers' sustainability consciousness follow respectively before intending to purchase. Thus, the proposed model assumes and illustrates therefore, the several relationships between the presented four Constructs: Consumers' Sustainability Consciousness (CSC – second order construct composed by 5 dimensions); Consumers' Perception towards Product with Sustainable Attributes (CPPSA – first order construct composed by 1 dimension); Consumers' Perception on Sustainable Brand Attitudes (CPSBA - first order construct composed by 2 dimensions – Righteousness and Opportunity) and Consumer' Perception on Sustainable Purchase Intention (CPSPI - first order construct composed by 2 dimensions – Trust and Access) and eleven Hypotheses: H1a: Consumers' sustainability consciousness positively influences intention to purchase sustainably, as far as the trust dimension is concerned; H1b: Consumers' sustainability consciousness positively influences intention to purchase sustainably, as far as the accessibility dimension is concerned; H2: Consumers' sustainability consciousness positively influences the consumers' perception towards products with sustainable attributes; H3a: Consumers' perceptions towards product sustainable attributes positively influence sustainable purchase intention regarding the dimension of trust; H3b: Consumers' perceptions towards product sustainable attributes positively influence sustainable purchase intention regarding the dimension of accessibility; H4a – Consumers' sustainability consciousness positively influences consumers' perception towards sustainable attitudes regarding the righteousness dimension; H4b – Consumers' sustainability consciousness positively influences consumers' perception towards sustainable brand attitudes regarding the dimension of opportunity; H5a – There is a positive influence from consumers' perception towards Brands' Sustainable Attitudes (regarding the dimension of righteousness), on their sustainable purchase intention regarding the dimension of trust; H5b – There is a positive influence from consumers' perception towards Brands' Sustainable Attitudes (regarding the dimension of righteousness), on their sustainable purchase intention regarding the dimension of accessibility; H6a – There is a positive influence from consumers' perception towards sustainable brands' attitudes (regarding the dimension of opportunity), on sustainable purchase intention (regarding the dimension of trust); and H6b – There is a positive influence from consumers' perception towards sustainable brands' attitudes

(regarding the dimension of opportunity), on sustainable purchase intention (regarding the dimension of accessibility). The theoretical framework and relationships proposed are illustrated in Figure 1.1 with the indication of which construct is developed in which chapter. Moreover, the full model is further developed in chapter 6.

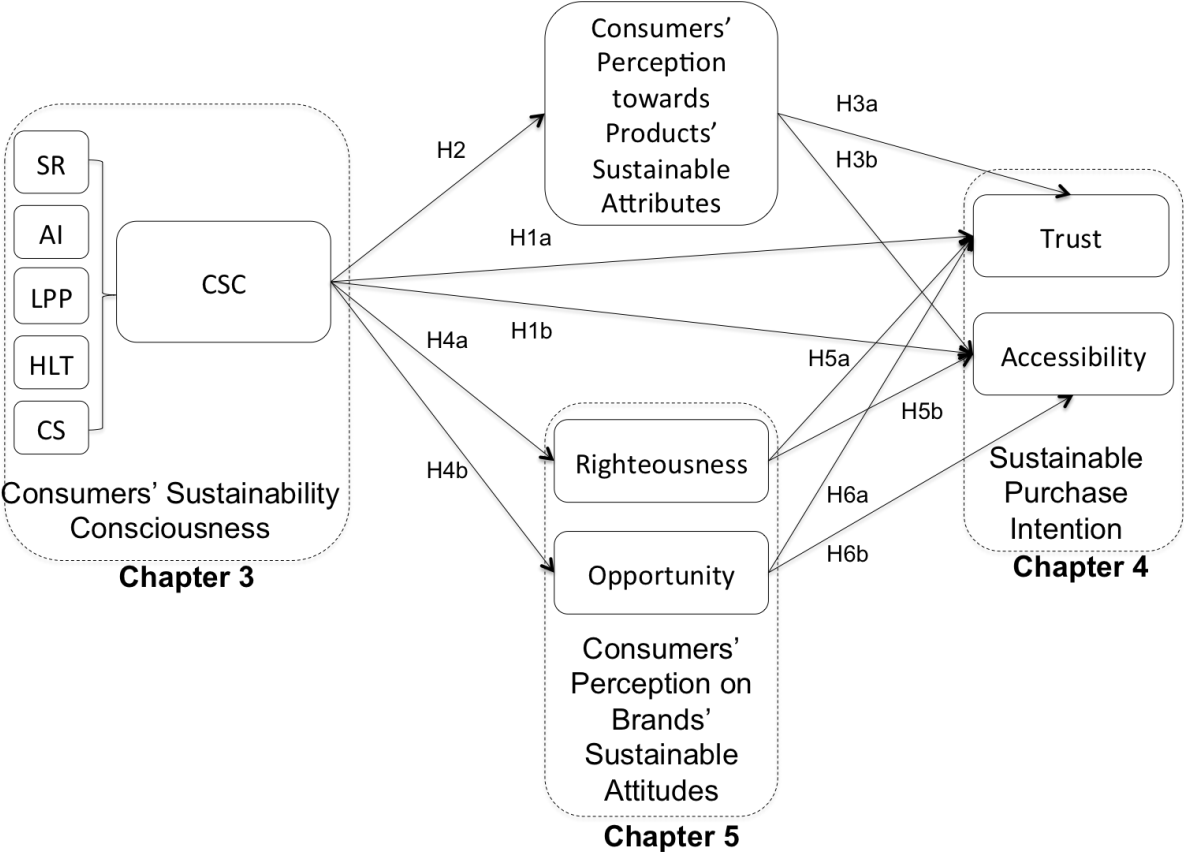


Figure 1.1 – Proposed Conceptual Model.

1.2 Research Methodology: Defining the Proposed Constructs and Model

Methodologically the study will draw on secondary and primary data collection aiming to measure the constructs presented above. This includes both quantitative and qualitative methods of scrutiny and analysis. In order to accomplish this, information from consumers with sustainable awareness was collected to understand expectations and purchase intention of sustainable products.

1.2.1 – Secondary Research

The literature review conducted as secondary research, was grounded on a detailed selection of mostly academic articles from top marketing and management journals as described by the journal rankings list provided by the faculty, using keywords such as “Sustainable Products”, “Consumer Consciousness”, “Purchase Intention”, “Sustainable Consumption” and “Sustainability”. Furthermore, with this study focusing on and emerging a stream of research, specific journals targeted at discussing sustainable issues in a business/marketing context were also used. Conducting such a literature review enabled to improve the knowledge and understanding of the topics under research. It also provided clearer definitions of what additional research would be required to fill the research gap. Conducting secondary research is useful to identify the gap between what is known and what needs to be known to solve a certain problem (Baker, 2001).

In this sense, it was possible to identify the exploratory nature of the study through the lack of relevant research studies that address the identified research gap and therefore to shape the direction of the primary research method chosen, which is explained in more detail as follows.

1.2.2 – Primary Research

Although this study is of an exploratory nature, seeking to provide quantifiable results, a mixture of qualitative as well as quantitative research methods were considered more appropriate to gather useful data in terms of understanding sustainable consumer behaviour in a context-specific situation (Amaratunga et al., 2002; De Ruyter and Scholl, 1998). The reason for choosing qualitative methods to complement quantitative ones, is justified with an emphasis on the fact that surveys will constitute the main method, making both techniques complementary and supportive of each other (Baker, 2001). Furthermore, Amaratunga et al. (2002) states that there will be a compensation of weaknesses in each method by the counterbalancing strengths of another.

Considering the above, each one of the four constructs was defined using the C-OAR-SE methodology proposed by Rossiter (2002), and validated the constructs combining Exploratory Factor Analysis procedures (using SPSS software), and confirmatory factor

analysis (Bollen, 1989; Hair et al., 2010), using two separate and independent samples. CFA was undertaken using a robust maximum likelihood estimation procedure in LISREL 8.80 (Jöreskog, K. G., & Sörbom, D., 2006). Beforehand, a qualitative analysis was conducted using in-depth interviews, leading to the proposal of the 46 initial battery of items that also included items from the literature review. A semi-structured guideline presenting a broad agenda was structured. Firstly, the broad and principal question was placed at the beginning (“What, in your opinion, is considered a sustainable product?”), to allow for spontaneous references to the topic. In other words, sub-questions were then asked accordingly, as a result of the outcome of the literature review, with the clear aim of answering the research objective. The order in which questions were asked was flexible and dictated by the interviewee’s answers: contrasting perspectives were often delved into in more detail, depending on the interviewee’s knowledge of sustainability. Examples included more specific debates about how the interviewee started consuming sustainable products or became aware of sustainable brands, leading to a conversational style of interview, in keeping with the study’s exploratory nature (Wilson, 2003). The Portuguese respondents from both the qualitative and quantitative analysis were gathered through a snowball technique due to the specificity of the topic. The sample included only real consumers of sustainable products. The full methodology is explained in detail in chapters 3 to 6.

1.3 Outline of the Thesis

This thesis is organized in seven chapters. Each of the chapter’s content is as follows:

Chapter 1 – Introduction

The study’s main topic is introduced and narrowed from the broader concept of sustainability to introducing the constructs and presenting the conceptual model. The rationale for the approach followed is also given as methodology is briefly introduced as well as the outline of this thesis.

Chapter 2 – Results of the Qualitative Analysis

This chapter presents and discusses the data gathered through the qualitative research analysis. Findings are discussed separately and presented in seven sub-topics namely: sustainability perception; sustainable products perception; sustainable habits (food); sustainable product characteristics; important factors on purchase decision; consumption barriers and consumption triggers.

Chapter 3 - Consumer' Sustainability Consciousness: A Five Dimensional Construct

This chapter proposes the five dimensions of the Consumer Sustainable Consciousness Construct defined using the C-OAR-SE methodology and measured using exploratory and confirmatory factor analysis. As a result, a new 19-item scale is proposed to measure the new proposed construct. Theoretical and practical implications of the study are discussed.

Chapter 4 - Consumer Perception on Sustainability Purchase Intention: A Two Dimensional Construct Approach

This chapter puts forward the two dimensions for Consumer Perception on Sustainable Purchase Intention construct. It is defined using the C-OAR-SE methodology and measured using exploratory and confirmatory factor analysis, resulting in a new 9-item scale, proposed to measure the proposed construct.

Chapter 5 - The Two Dimensions of Consumers' Perception towards Sustainable Brand Attitudes

This chapter presents the two dimensions for Consumer Perception on Sustainable Brand Attitudes. It is defined using the C-OAR-SE methodology and measured using exploratory and confirmatory factor analysis, resulting in a new 6-item scale, proposed to measure the new construct. Theoretical and practical implications of the study are discussed.

Chapter 6 - The Consumer' Sustainability Consciousness Model: An Integrated Approach

In this chapter the proposed research model is developed, intending to encapsulate what lies behind and influences consumers to buy in a more sustainable way. Structural Equation

Modeling (SEM) is used in order to validate the proposed model and to test the proposed research hypotheses.

Chapter 7 - Conclusions

Finally, conclusions are presented, highlighting recommendations to businesses interested in developing sustainable products and brands (i.e. the study's overall aim). Suggestions for future research are also put forward.

Chapter 2. Results of the Qualitative Analysis

The gathering of the information collected in the various in-depth interviews, had the purpose of determining the differences and similarities of opinions among respondents (Spiggle, 1994). Comparison of multiple cases shows if emergent findings are punctual coincidences or consistently replicated several times (Eisenhardt and Graebner, 2007: 26). The interviews (see interview guide in appendix A) were conducted face-to-face or using Skype and fully recorded in Portuguese (see list of respondents in appendix B). A tabular method was then used to analyze the data (Miles and Huberman, 1994), and the most important topics under research organized using in-text quotes by categories (see table of main quotations in appendix C). Then, the data were compared with appropriate literature in order to understand the relationships between qualitative results and emerging theory (Amaratunga et al., 2002; Eisenhardt and Graebner, 2007; Miles and Huberman, 1994; Wilson, 2003).

2.1 – Sustainability Perception

It was not surprising to see spontaneous mentioning of social, economic or environmental issues, when the respondents were approached about the topic of sustainability. It appeared that for some of the respondents the environmental issue was very clear, while for others, the social perspective was the most prominent, and for others, the economic or integration of the 3 should be the main focus.

In detail, the Social perspective considered: 1) respect for people (respects the local community where the product is produced, and is transparent and suitable for the final consumer); 2) human impact (big productions in small communities should be aware of its impact); 3) quality ("good for people" in a healthy and humanitarian perspective)

In the Environmental perspective, the dimensions of: 1) organic (usage of natural fertilizers protecting the environment); 2) non-toxic (exclusion of chemicals in the production process); 3) low energy use (oil usage reduced to a minimum; renewable energy usage as preferable;

simplification of the production processes); 4) non-tested on animals (animals should not be submitted to any atrocity for human welfare).

As for the Economic Perspective, the following were considered: 1) more expensive (associated with a premium generally applied in the market to this type of product); 2) low availability (the distribution channels are still not very well developed for this segment); 3) budget efficiency (buying only what is truly necessary).

The integrated view of the topic was also spontaneous regarding: 1) interdependence (awareness of how nature and human beings are interdependent and should work in symbiosis); 2) lack of knowledge (sustainable products and consumption are more complex in general, so more information is needed); 3) balanced (doing the best with what is available: reduce pollution to the minimum possible; consider population welfare, and a fair economic perspective).

2.2 – Sustainable Products Perception

It appeared that for some of the interviewees, the environmental link was very clear. For others, the social perspective was the most prominent, and for others, the economic or integration of the 3 should be the main focus. In this sense, we confirmed the need for an integrated model, assuming that the three pillars of sustainability should be studied together.

In general terms, the perception the respondents have towards sustainability, are summarized in table 2.1:

Sustainability Perception	Description
Social	
Respects people	Respects the local community where the product is produced, and is transparent and suitable for the final consumer
Considers human impact	Big productions in small communities should be aware of its impact
Quality	"Good for people" in a healthy and humanitarian perspective
Environmental	
Organic	Usage of natural fertilizers, protecting the environment
Non-toxic	Exclusion of chemicals in the production process
Low energy use	Oil usage reduced to a minimum; renewable energy usage as preferable;

	simplification of the production processes
Non-tested in animals	Animals should not be submitted to any atrocity for human welfare
Economic	
More expensive	Associated with a premium generally applied in the market in this type of product
Low availability	The distribution channels are still not very well developed for this segment
Budget efficiency	Buying only what is truly necessary
Integration	
Interdependence	Awareness of how nature and human beings are interdependent and should work in symbiosis
Lack of knowledge	Sustainable products and consumption are more complex in general, so more information is needed
Balanced	Doing the best with what is available: reduce pollution to a minimum; consider population welfare, and a fair economic perspective

Table 2.1: Sustainability perception main topics.

2.3 – Sustainable Habits - Food

The food industry was the most mentioned, with organic products acting as representative of the entry point on sustainable consumption most of the time. Respondents were very familiar with the topic, and knew where to buy the products, its pricing and availability. The perception of these certified products was in general of a higher quality and price, respecting the environment and originating from smaller producers (which was an advantage meaning that local communities were being stimulated).

The topic of being local was very significant. In Portugal, a major campaign (560 – the first digits of the Portuguese barcode) to buy national products revealed itself to have been very successful, as most of the respondents mentioned to have considered this in their purchasing decisions.

In general terms, the perception the respondents have towards the sustainable food category is as detailed in table 2.2:

Sustainable Habits - Food	Description
Organic Fruits and Vegetables	Reference to vegetarianism or focus on reducing meat consumption
Own production	In big rural areas or little urban available places to grow food at or near home
Recycling	Having in consideration recycling packages
Producers selection	Label search for production ethics
Non-selection of endangered species	Extra care not to contribute to species extinction
According to availability	Would have more frequent habits if more available
Local products	Search for national / local products as much as possible
Avoiding waste	Paying attention to buying products with least packaging possible
Health reasons	Health issues leading to more awareness in consumption
Lack of sustainable options	Would buy more if more options were available

Table 2.2: Sustainable Habits – Food main topics.

2.4 – Sustainable Product Characteristics

There were several characteristics perceived to be an indicator of sustainable practices, certification being one of them. It appeared to be very relevant as it provided a kind of product guarantee. Knowing that the product was certified as “green” or “fair trade” for instance left the consumer conscious-free in his or her purchase decisions.

Quality was another perceived attribute shared by many of the participants. Knowing that it was not produced with chemicals suggested a “good-for-me” positioning with the plus of not destroying the environment (with organic products).

Again, being local (or national) was one of the main characteristics that a product should have, to be able to be considered sustainable. As the more conscious consumer tends to search for more information during the purchase process, the labels appeared to be the most important means of gathering the necessary information, and therefore leading the consumer to trust the product, as more information meant more transparency. In general terms, the perception the respondents have towards sustainable products’ characteristics, is summarized in table 2.3:

Sustainable Product Characteristics	Description
Certification	An important factor to guarantee sustainable criteria
Ingredients origin	Stated as a very important factor and reinforces transparency
Production procedures	Knowing how the product was produced
Local product	Search and preference to contribute to the local economies
Respecting nature	Environmental consciousness present
Quality	Sustainable products should be equivalent in quality
Information available	Consumers search for more information in order to better understand these types of products
Transparency	Truthful information is required to trust brands and influence purchase decision

Table 2.3: Sustainable Products Characteristics main topics.

2.5 – Important Factors regarding Purchase Decision

Lack of distribution was one of main concerns, as respondents needed to find products on shelves, preferably with fair pricing. Products with sustainable claims were perceived as more expensive and since price is an important factor for purchase decision, this might act as a consumption barrier. Nevertheless this was not a consensual topic since many respondents asserted that they would buy sustainably even if more expensive. Also, lack of information in sustainable products was mentioned since its consumption is perceived to be more complex in general, so more information is needed. Linnears were mentioned as having complex shelf spaces and lacking variety. Respondents pointed out that they would buy more, if more products were available. Furthermore, media was not helping in the dissemination of sustainable products, as sustainable products were not as present as “regular” products.

Also, the respondents considered that for Purchase Decision, important factors were that the products should: guarantee nature protection; have precise label information (stated as a very important factor and that reinforces transparency); be found on shelves with sampling opportunities; fit consumers’ consciousness higher awareness (knowledge and sensitivity to the sustainable products and topics); be certified (an important factor to guarantee sustainable criteria); be convenient (equivalence to "normal" products) and offer local options (search and preference to contribute to the local economies). In general terms, the perception the respondents have towards purchasing sustainable products, is presented in table 2.4:

Important Factors regarding Purchase Decision	Description
Environmental Protection	Guarantee of nature protection
Label Information	Stated as a very important factor and reinforces transparency
Availability	Need to find products on shelves
Consciousness	Higher awareness, knowledge and sensitivity to the sustainable products and topics
Certification	An important factor to guarantee sustainable criteria
Convenience	Equivalence to "normal" products
Local	Search and preference to contribute to the local economies
Information available	Consumers search for more information in order to better understand these types of products
Price - Non Consensual Topic	
Willing to pay more	Acceptance of the market premium
And	
Would buy more if cheaper	Price sensitive consumers
Brand Trust - Non Consensual Topic	
Trust in brand is very important	Perception towards brand sustainable attitudes is relevant
And	
Not relevant	Perception towards brand sustainable attitudes is not relevant

Table 2.4: Important Factors on Purchase Decision main topics.

2.6 – Consumption Barriers

Education was one of the main spontaneous repetitions. Respondents felt that if consumers were more aware, they would buy more. Also, peer information through Internet and word-of-mouth is important (more than normal marketing communication). Availability appeared to be a very important issue since convenience was taken as a very important matter, as it was stated several times that consumers would buy more if products were found in their “normal” supermarkets. Therefore, distribution is crucial when consumers search for local products (a lot of awareness to buy Portuguese/local products); more availability in the neighbourhood and a Shop-in-shop concept was an interesting insight into distribution development. Price and Brand Trust were not consensual topics, but most of the participants considered themselves as price sensitive and would like to trust brands. In general terms, the perception the respondents have towards sustainability, can be summarized in table 2.5:

Consumption Barriers	Description
Lack of distribution	Need to find products on shelves
Expensive products	Price is an important factor and might act as a consumption barrier
Lack of information	Sustainable products and consumption are more complex in general, so more information is needed
Complex shelf space	Linear are difficult to understand
Lack of media information	Media not helping in the dissemination of sustainable products
Convenience	Equivalence to "normal" products
Slow integration process	Reference to sustainable consumption as a gradual process
Lack of variety	Would buy more if more options were available
Not being local	Search and preference to contribute to the local economies

Table 2.5: Consumption Barriers main topics.

2.7 – Consumption Triggers

One of the first main findings of the interviews was the fact that respondents with high awareness of the sustainability topic would approach it from an integrated point of view, stating that interdependence is a reality (awareness of how nature and human beings are interdependent and should work in symbiosis). After analysing the information in depth, five main drives or triggers to sustainable consumption were identified, namely:

- 1) Health Reasons: the increasing interest in wellbeing and healthy lifestyles represented being more aware of what to buy, in a “good-for-me” perspective (e.g. protecting the body from chemicals);
- 2) Information (e.g. both environmental and social media information, internet, etc....): more information was needed, due to the fact that the lack of knowledge in general populations would turn sustainable products and its consumption more complex in general. Even with the Internet revolution that has transformed people’s access to information, an educational need was still crucial;
- 3) Crisis Scenario (e.g. avoiding wasting money superficially, and reattributing household spending): it was not considered fair or at least transparent, that sustainable products are generally more expensive, and normally associated with a price premium, applied in the market for these types of products, leading to less consumption. Also, the lack of availability of products on shelves led to the belief that appropriate distribution channels are still not well developed for this segment. Considering that the qualitative research was conducted during

one of the most critical economic crises in Portugal, it was clear that families were reevaluating consumption patterns, as a budget efficiency need was essential and leading to only buying what is was truly necessary;

4) Connection to Nature: it seemed that some of the respondents had a great environmental awareness, especially concerning organic farming, where the exclusion of chemicals in the food production process was highly mentioned. The need for energy efficiency and conversion to renewable energy usage was also preferable. Respondents also preferred to purchase products not tested in animals;

5) Sense of Responsibility: social welfare was very often mentioned, as respect for local communities, considering population welfare, and fair economic development led to the need for "good-for-people-and-planet" products, including the dimensions of health security and humanitarian care. Human impact should therefore be neutralised when implementing big production lines in small communities, for example. In general terms, the perception the respondents have towards sustainability, as summarized in table 2.6:

Triggers	Description
Connection to nature	Environmental consciousness present
Sense of responsibility	Respects the local community where the product is produced, and is transparent and suitable for the final consumer
Health reasons	Health issues leading to more awareness in consumption
Crisis Scenario	Buying only what is truly necessary
Information	Dealing with peer word-of-mouth and internet documentation

Table 2.6: Consumption Triggers main topics.

Chapter 3: Consumer' Sustainability Consciousness: A Five Dimensional Construct¹

Abstract

This paper examines consumer triggers towards sustainable consumption behaviours, proposing Consumer Sustainability Consciousness as a new construct that allows us to understand what drives the conscious consumption of sustainable products and services, in an integrated "Triple Bottom Line" perspective.

Consumer Sustainability Consciousness is proposed as a five-dimensional construct involving: Sense of Retribution; Access to Information; Labelling and Peer Pressure; Health Issues; and Crisis Scenario. The proposed construct was defined using the C-OAR-SE procedure and measured and validated using both Exploratory and Confirmatory Factor Analysis. As a result, a 19-item scale is proposed to measure Consumer Sustainability Consciousness; theoretical and practical implications of the study are also discussed.

Keywords: C-OAR-SE, Consumer Behaviour, Consumer Sustainable Consciousness, Confirmatory Factor Analysis, and Sustainability.

3.1. Introduction

3.1.1 Sustainability: An overview

The Brundtland Commission Report (1987) provided us with the most widely accepted definition of Sustainability: "meeting the needs of the present without compromising the ability of future generations to meet their needs". The three pillars of Sustainability, known as the "Triple Bottom Line", are the cornerstones of what can also be designated in a

¹ Published Paper at Ecological Indicators

marketing mix perspective as the “3Ps”: Profit – Economic Benefits; People – Social Benefits; and Planet – Environmental Benefits (Placet et al., 2005).

In Table 3.1, we list the main studies found in the literature that separately consider the environmental, social or the economic perspectives of sustainability. As we understand, the environmental perspective as been further explored than the social one and no scale was found measuring how consumers understand economic benefits as a way to really provide welfare for people and planet. Even in the stream of research on ethics, which considers two of the three cornerstones of sustainability (environmental and social), no scale was found to fit the integrated scope of this study, where the intention is to understand how the consumer becomes aware (or conscious) and therefore driven to consume more sustainably. Furthermore, no study was found regarding consumers’ sustainability consciousness, despite the scales and constructs capable of measuring parts of the proposed construct that aim to provide an integrated view explaining consumer sustainable consumption behaviour.

Each of the three perspectives summarized in Table 3.1 are presented and explained in detail in the following sub-sections.

Constructs	Description	Statistical Method	Author (year)
<i>Social Perspective</i>			
Socially Conscious Consumer Scale	Social Responsibility Scale with 8 items	Linear Discriminant Analysis	Anderson (1972)
Corporate Social Responsibility (CSR)	Perceptions of the firm’s involvement in corporate giving, including its support of non-profit organizations	Confirmatory Factor Analysis	Lacey and Kennett-Hensel (2010)
Lifestyle Scale	Identify what values and lifestyles best explain environmentally friendly behaviours.	Structural Equation Modelling	Fraj and Martinez (2006)
<i>Environmental Perspective</i>			
Ecological Attitudes and Knowledge	Ecology scale	A two-factor (Groups X Subscales) analysis of variance	Maloney and Ward (1973)
Environmental Consciousness (EC)	Multi-dimensional construct, consisting of cognitive, attitudinal and behavioural components	Regression analysis	Schlegelmilch, et al. (1996)
Green Costumer Purchase Intention	Consumer involvement with green purchase intention	Descriptive Measures and Correlation Analysis	D'Souza et al. (2006)

Ecological behaviour (EB)	Dimension of the individuals' real ecological commitment with the environment	Structural Equation Modelling	Fraj and Martinez (2006)
Natural Environmental Orientation (NEO)	Embraces various perspectives towards nature, such as the love of nature and seems to be suited for explaining nature-protective behaviour.	Structural Equation Modelling	Mostafa (2007)
Green Purchasing Behaviour	Purchasing behaviours for general green products	Hierarchical Multiple Regression Analysis	Lee (2008)
<i>Economic Perspective</i>			
Creating Shared Value	Creating economic value in a way that <i>also</i> creates value for society by addressing its needs and challenges.	Conceptual	Porter and Kramer (2011)

Table 3.1: Overview of the main concepts, constructs and scales found in the literature on consumer or business social, environmental and economical perspectives.

3.1.2 Social Perspective

The “Social Consciousness Construct” was introduced 50 years ago with the need to capture consumer concerns regarding social issues, using the “Social Responsibility Scale”. This scale measures an individual’s traditional social responsibility. Initially developed by Berkowitz and Daniels (1964), it was later used by Berkowitz and Lutterman (1968) to further develop the topic.

Other types of scales, such as the “Lifestyles scale” from Fraj and Martinez (2006), focus on the way people live their lives, showing a more integrated perspective concerning aspects related to a balanced life, healthy diet and environmental concern and protection (Sanchez et al., 1998). Also, current demand of sustainable consumerism that shows an increasing willingness to integrate social responsibility in product purchase decision, explains the rise of consumers’ level of commitment to these issues that have been observed as having a positive effect on purchase behaviour (Lacey and Kennett-Hensel, 2010).

3.1.3 Environmental Perspective

Decades ago, Maloney and Ward (1973) started to claim that the effect of man's behaviour on the environment had been relatively ignored, while the inverse was widely studied. The author also emphasises that "a basic reconceptualization of the problem in terms of human behaviour dictates a solution in terms of altering that same behaviour". In this sense, if we are to study sustainable behaviour within the perspective of a positive change on the consumption paradigm, this has to be taken into consideration. Therefore, it is essential to understand the extent of the population's awareness regarding the environment and social protection aspects as the primary steps before modelling and implementing the modification of these relevant behaviours. Maloney and Ward (1973) created a framework to better understand consumers' "Ecological behaviour" proposing the "Actual Commitment subscale". This subscale was later adapted by Fraj and Martinez (2006) and analyses how people have changed their selection of products from a bundle of ten items due to their pollutant effects while also trying to be informed about environmental issues and other related problems. Also, many studies were conducted to understand consumers' environmental concerns and choices regarding green products (D'Souza et al., 2006; Lee, 2008).

This topic has also been approached by academia from an "environmental consciousness" perspective meaning that, as Borland (2009) states, the "consumers' response to green companies differs by how environmentally conscious they are". According to Bennet and Bennet (2008) "consciousness by definition is heightened sensitivity to, awareness of, and connection with our unconscious mind". This means that the concept of consciousness is related to the awareness level of a consumer regarding a certain topic.

The "Environmental Consciousness Construct" proposed by Schlegelmilch et al. (1996) includes three measurement scales: (a) the environmental knowledge scale; (b) the environmental attitudes scale; and (c) the recycling behaviour scale, proposed to bring new insights on the topic. Later, Ottman (1994) developed the concept of the green consumer and defined the idea of an "individual that seeks only to consume products that cause less or no damage to the environment".

Furthermore, Schlegelmilch et al. (1996) reinforced that a dramatic increase in environmental consciousness worldwide is believed to have caused a profound impact on consumer

behaviour. Thus, marketing strategies are beginning to merge with sustainable principles, as they envision conscientious consumers' satisfaction with portfolios and production processes that contribute to the economy and society as a whole (Salgado Beltrán and Gil Lafuente, 2005).

3.1.4 Economic Perspective

Porter and Kramer (2011) recently developed the state of the art concept of Shared Value. The authors understand that capitalist system is unable to sustain corporate growth if businesses insist on a just for-profit perspective as this has been seen as a major cause of social, environmental, and economic problems. Therefore, the concept of Shared Value is explained in terms of “creating economic value in a way that also creates value for society by addressing its needs and challenges” (Porter and Kramer, 2011). This means that businesses should start to understand that there is a very concrete path to increasing productivity and expanding markets if society needs are recognized as a priority to be addressed, in detriment to the conventional economic needs. The authors admit that this “can give rise to the next major transformation of business thinking” (Porter and Kramer, 2011).

Despite of all this, it is, unfortunately, of common sense that making a profit is a golden rule for most businesses in the world. Borland (2009) however, states that the corporate economic dimension should not dominate the social and environmental ones. The author suggests that these last two dimensions should not take second thoughts or be measured against the economic dimension. This might happen because socio-cultural and environmental (physical) wellbeing is usually dependent on economic (financial) wellbeing. Considering the above, corporate strategic sustainability arises when the integration of the principles of sustainability start becoming embedded in the management processes. In this sense, corporations will have to understand how, for example, to: close the loops of product life cycles (because life systems are not linear); integrate all parts of the system instead of segregating them (the same way that nature works around synergies and biodiversity); introduce eco-efficient procedures and production processes and especially how to truly add value to the society with their portfolios. Corporate impact on the environment (and society) needs to be positive or at least neutral (Hart, 1997), therefore “recognising the need for an “individual, collective and cultural transformation and paradigm shift” (Borland, 2009). In the

latter case, the desire for profit should be embedded in the desire to do the right thing (Baker and Sinkula, 2005).

Despite the interest of academia to put forward insights to help the corporate world build a new consumption paradigm, no scale was found demonstrating an integrated view of the “triple bottom line” in a consumer perspective. Furthermore, the scattered information around the topic has led us to address these limitations as a research opportunity. The main objective of the current study is therefore to provide academia with a theoretical framework regarding the number and nature of the dimensions in which consumers are aware or conscious and start changing its consumption patterns. We therefore propose the definition and validation of the Consumer Sustainability Consciousness Construct in this paper.

3.2. Method: Defining the Consumers’ Sustainability Consciousness Construct

The Consumer Consciousness Construct was defined using the C-OAR-SE procedure proposed by Rossiter (2002) and validated through Exploratory and Confirmatory Factor Analysis applied to two different and independent samples. A qualitative analysis was conducted using in-depth interviews before the proposal of the initial battery of 20 items that also included items from the literature review. The Portuguese respondents from both the qualitative and quantitative analysis were gathered through a snowball technique, due to the specificity of the topic, and included only real consumers of sustainable products.

3.2.1 Construct Definition: the C-OAR-SE procedure

By definition, a construct is “a conceptual term used to describe a phenomenon of theoretical interest” (Edwards and Bagozzi, 2000: 156–157). Our primary objective therefore, was to define the construct and then identify and validate its dimensionality. To accomplish the goal of construct definition, the C-OAR-SE procedure (Rossiter, 2002), despite its relatively recent introduction to academia, seems a solid approach to defining, generating and selecting items in the field of marketing scale development. C-OAR-SE stands for: Construct definition, Object classification, Attribute classification, Rater identification, Scale formation, Enumeration and Reporting. Rossiter (2002) claims that without this approach, there will be no space for a proper conceptual definition of the construct and its operationality will be

inadequately developed, leading to an inappropriate measurement. Thus, we can define the construct to be measured in this paper as: CONSUMER (rater entity) SUSTAINABILITY (focal object or object) CONSCIOUSNESS (attribute).

Regarding rater identification, and according to Rossiter (2002), the raters can be subdivided into 3 main groups: (a) Individual raters; (b) Group raters; and (c) Expert raters. For this study we have decided to consider a group rater formed by a sample of consumers that have consumed a product with sustainable characteristics at least once. In the qualitative analysis phase each of the 20 consumers belonging to the selected group was interviewed individually, using in-depth interview methods. This sample size was considered appropriate, since common qualitative sample sizes are constituted of 15–40 participants (De Ruyter and Scholl, 1998).

A semi-structured guideline presenting a broad agenda was applied. Firstly, a broad and main question was placed (“What, in your opinion, is considered a sustainable product?”) to allow for spontaneous references to the topic. Sub-questions were then asked according to the outcome of the literature review, and with the clear aim of answering the research objective. The ordering of questions was flexible and dictated by the interviewee’s responses. In each interview, different perspectives were often explored in more detail, depending on the interviewee’s sustainability knowledge. Examples include more specific debates around how the interviewee started consuming sustainable products or became aware of sustainable brands. The style of interview became conversational, in accordance with the study’s exploratory nature.

3.2.2 Construct Validation: C-OAR-SE versus Exploratory and Confirmatory Factor Analysis

Rossiter (2002) states that no empirical test was conducted to prove that his procedure is more valid than the traditional one. Nevertheless, the originality of the procedure is grounded in expert agreement, as C-OAR-SE relies on logical arguments and is based on prior qualitative analysis using “open-ended input from pre-interviews with raters” (Rossiter, 2002). Even though Finn and Kayande (2005) agree that “experts can be asked to judge whether a set of dimensions or a set of items is conceptually distinct”, this type of reasoning challenges what has been presented for the last 25 years in the literature in terms of marketing scales

development initiated by Churchill (1979). Furthermore, no procedure is recommended to be explained as being “grounded in rationalism rather than empiricism” (Wierenga and Van Bruggen, 2000: 72–77). Considering all the above-mentioned arguments, and despite the relevance of Rossiter’s message on the conceptualization of marketing constructs, “empirical validation is necessary because it reveals whether the conceptualization has achieved what was intended” (Finn and Kayande, 2005). Moreover, solid conceptual discernment does not guarantee that the data will match the expected (Teas and Palan, 1997).

Therefore, complementing the method concerning conceptualizing and empirically validating the construct seems to be the most appropriate path: we defined the construct using the C-OAR-SE procedure, and validated it through Exploratory and Confirmatory Factor Analysis. Exploratory Factor Analysis (EFA) is a statistical technique commonly used by researchers, namely in the field of social sciences, to reduce the dimensionality of the original data. Starting with a battery of items (often corresponding to questions in questionnaire used for data collection), and based on their correlation structure, the aim is to find the main underlying dimensions, thus reducing the dimensionality of the data. Confirmatory Factor Analysis (CFA) – see for example, Bollen (1989) and Hair et al. (2010) – is a confirmatory approach that allows the researcher to specify the constructs in the model and the items that are expected to measure each of them. CFA is often used with a final sample, to confirm the structure that was detected in EFA using a pre-test sample. In this paper EFA was conducted using SPSS software, whereas LISREL was used to perform CFA.

To determine the appropriateness of the collected data to perform factor analysis, we examined the measure of sampling adequacy Kaiser–Meyer–Olkin (KMO) and the Bartlett’s test of sphericity (see Kaiser, 1974). A minimum KMO value of 0.60 is required for the factor analysis to be considered good (Tabachnick and Fidell, 2007). Also, rejecting the null hypothesis of the Bartlett’s test provides strong evidence of the appropriateness of the data, suggesting several variables are significantly correlated (Malhotra et al., 2004).

Polychoric correlations were computed and the robust maximum likelihood estimation procedure available in LISREL 8.80 was used to estimate all CFA models, thus dealing with the ordinal scale of the initial variables.

3.3. Results: Validating the Consumers' Sustainability Consciousness Construct

3.3.1 Results from the Qualitative Analysis

It was not surprising to see spontaneous mentioning of the three cornerstones of sustainability during the interviews. In the same way, respondents with a heightened awareness of the sustainability topic would approach it from an integrated view, stating that interdependence is a reality (awareness of how nature and human beings are interdependent and should work in symbiosis).

After analysing the information in depth, five main drivers to sustainable consumption were identified, namely:

- 1) Health Reasons: the growing interest in wellness and healthy lifestyle represented a way to start being more aware of what to buy in a “good-for-me” perspective (e.g. protecting the body from chemicals).
- 2) Information (e.g. environmental and social media information, internet, etc.): the lack of knowledge in general populations would turn sustainable products and their consumption more complex in general, so more information was needed. Even with the Internet revolution that transformed the way people access information, the educational need was still a must.
- 3) Crisis Scenarios (e.g. need to avoid wasting money superficially and rearrange household spending): the perception that sustainable products are in general more expensive, normally associated with a price premium applied in the market for this type of product, was not considered fair or at least transparent since it would only lead to less consumption. Also, lack of availability of products on shelves led to the understanding that appropriate distribution channels are still not very well developed for this segment. Considering that the qualitative research was conducted in one of the most profound economic crises in Portugal, it was clear how families were re-evaluating consumption patterns, as a budget efficiency need was crucial, leading to only buying what is truly necessary.
- 4) Connection to Nature: it appeared that some of the respondents had a great environmental awareness, especially regarding organic farming, where the need for exclusion of chemicals in the food production process was highly mentioned. Also, the need for energy efficiency and

conversion to renewable energy usage was preferable. Respondents would also prefer to purchase products not tested on animals.

5) Sense of Responsibility: social welfare was also highly mentioned, as the respect for local communities considering population welfare, and a fair economic development led to the claimed need for “good-for-people-and-planet” products, including the dimensions of health security and humanitarian care. Thus, human impact should be neutralized when, for example, implementing big production lines in small communities.

Taking all this in consideration, we confirmed the need for an integrated model requiring the three pillars of sustainability to be studied together.

3.3.2 Scale formation with Pre-tested items

The C-OAR-SE procedure proposes that after analysing the qualitative data, the questionnaire is built based both on the literature review and on the results from the qualitative research (QR). The set of 20 items proposed to measure Consumers’ Sustainability Consciousness, with the complete wording and corresponding references from the literature can be found in Table 3.2.

Items	Adapted From
Question: "I started consuming more sustainably when...:"	
C1 - I started to pay more attention to my health	Fraj and Martinez (2006) / QR
C2 - I started following a vegetarian diet	Fraj and Martinez (2006) / QR
C3 - I began to consume more fruits and vegetables	Fraj and Martinez (2006) / QR
C4 - I saw a documentary with revealing information that led me to be more careful about what I buy	QR
C5 - I saw information on the internet that led me to change my consumption patterns	QR
C6 - I felt alert to the importance of social and environmental certifications	QR
C7 - I personally felt the difficulties of the current economic crisis and had to pay more attention to what I really needed to buy	QR
C8 - I was shown that consuming Portuguese products makes more sense for the local economy	QR
C9 - I realized we were polluting or destroying Nature	Fraj and Martinez (2006) / QR
C10 - I stopped buying products tested on animals	Fraj and Martinez (2006) / QR
C11 - I started making an effort to buy products in recyclable packaging	Fraj and Martinez

	(2006) / QR
C12 - I started buying fair trade products to help small communities to have better working conditions	QR/ Benzençon (2010)
C13 - I realized I wanted to give my contribution to my local community or society	Anderson (1972) / Fraj and Martinez (2006)
C14 - I realized I could contribute to a better world by buying fair trade products	(Benzençon, 2010)
C15 - I realized the superior quality of organic products	QR / D'Souza et al (2006)
C16 - The product labels drew my attention to characteristics that fit with my own values	QR
C17 - I realized that I would buy sustainably even with a lower product quality	D'Souza et al. (2006)
C18 - I was taught about recycling	Fraj and Martinez (2006) / QR
C19 - I began to be interested in information on product labels	QR / D'Souza et al. (2006) / Fraj and Martinez (2006)
C20 - I wanted to try products / practices that people close to me recommended	QR

Table 3.2: A list of the 20 items proposed to measure Consumers' Sustainability Consciousness. When adapted from the literature, the corresponding sources are given; QR means items were derived from the qualitative research (QR) previously conducted.

3.3.3 The Pre-Test Sample

A 20-item questionnaire was created and pre-tested in an online format for understandability and validity, and to identify any technical and/or wording problems during completion and submission. Likert-type scales from 1 – totally disagree to 7 – totally agree were used. Data for this study were collected from 212 Portuguese consumers, aged between 18 and 80 years old. Due to the specificity of the topic, a snowball sampling technique was used. Indeed, after participating in the survey, respondents were asked to forward the survey link to colleagues, friends or family that they believe were consuming sustainably, inviting them to collaborate in the research project, in an attempt to reach real consumers of sustainability products – the target sample of interest for the study.

To guarantee that all respondents had consumed a sustainable product at least once, a filter was included as the first question in the questionnaire. After examining the collected data, it was necessary to ignore respondents with missing data, thus leading to a valid sample of 174 fully completed responses. Overall, 58.8% of the respondents were female. Although most of the respondents were people that had graduated (71.2%), an overwhelming majority of participants earned less than 1500D per month (74.5%). Almost half the participants (43.8%) were into holistic practices such as yoga and/or meditation.

3.3.4 Results from the Exploratory Factor Analysis

The 174 responses of the pre-test sample concerning the 20 items were first analysed using principal components analysis (with Varimax rotation), with the aim of identifying the main dimensions underlying the construct Consumers' Sustainability Consciousness. The collected sample (n=174) can be used to conduct principal components analysis since KMO=0.847 and a significance level of 0.00 for the Bartlett's test suggests several variables are significantly correlated.

A five-factor solution with eigenvalues higher than 1 was obtained, accounting for 60.72% of the total variance of the 20 items. Table 3 lists the 20 items of the scale and displays the factor loadings that were obtained in the chosen five-dimensional solution. Based on the magnitude of the factor loadings (the largest value in each line of the table is boldfaced), each dimension was given a descriptive label, as follows:

- 1) Sense of Retribution (SR) - 6 items;
- 2) Access to Information (AI) - 4 items;
- 3) Labelling and Peer Pressure (LPP) - 4 items;
- 4) Health (H) - 3 items; and
- 5) Crisis Scenario (CS) - 3 items.

Overall, these five dimensions are in line with the findings of the qualitative analysis and literature review presented above, and at this stage, as recommended by Rossiter (2002), we will not "make the error of using statistical analysis to delete items from formed- attribute scales". Indeed, we will wait for the final sample and a confirmatory statistical analysis to make such a decision.

Items	Components				
	1 - SR	2 - AI	3 - LPP	4 - H	5 - CS
C14 - I realized I could contribute to a better world by buying fair trade products	0.782	0.184	0.253	0.043	0.108
C12 - I started buying fair trade products to help small communities to have better working conditions	0.738	0.019	0.300	0.071	0.075
C13 - I realized I wanted to give my contribution to my local community or society	0.720	-0.07	0.162	0.004	0.193
C15 - I realized the superior quality of organic products	0.637	0.194	0.130	0.318	0.021

C11 - I started making an effort to buy products in recyclable packaging	0.518	0.254	0.203	0.19	0.143
C10 - I stopped buying products tested on animals	0.516	0.239	0.053	0.362	0.214
C5 - I saw information on the internet that led me to change my consumption patterns	-0.006	0.850	0.198	0.110	0.151
C4 - I saw a documentary with revealing information that led me to be more careful about what I buy	0.128	0.753	0.172	0.295	0.138
C6 - I felt alert to the importance of social and environmental certifications	0.445	0.639	0.259	-0.059	0.108
C9 - I realized we were polluting or destroying Nature	0.467	0.481	-0.004	0.161	0.342
C16 - The product labels called my attention to characteristics that fit with my own values	0.271	0.231	0.732	0.136	-0.074
C17 - I realized that I would buy sustainably even with a lower product quality	0.152	0.154	0.658	0.157	0.035
C20 - I wanted to try products / practices that people close to me recommended	0.256	-0.006	0.616	-0.079	0.261
C19 - I began to be interested in information on product labels	0.203	0.215	0.609	0.281	0.200
C3 - I began to consume more fruits and vegetables	0.026	0.057	0.195	0.777	0.136
C1 - I started to pay more attention to my health	0.143	0.045	0.092	0.736	0.196
C2 - I started following a vegetarian diet	0.218	0.27	0.047	0.693	-0.188
C8 - I was shown that consuming Portuguese products makes more sense for the local economy	0.230	0.260	0.049	0.104	0.743
C7 - I personally felt the difficulties of the current economic crisis and had to pay more attention to what I really needed to buy	-0.066	0.231	0.325	0.235	0.630
C18 - I was taught about recycling	0.322	0.001	0.045	-0.026	0.535

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Table 3.3: Results from EFA: the five dimensions of the CSC construct and the items measuring each of them (for each of the initial items a standardized factor loading is boldfaced, indicating the dimension the item is suggested to measure).

3.3.5 Characterizing The Sample of the Main Study

The sample of the main study includes 1028 respondents who were in the mailing list of one of the top sustainable projects in Portugal (www.biovilla.org) and had consumed a sustainable product at least once (the same filter question of the pre-test survey was used). The final questionnaire was conducted via an online survey company, SurveyMonkey.com. As in the pre-test questionnaire Likert-type scales from 1 (strongly disagree) to 7 (strongly agree) were used to collect information regarding the 20 items of the consumer sustainability construct. A total of 992 valid and completed web-based survey questionnaires were received.

Overall, 60.5% of the respondents were female and 71.4% of the respondents have graduated. However, 77.5% of the participants earned less than 1500D per month. Almost half the participants (49.3%) were into holistic practices such as yoga and/or meditation.

Table 3.4 presents the means and standard deviations of the 20 items proposed to measure CSC. Recall that the items were originally measured on a Likert-type scale from 1 – totally

disagree to 7 – totally agree. It is possible to conclude that, on average, respondents tend to agree less with items such as “I started following a vegetarian diet”; “I personally suffered from the current crisis” and “I would buy sustainably even with a lower product quality”. In contrast, respondents tend to agree most with “I realize we are polluting or destroying nature” and “I realize the superior quality of organic products”.

Items	Mean	Std. Deviation
C9 - I realized we were polluting or destroying Nature	6.29	1.206
C15 - I realized the superior quality of organic products	6.03	1.253
C13 - I began to want to give my contribution to my local community or society	5.87	1.263
C8 - I was shown that consuming Portuguese products made more sense for the local economy	5.84	1.338
C14 - I realized I could contribute to a better world by buying fair trade products	5.83	1.343
C1 - I started to pay more attention to my health	5.73	1.352
C11 - I started making an effort to buy products in recyclable packaging	5.73	1.463
C19 - I began to be interested in information on product labels	5.71	1.565
C6 - I felt alert to the importance of social and environmental certifications	5.57	1.487
C12 - I started buying fair trade products to help small communities to have better working conditions	5.57	1.411
C20 - I wanted to try products / practices that people close to me recommended	5.43	1.555
C3 - I began to consume more fruits and vegetables	5.39	1.586
C16 - The product labels called my attention to characteristics that fit with my values	5.36	1.635
C10 - I stopped buying products tested on animals	5.22	1.733
C4 - I saw a documentary or shocking information that led me to be more careful about what I buy	5.20	1.546
C18 - I was taught about recycling	5.14	1.817
C5 - I saw information on the internet that led me to change my consumption patterns	5.05	1.728
C17 - I realized that I would buy sustainably even with a lower product quality	4.42	1.875
C7 - I personally suffered issues of the current crisis and had to pay more attention to what I really needed to buy	4.34	2.004
C2 - I started following a vegetarian diet	3.98	2.097

Table 3.4: Descriptive Statistics for the 20 items of the proposed CSC scale (with n = 992). Variables were measured on Likert-type scales from 1 – totally disagree to 7 – totally agree.

3.3.6 Results from Confirmatory factor analysis

Data from the main sample (n = 992) were used to perform Confirmatory Factor Analysis (CFA). Three possibly competing models were considered:

i) A first-order five-factor model, where each factor was measured by the structure of items

initially obtained in EFA using the pre- test sample;

ii) A second-order factor model with five first-order factors (and the same item structure as in the first-order model); and

iii) A revised second-order factor model with five first-order factors only measured by 19 items (dropping one of the original 20 items due to poor fit properties).

Table 3.5 summarizes the model-data fit indices that were obtained for the three competing models and Table 3.6 shows the estimated correlations that were obtained among the five first-order factors of the CSC construct (indeed, the fact that all correlations were high suggested a second-order model should be considered, with five first-order factors).

Models	χ^2 ^a	df ^b	χ^2/df	RMSEA ^c	SRMR ^d	Model AIC	CFI ^e
i) Initial first-order five-factor model	1118.34	160	6.99	0.078	0.08	1218.34	0.95
ii) Initial second-order five-factor model	1135.75	165	6.88	0.077	0.08	1225.75	0.95
iii) Revised second-order five-factor model without item C18	1035.41	147	7.04	0.078	0.08	1121.41	0.96

^achi-square statistic; ^b degree of freedom; ^c root mean squared error of approximation; ^droot mean squared residual; ^eConfirmatory Fit Index
Table 3.5: Comparison of overall fit indices for the three competing models.

	SR	AI	LPP	HLT	CS
SR	1.00				
AI	0.54	1.00			
LPP	0.59	0.70	1.00		
HLT	0.48	0.56	0.61	1.00	
CS	0.51	0.60	0.66	0.53	1.00

Table 3.6: Estimated correlations among the five first-order factors of the CSC construct.

Model (iii) presents the lowest AIC value and the best fit indices. A relative chi-square of 7.04 was obtained. There is no consensus regarding what an acceptable ratio is and recommendations range from as high as 5.0 (Wheaton et al., 1977) to as low as 2.0 (Tabachnick and Fidell, 2007) which was not the case for this procedure. Even so, the new value of CFI=0.96, combined with the SRMR = 0.083, produced a result considered acceptable by Hu and Bentler (1999): CFI of 0.96 or higher and a SRMR of 0.09 or lower. Also, the RMSEA is ≤ 0.08 in line with the recommendation of Hooper et al. (2008).

Hence, this paper proposes CSC to be measured as a second order construct with five first-order factors measured by 19 items. Fig. 1 displays CSC as a multidimensional construct (a second-order factor), with its five dimensions (the first-order factors): SR, AI, LPP, HLT and CS. From Fig. 1 it is also possible to see which items are expected to measure each of this five dimensions, namely (and in line with the results from EFA presented in Table 3):

- SR – Sense of Retribution – measured by 6 items: C14; C12; C13; C15; C11 and C10;
- AI – Access to Information – measured by 4 items: C5; C4; C6 and C9;
- LPP – Labelling and Peer Pressure – measured by 4 items C16; C17; C20 and C19;
- HLT – Health – measured by 3 items C3; C1 and C2; and - CS – Crisis Scenario – measured by 2 items: C8 and C7.

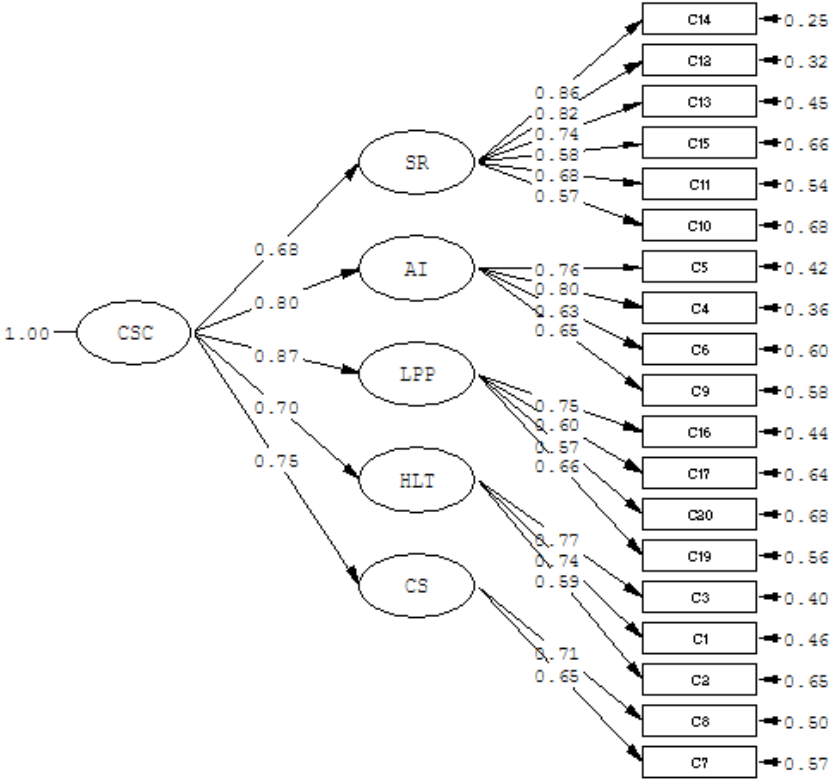


Figure 3.1: The Five Dimensions of the Second-Order Sustainability Consciousness Construct: SR – Sense of Retribution; AI – Access to Information; LPP – Labelling and Peer Pressure; HLT – Health and CS – Crisis Scenario (for a description of each item measuring each construct see Table 3.3).

3.4. Discussion and Conclusion

Based on the results of the analysis, the Consumer Sustainable Consciousness Construct was developed with success. The evidence provided us with the necessary insights into the five dimensions of consumer's sustainability consciousness. The results clearly show that there are different ways that consumers use to gain awareness and start intending to consume green or socially responsible products. This therefore substantiates the claim that multiple factors lie behind sustainable behaviour.

Most of the models that were mentioned from the literature review and data from the qualitative analysis show that the triggers for sustainable decision-making are influenced by many different factors. Nevertheless, the main goal of this research was to determine the number and develop the nature of consumers' sustainable consciousness dimensions. Thus the results showed that individuals might start to consume sustainably from many different perspectives, summarized in 5 dimensions:

Sense of retribution

When people started looking around at the effects their ecological footprints had on the people and the planet as a whole, namely after an awareness boom such as the one provided by the book "An Inconvenient Truth" (Gore, 2006), it is easy to understand that many consumers started to look for alternative products that would minimize the impact on our habitat (C11, C12, C13 and C14). There are of course multiple variables and ethical dilemmas that arise during any moment of purchase, and it becomes difficult to determine what is 'right' and what is 'wrong'. Nevertheless, the growing awareness around sustainability topics causes individuals to question their own unsustainable habits and their impact on these environmental and social problems (Maiteny, 2002). According to the author there are three types of responses to that "call for action": 'denial'; 'do your bit' and feeling of 'connectedness' in a sense of responsibility crescendo.

Also, growing national and local government initiatives are communicating more and more to the public, and "encouraging a sense of individual responsibility for (individual) actions" (Myers and Macnaghten, 1998).

Quality (C15) was another perceived attribute shared by many of the participants linked to

sense of responsibility. Knowing that a consumed product was not produced with chemicals suggested a “good-for-me” positioning with the added advantage of not destroying the environment. Not testing on animals (C10) (in the case of organic products, for instance) appeared to have an impact of a no-harm perception of the product for people and the planet.

Access to information

It is understandable that the revolution the Internet has brought to our lives came with the benefit of taking information to the most isolated places on the planet. As people became more informed, better consumption decisions started being made (C4 and C5). Thus, “access to information and communication technologies has become crucial to a sustainable agenda of economic development” (Navas- Sabater et al., 2002). The author also states that the digital division is gradually nearing a close as technological innovations, economic pressures, and regulatory reforms are making access to information and communication technologies more financially accessible so this is potentially considered to be a main mean of consumers’ sustainable consciousness development.

There are also other ways of acquiring information, for example certifications on products (C6), which appeared to be very relevant as they provided a sort of product guarantee. Knowing that the product was certified as “green” or “fair trade” for instance, would allow the consumers to feel conscious-free in their purchase decisions. Understanding and reading about certifications has been an excellent way of finding out about characteristics perceived to be indicators of sustainable practices (C9).

Labelling and peer pressure

As the more conscious consumer tends to search for more information during the purchasing process, peer advice is normally the first information resource (C20). However, labels appeared to be the most important means of gathering the necessary information and therefore leading the consumer to trust the product, as more information means more transparency (C16 and C19).

Environmental labels act as a guide for consumers to choose products that are environmentally friendly even if lower in quality (C17). It is often used by businesses to differentiate their products, position them and communicate the environmentally friendly message (D'Souza, 2000). One can mention several ways that managers can communicate their brand's sustainable benefits. One is by product claims; another is by labelling the products as "eco-friendly", "organic", "bio-degradable", "recyclable" or "ozone-friendly" (Morris et al., 1995).

Health

"Radical changes in the biosphere and human interaction with the environment are increasingly impacting on the health of populations across the world" (Brown et al., 2005). The author continues to explain that unfortunately many diseases are being disseminated/spread through transportation and are crossing the species barrier in the industrialized and globalized world. For example, new patterns of cancer are affecting part of our population, giving public health practitioners the need to recognize the interdependence between sustainability of the environment and the human species. Those individuals who are becoming increasingly concerned with environmental sustainability and improvements in quality of life are undergoing social and environmental changes within their lifestyles (C1, C2 and C3). A consumer therefore tends to search for "good for me" products (e.g.: organic produce) in order to be able to control the evolution of a cancer, for instance. Such a life event can change any consumer's food choices forevermore.

Crisis scenario

The social-economic scenario that the world is currently facing directly impacts purchasing decisions (C7). If today there is at least the perception of there being less money to spend, the consumer should be more cautious about where to spend it.

The topic of buying local was also very significant. In Portugal a major campaign (560 – the first digits of the Portuguese barcode) to buy national products revealed itself to have been very successful, as most of the respondents to the qualitative analysis spontaneously

mentioned having considered this in their purchasing decisions (C8). Again, being local (or national) was one of the main characteristics that a product should have to be able to be considered sustainable, as buying local implies a sense of contributing positively to solving the economic crisis.

We therefore end up understanding that the triggers to start consuming sustainably are diverse, but seem so intertwined that even if one might start off, for instance, with a health issue, it is possible to become sensitive to what agriculture is doing with our soils and how animals are treated in the process. From a solely egotistic point of view therefore, one might enter into a chain of knowledge that will continue to feed itself, and in turn contribute to a substantial rise in consumption sustainable consciousness.

3.4.1 Research Contribution

The key contribution of the current study resides in bringing a new perspective to consumers' sustainable consciousness, measuring the three pillars of sustainability (environmental and social along with economical variables), analysed together in the same construct and providing academia with a new (and more integrated) perspective on consumer Consciousness regarding Sustainability topics. In this sense, the gap found in the literature regarding consumer sustainable consciousness is minimized with the development of a new scale.

3.4.2 Recommendation for Further Research

The consumers' sustainability consciousness framework developed here is recommended to be followed through by further studies examining the perception of sustainability consciousness across cultures and to be tested regarding its impact on sustainable purchase intention. Also, it would be relevant to understand if non-sustainable consumers see the drivers to a more sustainable consumption in a different perspective from the "sustainable consumers".

The authors intend to further develop this research by investigating the impact that the five

dimensions of CSC may have on purchase intention and if so how can that influences perception on product sustainable attributes and sustainable brand attitudes.

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Chapter 4: Building Accessibility and Trust as a way to Increase Intention to Purchase Sustainably²

Abstract

The aim of this paper is to shed a new light on which dimensions compose sustainable purchase intention with the purpose of understanding what moves consumers to a potential more sustainable behaviour. Even though several studies have researched which factors influence consumer's intention to buy sustainably, no comparable research in consumer behaviour was found studying the dimensions within sustainable purchase intention in a triple bottom line perspective (Profit, People, Planet) that could also provide future corporate and academic applications.

Therefore, this paper proposes a new construct - Consumers' Perception on Sustainable Purchase Intention, defined using the C-OAR-SE procedure and measured using exploratory and confirmatory factor analysis using two different samples. In-depth interviews and online survey to actual consumers of sustainable products were undertaken in partnership with a sustainable project (Biovilla.org) using its database, guaranteeing that real consumers perceptions were gathered for this study.

The construct is presented as new two-dimensional, measured by nine items. The two dimensions are – Accessibility (including facets such as product lower pricing, availability in stores, and being sold within a convenient proximity to home) and Trust (including consumers needs such as: to know and trust products through understanding the labels; to have had good experiences in the past or simply to have new trial opportunities). The two dimensions seem also to be intertwined being the ideal solution for the consumer as presented as trustable products, available near home, affordable and easy to find on shelves.

² Submitted Paper to International Journal of Sustainable Development & World Ecology

Keywords: Sustainability; Purchase Intention; Sustainable Consumption; Consumer Behaviour; Sustainable Purchase Intention

Article Classification: Research Paper

4.1. Introduction

In the last decade, many studies brought the attention to the fact that consumers who act conscientiously in their personal capacities, might be empowered to use ethical values in economic decisions (Maignan and Ferrell, 2004; Valor, 2005; Vermillion and Peart, 2010) as a way to, through sustainable consumption, make companies rethink product life cycles (from production to distribution; use and disposal of products and services, and so on), social responsibility or value added to communities where they operate. The aim of a brand sustainable positioning should be to ensure that the basic needs of the entire global community are met, excess consumption of materials and energy is reduced and environmental damage is avoided or reduced (Glavič and Lukman, 2007). As Peattie (1995) indicated, consumers prefer to purchase green products in favour to conventional products if were offered similar prices and performance. In this sense, the same barriers such as price, unavailability and low level of trust of products can influence sustainable purchase, were there is evidence to suggest that consumers are price and quality sensitive when it comes to 'buying green' (Mandese, J., 1991). Furthermore, consumers satisfy their environmental protection needs through products that deliver information or certainty stimulations generated from previous memories that can initiate the process of awaited benefits. *"Thus, one can expect that consumers with values in adequacy with the ethical principles underlying the product will be more involved than others"* (Benzençon and Blili, 2010) and potentially more willing to purchase them. This can also explain the impact of a rise on consumers' level of commitment to sustainability has towards a positive effect on purchase behaviour (Lacey and Kennett-Hensel, 2010). Actually, it is known that environmentally conscious people are willing to improve the environment through changes in their purchasing behaviours (Chase, 1991). Furthermore, sustainable conscious consumers form opinions that may be decisive when buying a product that has sustainable benefits. Calomarde (2000) states that the rise in consumers' awareness gives firms the opportunity to come forward and differentiate themselves in relation to their major competitors in order to meet several consumer needs still

to be addressed. Research also suggests that consumers' attitudes toward firms that reflect sustainability in product performance standards of evaluation are prone to make purchase decisions based on a company's commitment to environmental responsibility (Folkes and Kramins, 1999; Moisander and Pesonen, 2002; Auger et al, 2003; Marin et al 2009; McEachern, et al 2010). With this in mind, it is crucial to understand that before actual behaviour, sustainable purchase intention occurs when both products and brand attitudes offer consumers a full and real experience of their claims.

4.2 Theoretical Background of Sustainable Purchase Intention (SPI)

For the past four decades, diverse studies regarding Purchase Intention (PI) constructs across an array of theoretical frameworks have been published in marketing journals, turning it into a widely researched topic (Bagozzi and Burnkrant, 1979; Ostrom, 1969). To define purchase intentions concisely, one may state that: *“Purchase intentions are an individual’s conscious plan to make an effort to purchase a brand”* (Spears and Singh, 2004). It can also be interpreted as *“the person’s motivation in the sense of his or her conscious plan to exert effort to carry out a behaviour”* (Eagly and Chaiken 1993). Also, Salgado Beltrán and Lafuente (2005) understands that purchasing behaviour is based on abstract attitudes resulting from sensations received from the environment, culture or psychological aspects, among others.

In respect to SPI, it is known that maintaining an awareness of continuous improvement, focused on the development of sustainable products and strategies, may influence consumer behaviour and generate competitive advantage for companies (Kanter, 2008; Sharma and Vredenburg, 1998), thus, helping consumers (via product) to become more sustainably oriented, and expected to lead to greater and stronger intention to purchase sustainability. One can find the concept of sustainability presented in the literature with three main cornerstones, known as the “Triple Bottom Line” designated in a marketing mix perspective as the “3Ps”: Profit – Economic Benefits; People – Social Benefits; and Planet - Environmental Benefits (Placet et al. 2005).

Nevertheless, it was found that most of the studies regarding SPI consider the environmental and social perspectives of sustainability separately. As we understand, the environmental perspective as been further explored and no scale was found measuring how consumers understand social and/or economic benefits as a way to really provide welfare for people and

planet that might influence SPI.

For example, several decades ago, Maloney and Ward (1973), in order to start understanding consumers' Ecological behaviour, proposed the "Actual Commitment subscale" framework. The scale measures how people maintained informed about environmental issues and other related problems while analysing their selection of products from an assortment of ten items due to their pollutant effects. Fraj and Martinez (2006) later adapted this scale were Lifestyles scales and Ecological behaviour construct were studied, considering individuals' real ecological commitment to the environment.

The idea of an "*individual that seeks only to consume products that cause less or no damage to the environment*" was developed by Ottman (1994) denominated "the green consumer". Also, Schlegelmilch, et al. (1996) proposed the "Environmental Consciousness Construct" including three measurement scales: a) the environmental knowledge scale; b) the environmental attitudes scale; and c) the recycling behaviour scale, with the intention to bring new insights on the topic.

Later on, the construct of "Green Customer Purchase Intention" was developed to understand consumer involvement with environment implying on green purchase intention, where D'Souza *et al.* (2006) found that factors such as good information on product labels would be decisive at the moment of purchase on green purchasing behaviour, or that consumers' past experiences with green products might be "crucial in forming the product-specific perception that would lead to future purchase intention" (D'Souza et al., 2006, p. 150). On the other hand, this author also found that consumers would purchase "greener" products even if lower in quality.

Having this in mind and knowing that no standard, psychometrically validated scales exist to measure purchase intention in general, it is also acknowledged that if anyone is inclined to measure the construct, they will come across numerous options (Spears and Singh, 2004). It is somewhat apparent that practically all studies designed to measure it have used a different set of items: affective responses to genetically modified organisms (GMO) for example, Bredahl (2001) measure purchase intention with a single-item asking the respondents: "I would intend to" with response scales anchored in "definitely avoid it" and "definitely buy it"; while on the other hand, Lee (2008), uses a four-item, Likert-type scale to measure "Green Purchase Intention". Furthermore, and since there is no study regarding sustainable purchase intention providing an integrated view of the topic including the environmental, social and economic

cornerstones of sustainability that best explains consumers' sustainable consumption behaviour, this paper proposes to fill this research gap in the literature by developing and validating the proposed consumers' perception on sustainable purchase intention construct. The purpose is therefore to understand what moves consumers to a potential more sustainable behaviour and provide academia and corporations with a consistent construct that can also enable future applications in other settings.

4.3 Methodology

The definition of a construct is: “*a conceptual term used to describe a phenomenon of theoretical interest*” (Edwards and Bagozzi, 2000). Therefore our main aim was to define the construct first, followed by identifying and validating its identity and to achieve this we used the C-OAR-SE (Rossiter, 2002) procedure, standing for: Construct definition, Object classification, Attribute classification, Rater identification, Scale formation, and Enumeration and Reporting. Although it was only relatively recently introduced to academia, the C-OAR-SE procedure is one of the most applicable and innovative ways of defining, generating and selecting items for this marketing scale development. The first step of the C-OAR-SE procedure is therefore described as such: a) the object and its components; b) the attribute and its components; c) the rater entity. If this order is not adhered to, a proper conceptual definition will not be achieved, and operationally insufficiently developed, leading to inappropriate measurements. With the application of this procedure, the construct measured in this paper can be defined as: CONSUMERS' (rater entity) PERCEPTION ON (focal object) SUSTAINABLE PURCHASE INTENTION (attribute).

Our group rater was a sample of consumers that have, at least once, consumed at least 1 product with sustainable characteristics. Following this reasoning, we proceeded with a final qualitative sample size of 20 interviewees. This sample size was considered appropriate since common qualitative sample sizes are constituted of 15-40 participants (De Ruyter and Scholl, 1998). Nevertheless, the researcher's judgment is considered to mostly guide the selection of sample sizes, when purposive method is in use (Baker, 2002). A semi-structured guideline presenting a broad agenda was structured. Firstly, the broad main question was placed at the beginning (“What, in your opinion, can be considered a sustainable product?”), to allow for spontaneous references to the topic.

The proposed construct (CPSPI) with an initial battery of 11 items that also included items from the literature review was then validated through Exploratory and Confirmatory Factor Analysis (Bollen, 1989; Hair et al., 2010) conducted using two different and independent samples using the maximum likelihood estimation procedure implemented in LISREL 8.80. The Portuguese respondents from both the qualitative and quantitative analysis were gathered through a snowball technique as the best approach to reach real consumers of sustainability products.

4.4 Results

4.4.1 Results from the Qualitative Research

After analysing the information in depth, there are many insights that can be identified. Lack of distribution was one of main concerns as respondents needed to find products on shelves, preferably with fair pricing. Products with sustainable claims were perceived as more expensive and since “price is one of the main factors for choice” (Male Participant, 67yo), this was perceived to act as a consumption barrier. Nevertheless this was not a consensual topic, since many respondents asserted that they would buy sustainably even if more expensive. Also, lack of information in sustainable products was mentioned since its consumption is perceived to be more complex in general, so more information is needed (“I spend more time reading the labels than I do with a regular product” (Female Participant, 25yo)). Supermarket linear shelves were mentioned as having complex shelf space and lacking variety. Respondents pointed out that they would buy more if more products were available. Moreover, “what matters is that these products are distributed in the right points of sales” (Male participant, 27yo). Furthermore, media was not helping in the dissemination of sustainable products, as sustainable products were not as present as “regular” products.

The respondents also considered important factors for Purchase Decision, that the products should: guarantee nature protection; have precise label information (stated as a very important factor, that reinforces transparency); be found on shelves with sampling opportunities; fit consumers consciousness higher awareness (knowledge and sensitivity to the sustainable products and topics); be certified (an important factor to guarantee sustainable criteria); be convenient (equivalence to "normal" products) and offer local options (search and preference

to contribute to the local economies. In fact, “the consumer can only choose from what he or she encounters in stores, and will have no difficulty to change habits if there are advantages perceived in terms of health, social or environment benefits and if its not a lot more expensive” (Male Participant, 67yo).

4.4.2 Scale formation with pre-tested items

The C-OAR-SE procedure proposes that after analysing the qualitative data, the questionnaire is built based on literature review and qualitative research (QR). Thus, the proposed selected set of items with complete wording and references can be found in table 4.1:

Items	Adapted From
Question: "I would consume more often sustainable products if:"	
I1 - Were cheaper	QR / D'Souza et al (2006)
I2 - Were available in more stores	QR
I3 - Were available closer to home	QR
I4 - I trusted their certification and source of raw materials more	QR / D'Souza et al (2006)
I5 - Had better visibility in store	QR
I6 - Better understood their benefits	QR
I7 - I understood better what is written on the packaging	QR / D'Souza et al (2006)
I8 - I knew the brands better	QR
I9 - They offered more opportunities for experimentation	QR
I10 - I have had a better consumer experience in the past	QR / D'Souza et al (2006)
I11 - My day-to-day brand also offered this type of product	QR / D'Souza et al (2006)

Table 4.1: An overview of the 11 items selection process.

4.4.3 The Pre-Test Sample

An 11-item questionnaire in an online format was created and pre-tested and applied to 212 people for understandability and validity, in order to identify any technical and/or wording irregularities during completion and submission. It was then necessary to delete those answers in which some data was missing, ending up with 174 fully completed responses. We used a Likert-type scale approach (1 = totally disagree; 7 = Totally agree). Data were collected from respondents in Portugal who had consumed a sustainable product at least once and in order to guarantee this, a filter question was introduced at the beginning of the questionnaire. Overall, 58.8% of respondents were female and despite most of the sample consisted of people that

have graduated (71.2%), the vast majority of participants still earned less than 1500€ a month (74.5%). Just under half (43.8%) were into holistic practices such as yoga and/or meditation.

4.4.4 Exploratory Factor Analysis

The 11 items were first analysed using principal component analysis with Varimax rotation over the 174 responses of the pre-test sample. Exploratory factor analysis (EFA) was used to initially identify the underlying dimensions of the Consumer Sustainable Purchase Intention construct and to reduce a large number of variables to a smaller number. A two-factor solution with eigenvalues larger than 1 (Kaiser, 1960 and Cattell's, 1966) was obtained, accounting for 56.5% of the total variance of the original 11 items. To determine the appropriateness of factor analysis, we examined the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett test of sphericity. The value of 0.60 or above is required for KMO to be considered a good factor analysis (Tabachnick and Fidell, 2001) and our findings showed that this measure of sampling adequacy was equal to 0.825, much higher than the recommended value. Also, a Bartlett test with a statistical significance of 0.000 provides strong evidence of the appropriateness of the data for Exploratory Factor Analysis (Malhotra *et al.*, 2004). Both these results show that the collected data can be subject to factor analysis to identify the underlying patterns of the consumer sustainable purchase intention. The findings from EFA indicate that two dimensions of consumer sustainability purchase intention should be considered, given the original 11 items. Each factor was given a descriptive label (as shown in table 4.2):

- 1) Trust (composed of 8 items);
- 2) Accessibility (composed of 3 items).

Although not present in the literature, newly emerging factors were named after the representative attributes within the factor (Aaker, 1997). These two dimensions are overall consistent with the findings of the qualitative analysis presented above. However, one should note that the factor loadings associated with I4 and I 11 are below the minimum recommended threshold value of 0.7, which must be further investigated in CFA.

The two Dimensions - Rotated Component Matrix	Components	
	1 – Trust	2 - Accessibility
I6 - Better understood their benefits	0.836	0.000
I9 - They offered more opportunities for experimentation	0.803	0.154
I7 - I understood better what is written on the packaging	0.784	0.153
I8 - I knew the brands better	0.753	0.205
I10 - I have had a better consumer experience in the past	0.709	0.290
I5 - Had better visibility in store	0.701	-0.001
I11 - My day-to-day brand also offered this type of product	0.577	0.055
I4 - I trusted their certification and source of raw materials more	0.483	0.207
I2 - Were available in more stores	0.100	0.893
I1 - Were cheaper	0.206	0.777
I3 - Were available closer to home	0.067	0.670

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Table 4.2: Rotated Component Matrix

4.4.5 Characterizing The Sample of the Main Study

A final questionnaire was created for this objective, with 1028 subjects via an online survey company, SurveyMonkey.com that was promoted through the use of a mailing list belonging to one of the top sustainable projects in Portugal (www.biovilla.org). These respondents had consumed a sustainable product at least once. To guarantee this we introduced a filter as the first question of the questionnaire. Due to the specificity of the topic we gathered a convenience sample using the snowball technique. Overall, 60.5% of the respondents were female. Although most of the sample was composed of people that have graduated (71.4%), the overwhelming majority of participants earned less than 1500€ per month (77.5%). Almost half the participants (49.3%) were into holistic practices such as yoga and/or meditation. We maintained the use of a Likert type scale (1 = strongly disagree; to 7 = strongly agree), asking the respondents to indicate their position on each of the 11 statements selected to measure the CPSPI construct. A total of 992 valid and completed questionnaires to the web-based survey were received.

4.4.6 Confirmatory Factor Analysis

Data from the second and final sample (n = 992) were used for confirmatory factor analysis (CFA). A series of CFAs (starting with the structure suggested from EFA) were conducted to test four competing measurement models (see Table 4.3):

- 1) Initial first-order two-factor model, with the two-factor structure obtained from EFA;
- 2) Initial first-order one-factor model measured by 11 items;
- 3) Revised first-order two-factor model (dropping one of the original items due to poor fit properties);
- 4) Revised first-order two-factor model (dropping two of the original items due to poor fit properties):

Models	χ^2 ^a	df ^b	χ^2/df	RMSEA ^c	SRMR ^d	Model AIC	CFI
1) Initial first-order two-factor model	368.36	43	8.57	0.087	0.068	414.36	0.96
2) Initial first-order one-factor model	881.97	44	20.04	0.140	0.110	925.97	0.91
3) Revised first-order two-factor model (without I4)	327.70	34	9.64	0.093	0.068	396.59	0.96
4) Revised first-order two-factor model (without I4 and I11)	242.59	26	9.33	0.092	0.068	280.59	0.97

^achi-square statistic; ^bdegree of freedom; ^croot mean squared error of approximation; ^droot mean squared residual; ^eModel AIC

Table 4.3: Comparison of overall fit indices for the four competing models

Model 4 has the lowest AIC value (Schumacker and Lomax, 1996) and was the model chosen, with a relative chi-square value of 9.33. Although a consensus regarding what an acceptable ratio is does not exist, recommendations range from as high as 5.0 (Wheaton et al, 1977) to as low as 2.0 (Tabachnick and Fidell, 2007). However this was not the case for our model. Nevertheless, the value of CFI=0.97 combined with the SRMR = 0.068 and the value of NNFI=0.96 combined with the SRMR = 0.068, resulted in an outcome accepted by Hu and Bentler (1999), showing a good fit for a two-index presentation format where the acceptable Type II error rates where the recommendation is a CFI of 0.96 or higher and SRMR of 0.09 or lower; and NNFI of 0.96 or higher and SRMR of 0.09 or lower, respectively.

Thus, CPSPI is proposed as a two-dimensional construct, measured by 9 items, with a correlation value of 0.38 between the dimensions accessibility and trust, as depicted in figure 4.1.

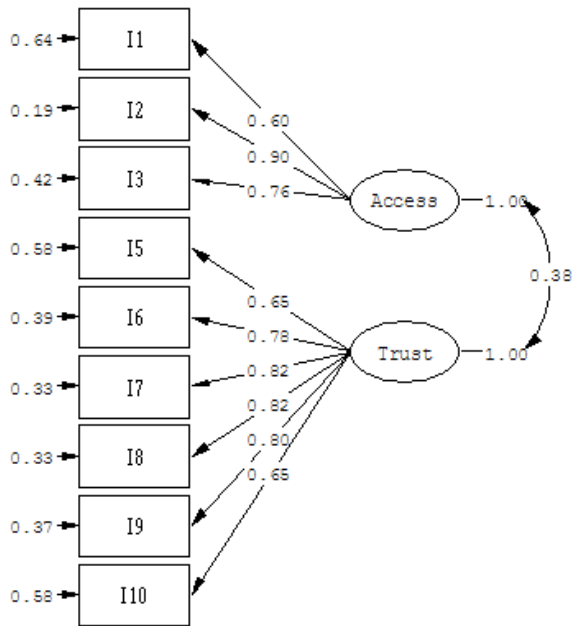


Figure 4.1: Two Dimensions of Consumer Perception on Sustainable Purchase Intention

4.5 Discussion and Conclusions

A lot has been said and research about “green consumers”, “social responsibility” or “sustainable brand positioning”, but decades go by and the sustainable “market” is still considered a “niche”. More and more is known that purchase intentions are not linear and incorporate not only rational decision-making around functional product benefits such as “quality” or “price”, but also can bring emotional involvement to the process of purchase, specially if the consumer is presented with an ethical product or brand. For this reason is important to unpack what really matters for the consumers so that managers and marketers can bring to market relevant products that target real consumers needs and therefore contribute to the evolution of this niche to a mass market in the shortest period of time possible.

Most of the concepts found in the literature review match the data from the qualitative and quantitative analysis showing that the triggers for sustainable decision-making are influenced by many different variables. This research has applied several factor analyses in order to find out what dimensions would better explain the consumers’ perception on sustainable purchase intention. Based on the results of the analysis, the proposed CPSPI construct was measured

and developed with success for its two dimensions that even though they might seem obvious or intuitive, no research was found in the literature to confirm it, so it is considered as an original research contribution. The results clearly show that there are different ways that consumers are sensitive that impact their intention to consume green or socially responsible products. This therefore substantiates the claim that multiple different variables, compose sustainable purchase intention based on its two main dimensions:

1) *Trust*: New product solutions for a more sustainable consumption are put in the market everyday. For a regular consumer that is entering in the realms of sustainable consumption, gaining awareness of which products or brands can substitute the “regular shopping basket” and make real changes in consumption patterns, is a priority. So providing sampling that can bring consumers a trial occasion, acute information on labels and if applicable, increase visibility in stores, might be of a great use to attract new consumer entrants. This might happen taking in consideration that the consumer can only choose from what he or she encounters in stores, and will have no difficulty to change habits if there are advantages perceived in terms of health, social or environment benefits and if its not a lot more expensive. Peer Information through Internet and word-of-mouth is also seem to be of great importance, more than normal marketing communication, when it comes to build trust.

Thus, it was clear from the analysis that consumers need to know and trust the products before buying them. There are many different layers of trust that range from understanding the labels, to good experiences in the past or simply having the opportunity to try them out before purchase. Also, research appears to be clear on suggesting that committed environmentalists are more prone to purchase products with environmental credentials shown on labels (Gilg et al, 2005). On another level of understanding, customers will also tend to trust retailers that have a reputation for ethical conduct more than they trust other retailers (Castaldo et al, 2009). Also, as Boström and Klintman (2008) mention: “*as conscientious consumers, we have become overwhelmed with alarms about food contamination, over-fishing, clear-felled forests, loss of biodiversity, climate change, chemical pollution, and other environmental and health-related risks*”. Thus, the reinforcement of how consumers need to trust the products they are buying becomes crucial as these factors build trust and it is therefore understandable that it can become important in the moment of purchase intention.

2) *Accessibility*: Sustainable products are still perceived to be more expensive. Even though there are consumers more price sensitive than others, as for any other type of product, if the intention of a certain product is to reach mass market, than is important to admit that influence of price is considerable.

Accessibility also means that managers should really develop the distribution channels, to increase product penetration, were results show that consumers would buy more if products were found in their normal supermarkets. Moreover, more and more specialized stores that appeal to the sustainable consumer are starting to appear in the streets. Thus, other emergent potential distribution channels such as yoga studios, bio supermarkets and restaurants or even regular local shops that are interested in a more conscious portfolio and that can bring opportunities for cross-selling and recruiting of new consumers (depending on the product category), are to take in consideration. It is also important to remind that distributing sustainable products in the “right points of sales” contributes to create or consolidate brand positioning: “What matters is that these products are distributed in the right points of sales“ (Male participant, 27yo). Thus, one can conclude that, even if a consumer trusts the origin and management of a certain product, if it isn’t available at the regular supermarket or shop; is too expensive; or is constantly out of stock, there will be no option regarding intention to purchase, as is the case for any other product in the market. Therefore, product development should be proactive as to address these consumers with appropriate communication tools and distribution channels (Pogutz and Micale, 2011).

Another main conclusion one can exert from the analysis is that the two factors that compose the intention to purchase sustainably are distinct, but seem so intertwined that the ideal solution for the consumer would be to find products in the market which they could trust, be available near home, affordable and easy to find on shelves. From a solely consumer point of view, one might understand from the results of the research, that if brands are able to develop portfolio with these criteria, can generate a great contribution to a substantial rise in sustainable consumption and consequently positively impact sustainable purchase behaviour. Because in the end, “*it is about consuming differently, consuming efficiently, and having an improved quality of life*” (Jackson and Michaelis, 2003 pag.14).

4.5.1 Research Contributions and Recommendation for Further Research

The contribution of the current study resides in bringing a new perspective to consumers' sustainable purchase intention, measuring two found relevant factors. In this sense, the gap found in the literature is minimized with the development of this new scale. Finally, the consumers' sustainability purchase intention framework developed here is recommended to be tested in further studies examining the construct across cultures, different products or brands and in specific product categories in one or several time frames in order to monitorise consumption evolution. Also, analysing the demographics and comparing potential of opinions among different age, gender or status groups.

Chapter 5: Are Sustainable Brand Attitudes being perceived by its Consumers as Expected?³

Abstract

This paper examines what perceptions consumers have towards sustainable brand attitudes and what triggers consumers' positive or negative perceptions regarding them. It also intends to put forward an integrated view on how to look at sustainable brand attitudes that consider the triple-bottom-line perspective, where the environmental, social and economical perspectives are simultaneously taken into consideration. For that matter, a two-dimensional proposed construct of Consumers' Perception towards Sustainable Brand Attitudes (CPSBA) was defined using the C-OAR-SE procedure and validated through confirmatory factor analysis. A set of 9 items adapted from the Baker and Sinkula (2005) scale was pre-tested using a first sample, after consolidating the results from qualitative analysis and literature review. A second independent sample was gathered for the main research study, leading to the proposition of a 7-item scale to measure CPSBA, a construct with two dimensions – Righteousness; and Opportunity which differs from brand employees perceptions regarding company culture towards sustainability.

Keywords: Sustainability; Brand Attitude; Sustainable Consumption, Confirmatory Factor Analysis, C-OAR-SE.

Article Classification: Research Paper

³ Submitted Paper to Sustainable Development

5.1 Introduction

The European Commission's (2008) report on Sustainable Consumption, Production and Sustainable Industrial Policy Action Plan presents sustainability as one of best and most promising practices society can have to protect people and our planet. Furthermore, it introduces the topic expressing the importance and business opportunity that this potential core value can bring to markets if integrated into the market-economic system. This reasoning might not be straightforward since Marketing is often seen as a mechanism to push into market products and services that consumers don't need, leading to overproduction, waste and therefore unsustainability. Marketing is also viewed as having a negative effect on society and individuals as a consequence of a certain irresponsibility regarding the misuse and deterioration of natural resources as it "brainwashes" consumers to buy unneeded items (Lehner and Vaux Halliday, 2014). A "new paradigm" in Marketing was referred before as Relationship Marketing (Moller, K. (1992). Nowadays, and in a more opened perspective, a paradigm shift can occur from "the future that has already happened" (Drucker 1998).

Nowadays, changes in consumers' expectations and new legislation have also brought about more responsibility to corporations in how to act in terms of environmental and social issues (Lacey and Kennett-Hensel, 2010). Thus, environmental and social consciousness became "not only an ideology of (individuals as) activists, but also a matter of 'market competition' that influences consumer behaviour" (Mostafa, 2007). The culture of corporations is generally initiated and maintained by senior management. However, in large organizations individuals and circumstances can shift the company strategy to become more sustainable (Kanter, 2008). So if there is investment in green innovation, there can also be benefits to corporations allowing them to even improve corporate image (Lacey and Kennett-Hensel, 2010; Menon and Menon 1997).

Furthermore, Sharma and Vredenburg (1998) argued that this type of proactive strategy, if viewed as a "*key organizational resource*", should be associated with the emergence of "*unique organizational capabilities*" and, consequently, have implications in terms of competitiveness. Thus, managers should not assume that sustainable oriented business philosophies are inconsistent with stakeholders' welfare (Baker and Sinkula, 2005). In fact, managers should be reminded that the consumer and the environment are probably the most important stakeholders of all.

Moreover, many businesses began dealing with these new rules only in the perspective of compliance and perhaps using it in their public relations strategies, knowing that they did it not only for altruistic reasons, but mainly to prevent the potential impact of protests and penalties, or to outline a new product feature that, in fact, was included in the product design just to comply with the law (Grappi et al., 2013). For example, Peattie and Crane (2005) have identified five marketing practices that led to disbelief of sustainable marketing for some consumers: (1) Green spinning - reacting to the public's criticism and discredit to a company's practices using public relations to deny it; (2) Green selling – adding green claims to existing products in order to boost sales (also known as Green Washing; identifying misleading environmental marketing practices from the corporate world); (3) Green harvesting – companies developing green products only when coupled with cost savings (e.g., energy saving, input efficiencies, package reductions); (4) Entrepreneur marketing – innovating green products only because doing so represents an opportunity and not really understanding the consumer need; and (5) Compliance marketing – using environmental legislation as an opportunity to implement and promote the company's green credentials without taking initiatives to go beyond responding to regulations.

Cheung and Ambrose (2004) state that the struggle that still exists between the interest for material pursuit and consistency to keep to moral values is an enduring problem of our society, where putting moral precepts into action constitutes a challenge in business ethics. But, independently on the view one might have about the topic, one should keep in mind that corporations are those responsible for boosting economic development by having the “*financial resources, technological knowledge, and institutional capacity to implement solutions*” (Borland, 2009 p.556).

There was also a time when managers thought that investment in sustainability activities was seen as harmful to businesses. Later on, new environmental regulations and protection, including the rise of consumer consciousness, brought challenges to companies across the globe. In this sense, a corporate way of gaining the competitive advantage is seen as implementing sustainable strategies, and the three pillars of Sustainability are therefore defined as the foundations of the “Triple Bottom Line”, integrating the “3Ps” holistically: 1) Profit – Economic Benefits: cost-saving programmes, new product development and society-economic welfare; 2) People – Social Benefits: Improving people's quality of life; and 3) Planet - Environmental Benefits: protection of global natural resources (Placet *et al.*, 2005).

Considering this, corporate strategic sustainability arises when the integration of the principles of sustainability started being embedded in the management processes and activities that plan for the future of all species. In this sense, corporations will have to understand, for example, how to: close the loops of products' life cycles (because life systems are not linear); integrate all parts of the system instead of segregating them (in the same way that nature works around synergies and biodiversity); introduce eco-efficient procedures and production processes and especially how to truly add value to society with their portfolios. Corporate impact on the environment (and society) needs to be positive or at least neutral (Hart, 1997), therefore “*recognising the need for an “individual, collective and cultural transformation and paradigm shift”*” (Borland, 2009 p.558). In the latter, the desire for profit should be embedded in the desire to do the right thing (Baker and Sinkula, 2005). Moreover, providing more ethical engagement on social and environmental activities and strategies is assumed to build more trust and commitment from conscious consumers towards sustainable brand attitudes (Lacey and Kennett-Hensel, 2010).

Since Brand Attitudes can be defined as “*consumers' evaluation of a brand*” (Mitchell and Olson, 1981) and a “*sustainable brand*” defined by a specific set of brand attitudes and benefits related to the reduced environmental and social impact of the brand and its perception as being sustainably sound, if the firm is engaging in sustainable or ethical behaviour just for extrinsic motives rather than for intrinsic ones, may not be viewed by the consumers who as favourably as if they would do the other way round (Folkes and Kamins, 1999). Thus, sustainable brand attitudes have to continually be studied and clarified in order to monitor the evaluation consumers make regarding how brands behave in the market. Having all this in mind, and despite the interest and importance of the topic, no construct was found capable of measuring Consumers' Perception on Sustainable Brand Attitudes (CPSBA). Thus, this fact has led us to address this limitation as a research opportunity, with the main objective of this study being to provide academia with a theoretical framework regarding the number and nature of the dimensions of CPSBA.

5.2. Methodology: Defining Consumers Perception of Sustainable Brand Attitudes Construct

Using the C-OAR-SE procedure (Rossiter, 2002) to define the CPSBA construct, a set of 9 items, based on Baker and Sinkula (2005) original scale, was pre-tested in an online format and applied to 212 people for understandability and validity and to identify any technical and/or wording problems during completion and submission after consolidating the qualitative results and literature review using a first sample.

The reason for choosing the Baker and Sinkula (2005) was to apply a scale already pretested in a corporate environment to a consumer environment to understand the gap between what corporations understand they are doing versus what consumers actually apprehend of sustainable brand attitudes.

An Exploratory Principal Components Factorial Analysis was conducted and a second independent sample gathered for the principal investigation, where Confirmatory Factor Analysis was used. The Portuguese respondents from both the qualitative and quantitative analysis were gathered through a snowball technic, due to the specificity of the topic. Indeed, after participating in the survey, respondents were asked to forward the survey link to colleagues, friends or family that they believe were consuming sustainably, inviting them to collaborate in the research project, in an attempt to reach real consumers of sustainability products – the target sample of interest for the study.

5.2.1 Defining the Construct: Rater Identification and Scale Formation

By definition a construct is “*a conceptual term used to describe a phenomenon of theoretical interest*” (Edwards and Bagozzi, 2000 p.156–157). Our primary objective therefore, was to define the construct and then identify and validate its dimensionality. To accomplish this goal, we employed the C-OAR-SE (Rossiter, 2002) procedure that stands for: Construct definition, Object classification, Attribute classification, Rater identification, Scale formation, and Enumeration and Reporting. Without this, there is no space for a proper conceptual definition of the construct and its operationally will be inadequately developed, leading to an inappropriate measurement. By applying the theory, we can define the construct to be measured in this paper as: CONSUMERS’ (rater entity) PERCEPTION (attribute) on SUSTAINABLE BRAND ATTITUDES (focal object).

5.2.1.1 Rater identification and Pre-Qualitative Analysis

Our group rater or respondents consisted of a sample of consumers that have consumed a minimum of one product with sustainable characteristics at least once. We therefore proceeded with a final qualitative sample size of 20 interviewees, which was considered appropriate, based on the fact that common qualitative sample sizes consist of 15-40 participants (De Ruyter and Scholl, 1998). The researcher's judgement however, is considered to guide the selection of sample sizes, when purposive method is in use (Baker, 2002).

We built a semi-structured guideline presenting a broad agenda: to begin with, an encompassing question at the beginning ("In your opinion, what is considered a sustainable product?"), to allow for spontaneous references to the topic. Sub-questions were then asked according to the outcome of the literature review. The ordering of questions was flexible and dictated by the responses of the interviewees. Depending on the interviewee's sustainability knowledge, different viewpoints were often scrutinized in more detail in each interview.

5.2.1.2 Scale formation with Pre-tested items

After analysing the qualitative data, the C-OAR-SE procedure proposes that the questionnaire is developed based on literature review and qualitative research results (QR). For this purpose, we selected Baker and Sinkula's (2005) instrument that measures environmental marketing strategies in relation to the performance of a firm, analysing the viability of the enviropreneurial marketing (EM) construct and therefore exploring its relationship with firm performance. As far as environmental and social topics in the corporate world are concerned, an enviropreneurial marketing approach of the organization is seen to have implications in terms of higher competitiveness (Sharma and Vredenburg, 1998). In terms of marketplace, firms gain good or bad reputation not only on the basis of their ethical behaviour but also regarding product attribute information as it is suggested to have effects on consumers' attitudes toward firms (Folkes and Kamins, 1999). The original scale was tested in a context where employees were asked: "Environmental issues enter into our marketing strategy development".

Baker and Sinkula (2005) found out that the EM construct was composed of three factors: Environment as Opportunity; Environment as Commitment and Environment as Righteousness. With this study it became clear that an enviropreneurial marketing attitude in a company impacts the perception that its employees have of its sustainable brand attitudes. Thus it seems appropriate to study this same scale in a consumer perspective to understand how this marketing strategy really works for the consumer.

With all this in mind, a 9-item questionnaire was designed based on Baker and Sinkula (2005) EM scale, pre-tested in an online format, applied to 212 consumers for understandability and validity to identify any technical and/or wording problems during completion and submission. As previously mentioned, a snowball technique was used to gather the sample. After examining the data pattern, we had to delete responses in which some data was missing, and ended up with 171 fully completed questionnaires.

The items took the qualitative analysis into consideration and were adapted from Baker and Sinkula (2005) to fit in the context of this study and be answered by consumers. Thus, the language was revised for better understanding. The objective is to understand what variables categorize consumers' perceptions towards Sustainable Brand Attitudes (see items in Table 5.1).

Items for Consumers' Perception on Sustainable Brand Attitude		
Items	Adapted From	
BA 1		They want to create a competitive advantage
BA 2		They see environmental and social issues as an opportunity to sell more products
BA 3		They do it as an obligation and not proactively
BA 4		They compromise to make serious investments to protect society and the environment
BA 5	Baker and Sinkula (2005)	Make irreversible commitments to sustainable practices
BA 6		They want to present a competitive advantage against the competition
BA 7		It is part of their work philosophy to be committed to sustainable development
BA 8		It is the right thing to do
BA 9		Because the law requires them to have more practices that respect the environment and society

Table 5.1: Items for Consumers Perception towards Sustainable Brand Attitude

Data for this study were collected from respondents in Portugal who had consumed a sustainable product at least once, which was ensured by using a filter in the beginning of the questionnaire. Overall, 58.8% of the respondents were female. Although most of the sample consisted of people that have graduated (71.2%), the overwhelming majority of participants

earned less than 1.500€ per month (74.5%). Almost half the participants (43.8%) were into holistic practices such as yoga and/or meditation.

5.2.2 Validating the Construct: C-OAR-SE versus Confirmatory Factor Analysis (CFA)

Despite the relevance of Rossiter's (2002) message on the conceptualization of marketing constructs, "*empirical validation is necessary because it reveals whether the conceptualization has achieved what was intended*" (Finn and Ujwal, 2005). With this in mind, empirical validity remains of determinant importance (Finn and Kayande, 2005). Therefore, in order to complement the method conceptualizing and empirically validating the construct seems to be the most appropriate path. Thus, we defined the construct using C-OAR-SE, and validated it first through Exploratory Factor Analysis (EFA) using SPSS software, and secondly with confirmatory factor analysis (CFA) (Bollen, 1989; and Hair *et al.*, 2010), using the robust maximum likelihood estimation procedure available in LISREL 8.80.

5.3. Results: Validating Consumers Perception on Sustainable Brand Attitudes Construct (CPSBA)

5.3.1 Results from Qualitative Analysis and Pre-Test Sample

The main findings were that respondents were not consistent in trusting (perception towards sustainable brand attitudes as truthful) or not (green washing perception towards sustainable brand attitudes as false) brand attitudes on the sustainability topic.

Sustainable products are still perceived to be more expensive. Even though there were respondents more price sensitive than others, as for any other type of product, if the intention of a certain product is to reach mass market, than is important to admit that influence of price is determinant as "price factor, is the first major barrier (to consumption)" (Female participant, 38yo). It was clear that respondents didn't understand clearly pricing strategies,

and for that reason business transparency was reclaimed to be an important ("You can not ask people to spend more money and go further way to buy the products if there are no clear advantages stated" (Female Participant, 28yo)).

Product availability and the need to increase product penetration, was spontaneous mentioned several times as the majority of the respondents stated that would buy more if products were found in their normal supermarkets as "one of the main barriers to consumption is and continues to be (...) above all the availability." (Female participant, 27yo). Moreover, more and more specialized stores that appeal to the sustainable consumer are starting to appear in the streets. Thus, other emergent potential distribution channels such as yoga studios, bio supermarkets and restaurants or even regular local shops that are interested in a more conscious portfolio and that can bring opportunities for cross-selling and recruiting of new consumers (depending on the product category), are to take in consideration as "... there should be more shops. Natural, biological products (...) more access." (Female Participant, 36yo). Moreover, is important to remind that distributing sustainable products in the "right points of sales" and making "them always available" (Female Participant, 36yo) contributes to create or consolidate brand positioning. So its important to further understand where consumers want these new products to be sold and how they should be communicated.

New product solutions for a more sustainable consumption are put in the market everyday but it was stated that "It is difficult to identify which products are sustainable in the market" (Male Participant, 40yo). For a regular consumer that is entering in the realms of sustainable consumption, gaining awareness of which products or brands can substitute the "regular shopping basket" and make real changes in consumption patterns, is a priority so to eliminate the notions that "there are no alternatives"(Female Participant, 40yo) to consume in a more sustainable way.

5.3.2 Pre-Test and Exploratory Factor Analysis (EFA)

The 9 items were first analysed using principal component analysis with Varimax rotation using the 174 valid responses of the pre-test sample. The aim of this EFA was to initially identify the underlying dimensions of the sustainable brand attitude construct and to reduce a large number of variables to a smaller number. The study revealed that a three-factor solution

presented one eigenvalue <1, so we decided to proceed with the two-factor EFA solution (Kaiser, 1960; and Cattell, 1966), accounting for 64.25% of the total variance of the initial 9 items. To determine the appropriateness of the factor analysis, we examined the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett test of sphericity. A value of 0.60 or above is required for KMO to be considered a good factor analysis (Tabachnick and Fidell, 2007), and our findings showed that this measure of sampling adequacy reached 0.776. Also, a Bartlett test with a statistical significance of 0.000 provides strong evidence of the appropriateness of the data for Exploratory Factor Analysis (Malhotra *et al.*, 2004). Both these results show collected data can be used for factor analysis to identify the underlying patterns of the consumer's perception on sustainable brand attitudes.

Aside from these statistical criteria, most importantly, we evaluated each item for interpretation of meaning and clarity to examine face validity regarding the item's relationship to the appropriate dimension. The findings from EFA indicate that two dimensions are important for consumer perception on sustainable brand attitudes, considering the original 9 items. Each factor was given a descriptive label inspired on the original factor naming of Baker and Sinkula (2005) (see table 5.2):

- 1) Righteousness (composed of 4 items);
- 2) Opportunity (composed of 5 items).

The 2 Dimensions - Rotated Component Matrix	Component	
	1 – Righteousness	2 - Opportunity
BA5 - Make irreversible commitments to sustainable practices	0.924	-0.081
BA4 - They compromise to make serious investments to protect society and the environment	0.913	-0.062
BA7 - It is part of their work philosophy to be committed to sustainable development	0.909	-0.090
BA8 - It is the right thing to do	0.756	-0.038
BA6 - They want to present a competitive advantage against the competition	0.102	0.784
BA1 - They want to create a competitive advantage	-0.110	0.773
BA2 - They see environmental and social issues as an opportunity to sell more products	-0.288	0.743
BA9 - Because the law requires them to have more practices that respect the environment and society	0.052	0.630
BA3 - They do it as an obligation and not proactively	-0.121	0.629

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Table 5.2: Rotated Component Matrix

5.3.3 The Sample of the Main Study

A final questionnaire with 1028 subjects was conducted via an online survey company, SurveyMonkey.com, administered through the mailing list of one of the top sustainability projects in Portugal (www.biovilla.org). These respondents had consumed a sustainable product at least once. In order to guarantee this, the first question of the survey was introduced as a filter. The convenience sample was gathered using the snowball technique.

Although most of the sample consisted of people that have graduated (71.4%), the overwhelming majority of participants earned less than 1500€ per month (77.5%). Almost half the participants (49.3%) were into holistic practices such as yoga and/or meditation as 60,5% were female. The use of a Likert type scale was implemented (1=strongly disagree; to 7=strongly agree), asking the respondents to indicate their position on each of the 9 statements selected to build the construct. In total of 992 valid and completed questionnaires (response rate of 42%) to the web-based survey were received (see Table 5.3).

Items	Mean	Std. Deviation
BA2 - They see environmental and social issues as an opportunity to sell more products	5.47	1.460
BA6 - They want to present a competitive advantage against the competition	5.46	1.515
BA1 - They want to create a competitive advantage	5.23	1.653
BA9 - Because the law requires them to have more practices that respect the environment and society	5.15	1.768
BA8 - It's the right thing to do	4.98	1.883
BA3 - They do it as an obligation and not proactively	4.82	1.658
BA7 - It is part of their work philosophy to be committed to sustainable development	4.70	1.850
BA5 - Make irreversible commitments to sustainable practices	4.48	1.743
BA4 - They compromise to make serious investments to protect society and the environment	4.38	1.753

Table 5.3: CPSBA Items Descriptive Statistics (n=992)

5.3.4 Confirmatory Factor Analysis (CFA)

Data from the second and main sample (n = 992) were used for CFA. A series of CFAs was conducted to test three competing measurement models:

- 1) A first-order two-factor model, with the structure obtained in EFA;
- 2) A first-order three-factor model (to test the original scale proposed by Baker and Sinkula 2005);

3) A revised first-order two-factor model, (dropping two of the original 9 items due to low factor loadings). Table 5.4 summarizes the fit indices obtained for the three competing models:

Models	χ^2 ^a	df ^b	χ^2/df	RMSEA ^c	SRMR ^d	Model AIC	CFI
1) First-order two-factor model	300.20	26	11.55	0.10	0.089	450.30	0.94
2) First-order three-factor model	289.89	24	12.08	0.11	0.087	331.89	0.94
3) Revised first-order two-factor model, (dropping items BA3 and BA9 due to poor fit properties);	176.55	13	13.58	0.11	0.075	206.55	0.96

^achi-square statistic; ^b degree of freedom; ^c root mean squared error of approximation; ^d root mean squared residual; ^eModel AIC

Table 5.4: Comparison of overall fit indices for the three competing CFA models

In line with the findings of both the qualitative analysis and the EFA, where respondents had two clear points of view: trusting brand attitudes or not trusting them at all, we began by comparing the results of a two factor CFA model with those of a three factor model - the original scale proposed by Baker and Sinkula (2005). Additionally, we have considered a third model, removing the 2 observed variables with low factor loadings. Results from the revised model show that Model 3 has the smallest AIC value (Schumacker and Lomax, 1996), so we decided to choose the presented third competing model.

Considering the selected model, it presented a relative chi-square of 13.58. There is no consensus regarding what an acceptable ratio is, although recommendations range from as high as 5.0 (Wheaton et al, 1977) to as low as 2.0 (Tabachnick and Fidell, 2007) which was not the case for this procedure. Even so, the value of NFI=0.96 and a CFI=0.96, combined with the SRMR = 0.075, produced a result accepted by Hu and Bentler (1999) as a good fit for a two-index presentation format where the acceptable Type II error rates supported a recommended CFI of 0.96 or higher and SRMR of 0.09 or lower. As a result, the modifications were confirmed as substantial, so overall the confirmatory factor analysis demonstrated that the data provided an overall acceptable fit for the construct under study. Through this process of evaluation of a model's fit, the revised first-order two-factor model proposing a two-dimensional construct for CPSBA was measured by 7 items, where the two dimensions are negatively correlated as displayed in figure 1 and table 5.5.

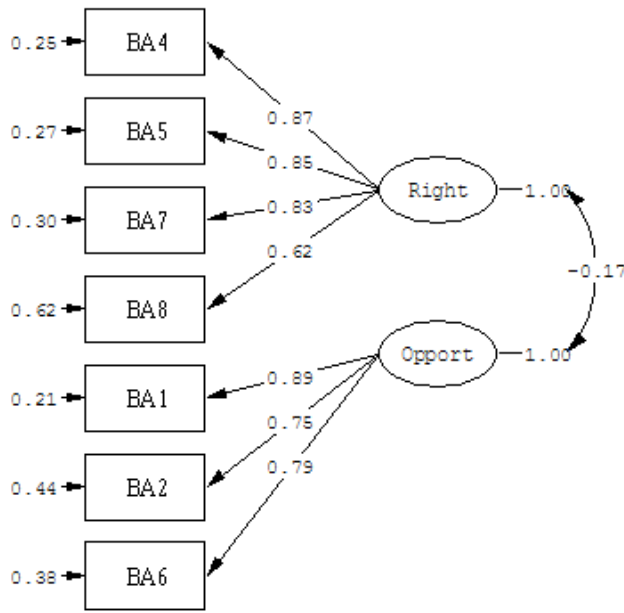


Figure 5.1: Two Dimensions of Consumers’ Perception on Sustainable Brand Attitudes

	Righteousness	Opportunity
Righteousness	1.00	
Opportunity	-0.17	1.00

Table 5.5: Correlation Matrix of the two dimensions of CPSBA

5.4. Discussion and Conclusions

Based on the results of the analysis, the Consumer Perception on Sustainable Brand Attitudes Construct was measured and developed with success. There was a clear understanding that consumers have a polarized opinion, and perception around sustainable brand attitudes encapsulated in two main perspectives. It is understood that, if brands can be effectively positioned as “sustainable brands”, this entails an active communication and differentiation of the brand from its competitors through environmentally or socially sound attributes. It was also confirmed that what consumers perceive about marketing sustainable strategies consistent in both qualitative and quantitative analysis. It was shown that the perceptions consumers have towards sustainable brand attitudes are composed of two main factors (Righteousness and Opportunity). Consequently, CPSBA is based on the interaction of two

opposite points of view. Even though this result was not consistent with the 3 factors proposed by Baker and Sinkula (2005), it gave us the interesting result that consumer's perceptions towards sustainable brand attitudes might differ from brand employees. Recall Baker and Sinkula (2005) tested their scale in a corporate environment and applied the questionnaire to employees. Therefore, it is important to acknowledge that even a sound sustainable corporate culture might not be apprehended as such by its consumers. In fact, consumer perception varies between understanding that brands are truly committed to do good (righteousness), and that brands are not going beyond what they are obliged to do by law or business opportunity (opportunity).

Thus, positioning a brand as sustainable entails an active, lived and truthful communication and differentiation of the brand from its competitors through its sustainable sound attributes. The same way, sustainable products will not be commercially successful if green brand attributes are not effectively communicated. Hence, it is important to deepen the meaning of the two factors:

5.4.1. Righteousness

In most studies, it is apparent that an environmental consciousness among consumers is growing, allowing for an overall positive attitude to affect brands that are seen as environmentally stable (Eagly and Kulesa, 1997). As Baker and Sinkula (2005) state: *“Those adopting such a (true sustainable) approach would see environmental (and social) issues as market opportunities, be willing to take risk, make commitments (both financial and non-financial) that are substantial and visible, and possess a fundamental desire to do the right thing”*. Thus, we can observe that consumers truly believe in brands that show themselves to be honest and careful with people and planet where righteousness can be treated as the ideal moral standpoint and is taken to be an exemplary behaviour for which people and corporations should strive (Tsai *et al.*, 2011). Moreover, Cheung and Ambrose (2004 p.258) state that, *“moral virtues are pursued not for the sake of generating more profits but as an end in itself. It is a way of life organized around the search for meanings and a sense of commitment”* as all this can be seen as a deep sense of service (Pfeffer and Fong, 2004).

Birnik and Billsberry (2008) remind us that righteous management does not support the idea that altruism and self-interest are incompatible and that it genuinely aspires to bring alive

corporate vision statements that are supposed to be truthful and put in action. These authors also remind us that righteous management should be based on intrinsic motives that aim to improve personal, shareholders and organization's lives, as well as doing well to the greater community. Having all this in mind, the dimension of righteousness regarding sustainable brand attitudes, can only be taken as truthful if it really brings value to people and planet as a whole.

5.4.2. Opportunity

If, on the other hand, consumers become confused about brand attitudes and real intentions, they may have a more negative perception towards certain brands, which could in turn come from a perceived trade-off between the brand's functional attributes and environmental (or social) responsibility (Schlegelmilch *et al.*, 1996). If this were not clear to the consumer, it would mean that the brand is not able to effectively implement a true sustainable brand attitude, and therefore should not expect to provide benefits to sustainably conscious consumers. Moreover, the truth is that consumers do tend to become emotionally involved with brands they perceive are "doing-things-right", and reject those that are on the opposite track such as those they perceive to be opportunists.

Therefore, it becomes another main conclusion that brand-true sustainable positioning is crucial and interaction of all marketing tools are essential to the process of shaping distinct consumer perceptions. With a view to this, corporations and strategists should start to view the preservation of our natural resources not egotistically (maintaining our standard of comfortable living) but respecting the whole ecosystem. If we transfer this notion to a corporate perspective, enterprises making this shift will move from a perspective of competition to that of cooperation (e.g.: sharing know-how and knowledge enables corporations to create synergies avoiding waste on duplicated costs of several enterprises developing the same technology at the same time) and from price to value (e.g.: valuing natural resources) and will enable fair prices for products and services and allow consumers to perceive the right value of the goods they are purchasing.

As a matter of fact, and as this research suggests, applying the three factors scale by Baker and Sinkula (2005), originally applied to employees in a corporate environment, did not reveal appropriate for consumers, where a two factors solution was found. This interesting

result shows that consumers' perceptions towards sustainable brand attitudes might differ from those of brand employees.-In fact, it is important to acknowledge that even a sound sustainable corporate culture might not be apprehended as such by its consumers.

Similarly, social and environmental changes occur in individuals (consumers) that are becoming increasingly concerned with sustainability and improvements in quality of life, new launch of products considered environmentally sound, and so on. Thus, companies that pioneer in real green or social innovation can enjoy "first mover advantages" and develop new market opportunities to increase their competitive advantage.

Chapter 6: The Consumer’ Sustainability Consciousness Model: An Integrated Approach⁴

Abstract

This paper contributes to the current debate regarding sustainable consumption putting forward a model that measures how consumers’ sustainability consciousness directly and indirectly impacts sustainable purchase intention. While many prior studies have investigated the factors that affect this matter, a comparable research in consumer behaviour that looks at sustainability in an triple-bottom-line perspective was found necessary to further understand the complexity that influences consumers to buy in a more sustainable way. This study frames the multiple constructs and dimensions that lie behind sustainable purchase intention with prior literature review and qualitative research and posterior structural equation modelling measurement proposing the Consumers’ Sustainable Consumption Model. The findings showed that is more important that companies launch portfolios with the desired sustainable products attributes than that they develop a sustainably sound brand and that it is more relevant to consumers to perceive brand attitudes as righteous than as opportunistic, but this fact doesn’t have much impact on purchase intention. Finally, is appears to be more relevant for consumers to purchase sustainably through trusting the products rather than through having them accessible in price or available in stores leading to the breakthrough notion that sustainable consumption is not only about conscious consumers and brands communicating sustainable attitudes, but it mainly about bringing to market products that effectively hold the sustainable attributes within the regular mainstream characteristics. By advocating this, a comprehensive path to increase sustainable consumption is developed in this paper.

Keywords: Sustainable Products; Consumer Consciousness; Sustainable Consumption; SEM

Article Classification: Research paper

⁴ Paper to be submitted to Journal of Business Ethics

6.1. Introduction

Several decades ago, Schumacher (1973) introduced the term sustainability representing a main tipping point in western societies bringing a great environmental and social awakening creating a great influence in the following years even from an economic perspective. In fact, sustainability is conceptualized in a “triple bottom line” perspective with its “three pillars” (United Nations, 2005) has its cornerstones (environmental, social and economic), and presented in a marketing mix approach as the “3Ps”: Profit – Economic Benefits; People – Social Benefits; and Planet - Environmental Benefits (Placet *et al.*, 2005). Since then, more and more, marketing strategies are merging with sustainable principles were new portfolios and production processes are being brought to market contributing to economy, environment and society in a more conscientious perspective (Salgado and Lafuente, 2005). Therefore, sustainability needs to be understood as a whole set of values that should be embeded in consumers purchase decisions and on corporate actions.

Existing literature mainly focuses on studying separately the environmental and/or social perspectives of the topic, as no model was found focusing in the holistic approach which considers the triple-bottom-line in the same study. Also, no study was found able to encapsulate in the same model, consumers perceptions towards product sustainable attributes and corporate sustainable attitudes as predictors of purchase intention. Therefore, this study aimed at this research gap and presented the proposed model of Consumers’ Sustainable Consumption.

Thus, what is believed in the current study is that the purpose of a sustainable marketing strategy is to integrate the goals, policies and actions into a coherent whole organization that provides products and services that are profitable and that can indeed meet consumers’ real needs, while respecting the environment and society as a whole. Therefore, business should be proactive to adress these consumers with appropriate communication tools and distribution channels (Pogutz and Micale, 2011). In fact, it is to keep in mind that corporations are still those responsible for boosting economic development by having the “*financial resources, technological knowledge, and institutional capacity to implement solutions*” (Borland, 2009). They also should be responsible for the welfare of local communities involved in manufacturing their products, and many times for the pollution caused by their production

lines. For this matter, Hart (1997) prevents that corporate impact on the environment (and society) needs to be positive or at least neutral.

For this reason, it's imperative to understand what actually matters to conscious consumers, being the purpose of this paper to: first review the path that consumers follow from the moment that they start becoming aware of sustainability to the point of intention to consume in a more sustainable way; and second to propose a model that allows a deeper understanding of a new consumption paradigm (Mihelcic et al., 2003) that is more environmentally friendly, socially responsible and economically fair. In short, and to accomplish that, it is necessary to first unpack what sustainable consumption is from a conscious consumer point of view.

6.2 Unpacking Sustainable Consumption

Sustainable Consumption can be defined as: *“formulating equitable strategies that foster the highest quality of life, the efficient use of natural resources, and the effective satisfaction of human needs while simultaneously promoting equitable social development, economic competitiveness, and technological innovation”* (Tukker et al. 2006). Even so, the essence of consumption according to Warde's (2004) is more of an individual *“process whereby agents engage in appropriation, whether for utilitarian, expressive or contemplative purposes, of goods, services, performances, information or ambience, whether purchased or not, over which the agent has some degree of discretion”*. In this way, consumers are taken as individuals who can exercise freedom and responsibility by making own choices with full autonomy and private right (Barnett et al., 2005). And, first of all, consumers are people. People with past experiences, present needs and future desires. In western societies, people need, in most of the cases, to buy at least food to thrive. These items people buy can only be the ones provided by companies or local individuals that set the supply according to the perceived demand for certain products.

In the case of sustainable consumption, it *“is not about consuming less, it is about consuming differently, consuming efficiently, and having an improved quality of life”* (Jackson and Michaelis, 2003 pag.14). Consumption research can also define this type of concerns as

“ethical”, including environmental sustainability, health and safety risks, animal welfare, fair trade, labour conditions, and human rights (Barnett *et al.*, 2005). Moreover, Bezençon and Blili (2010) consider that the ethical consumption is a growing market, where consumers buy a certain percentage of intangible attributes, justice and perhaps conscience. The authors also state that these new consumer needs are challenging the classical consumer theories. This is even more pertinent during delicate economic climates such as the actual one when consumers are more than ever available to re-evaluate consumption patterns (Lacey and Kennett-Hensel, 2010). Moreover, it is understandable that the revolution that the internet has brought to peoples lives came with the benefit of turning the consumer more informed, and therefore, better consumption decisions started being made as “*access to information and communication technologies has become crucial to a sustainable agenda of economic development*” (Navas-Sabater *et al.*, 2002). Thus, consumer sustainable consciousness plays a key role of guidance on how products should be developed, keeping in consideration an ethical perspective and product attributes. Futhermore, for intention to purchase to happen, brands must launch products with sustainable attributes that match consumers’ new needs. Indeed, Borland (2009) suggests a re-evaluation of conventional instruments of analysis that might not be adequate to apprehend these new trends.

Having all this in consideration, in the moment of purchase in any linear or point of sale, there are three main aspects that consumers face while deciding weather to buy more sustainably or not:

1) Sustainable Consciousness: current demand of sustainable consumerism shows an increasing willingness to integrate social and environmental responsibility in product purchase decision which in turn explains the rise of consumers’ level of commitment to these issues that have been observed as having a positive effect on purchase behaviour (Lacey and Kennett-Hensel, 2010; Chan and Yam, 1995). Actually, Borland (2009) states, the “*consumers’ response to green companies differs by how environmentally conscious they are*”.

2) Perception on Product Sustainable Attributes: including price, functional attributes, impact on environment and society, where according to Crane (2001), products with ethical attributes are perceived by the consumer as causing less damage to the environment because they take the entire life cycle into account, and minimize environmental impacts using biodegradable packaging, among others. Furthermore, Bezençon and Blili (2010) define them as “*products*

that exhibit one or several social or environmental principles which might affect consumer purchase decision”.

3) Perception on Sustainable Brand Attitudes: changes in consumers’ expectations and new legislation have also brought about more responsibility to corporations in how to act in terms of environmental and social issues (Lacey and Kennett-Hensel, 2010). Actually, product evaluations by consumers in the face of unethical corporate behavior might result in negative word of mouth or even protest behaviors (Grappi *et al.*, 2013). Thus, environmental and social consciousness became “not only an ideology of (individuals as) activists, but also a matter of ‘market competition’ that influences consumer behaviour (Mostafa, 2007).

For instance, when a consumer is buying a sustainably sound product such as a Ben&Jerry’s icecream, Boticario cosmetics or simply organic bread, he or she will encounter the regular functional attributes claims such as “super premium ice cream”, “water proof makeup”, “freshly baked” and so on, as well as augmented attributes such as “climate neutral”, “fair trade”, “locally produced” that can be presented as more claims or actually acquired certifications along with brand communication in product labels. After analysing the product, consumers’ sustainability consciousness acts as a filter to discriminate between what is or is not important to him as an individual. In fact, if there is no sustainable consciousness, probably the certifications previously mentioned will not be relevant and maybe not even understood generating confusion (Pogutz and Micale, 2011) while price might turn to be the major concern for purchase. On the other hand, if a sustainable conscious consumer encounters a “regular” product with no apparent sustainable attributes, he or she might move on to another product that has for instance less packaging, more welfare claims, or anyother attribute that might seem important regardless of the price (Gilg, et al 2005).

Even if this paper is not about judging if consumers are or are not sustainably conscious, neither if brands present or not real sustainable attitudes, or products with the desired sustainable attributes, the purpose of this research is to understand what lies behind consumer’s sustainable purchase intention providing a fresh and integrated view on how consumers’ sustainability consciousness impacts their intention to purchase sustainably. It also aims at contributing with recommendations to organizations to start integrating sustainable principles and philosophy at a corporate strategic level which in turn will can bring deeper understanding of their role (Borland, 2009).

6.3 The Proposed Consumer' Sustainability Consumption Model (CSC)

The model proposed in this study assumes that the importance attached to consumer consciousness in terms of environmental, economic and social issues, is a key factor during the whole purchasing process. However, besides the direct relationship between consumers' sustainability consciousness and intention to purchase sustainably, it is proposed that possible mediators should be considered. This is due to the fact that consumers have to clearly understand and demand for certain product sustainable attributes, as well as understand and trust brand sustainable attitudes beforehand. There are numerous reasons for conducting an analysis of consumer perspective that includes brand sustainable attitudes and product sustainable attributes. However to do so, one needs to understand the strategies and portfolios being launched by brands and their reason for doing so (Borland, 2009).

Thus, the proposed CSC Model includes four main constructs based on the research of Carvalho et al (2015a,b,c): 1) Consumer Sustainable Consciousness (CSC); 2) Consumers' Perception towards Brand Sustainable Attitudes (CPSBA); 3) Consumers' Perception towards Product Sustainable Attributes (CPPSA) and 4) Sustainable Purchase Intention (SPI). The CSC model postulates direct and indirect influences among its four constructs, as illustrated in Figure 6.1 having in consideration the methodology presented further in the paper.

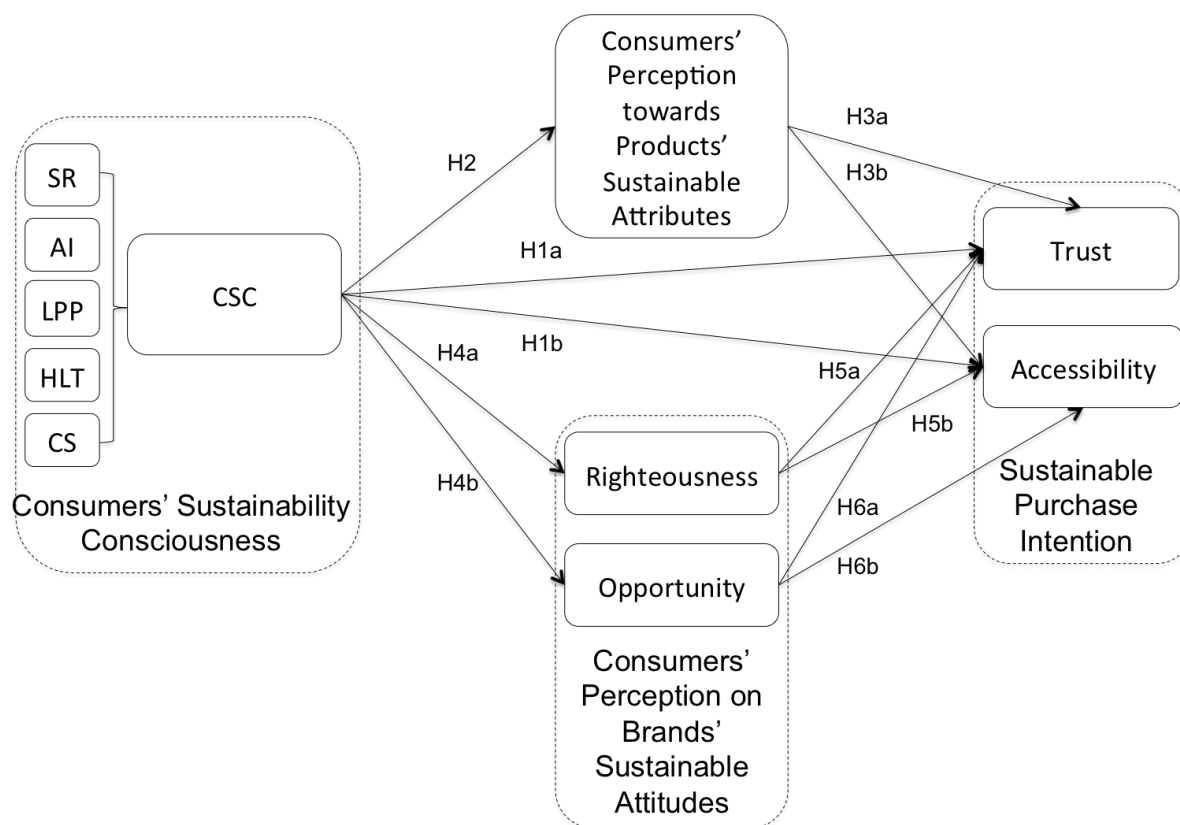


Figure 6.1 – The Consumer’ Sustainability Consciousness (CSC) Model.

6.3.1 Consumer’s Sustainability Consciousness and its Impact on Purchase Intention

According to Bennet and Bennet (2008), consciousness can be defined as “*heightened sensitivity to, awareness of, and connection with our unconscious mind*”. It is known that a consumer responds to a green company depending on how environmentally conscious he or she is (Borland, 2009). Fifty years ago, the “Social Consciousness Construct” was introduced as a result of the need to capture consumers’ concern regarding social issues, using the “Social Responsibility Scale”, which measures the individual’s traditional social responsibility. This scale was initially developed by Berkowitz and Daniels (1964), was and later used by Berkowitz and Lutterman (1968) and Anderson and Cunningham (1972), delving deeper into the topic. Other types of scales, such as the “Lifestyles scale” from Fraj and Martinez (2006), focus on how people’s lives are lived, and show a more integrated perspective on aspects related to a balanced life, healthy diet and environmental concern and protection (Sanchez *et al.*, 1998). The current demand for sustainable consumerism shows an increasing willingness to integrate social responsibility in product purchase decision, and

explains the rise in the level of commitment of consumers towards these issues, which are seen to have a positive effect on purchase behaviour (Lacey and Kennett-Hensel, 2010).

Schlegelmilch *et al.*, (1996) proposed three measurement scales included in the “Environmental Consciousness Construct”: i) the environmental knowledge scale; ii) the environmental attitudes scale; and iii) the recycling behaviour scale, proposed to bring new understanding to the topic. Ottman (1994) developed the idea that the green consumer is an individual who looks to gain access to and really consume products that are shown to cause less or no damage to the environment, i.e. products with attributes worthy of trust. Schlegelmilch *et al.* (1996) further reinforced that a dramatic increase in worldwide environmental consciousness is believed to have caused a deep impact on consumer behaviour. Marketing strategies are thus beginning to merge with sustainable principles as they anticipate conscientious consumers’ satisfaction with portfolios and production processes that contribute to the economy and society as a whole (Salgado and Lafuente, 2005; Carvalho *et al.*, 2015c).

Carvalho *et al.* (2015b) suggested that two main dimensions compose sustainable purchase intention: trust (understanding the labels and certifications; good experiences in the past or simply having the opportunity to try sustainable products before purchase) and accessibility (product pricing, availability in stores, and sustainable products being sold in a convenient proximity to home). Thus, the first research hypothesis proposes that:

H1a: Consumers’ sustainability consciousness positively influences intention to purchase sustainably, as far as the trust dimension is concerned.

H1b: Consumers’ sustainability consciousness positively influences intention to purchase sustainably, as far as the accessibility dimension is concerned.

6.3.2 Product Sustainable Attributes

Four decades ago, Kassarian (1971) already envisioned that there was an impressive potential for a market of “a good product based on ecological concerns”. Sustainable product attributes refers to a set of characteristics that might influence purchase intention. These type of

products can also be defined as ethical products as Bezençon and Blili (2010) define them as “*products that exhibit one or several social or environmental principles which might affect consumer purchase decision*”. The authors’ state that a product cannot be ethical *per se*, but can be augmented by ethical considerations or attributes that are positively perceived. The authors also claim that it is not the brand itself that distinguishes ethical products, but rather the “meta-brand”, associated to the product through the ethical augmented product characteristics, that does. The list of these principles and characteristics can be extensive. Issues such as product safety, environmental impacts, consumer privacy, employee welfare, discrimination, fair pricing, community action, gene technology and so on, should be taken into consideration when studying these types of product (Crane, 2001). Sustainability labels therefore act as a guide for consumers to choose products that are environmentally and socially friendly and are often used by businesses to differentiate their products, to position them and to communicate an environmentally friendly message (D’Souza, 2000). There are several ways in which managers can communicate their brand’s sustainable benefits: product claims; labelling the products as eco-friendly; organic; biodegradable, recyclable and ozone-friendly (Morris *et al.*, 1995). In order to better understand consumers’ Ecological behaviour Maloney and Ward (1973) created a framework proposing the “Actual Commitment subscale”, which was later adapted by Fraj and Martinez (2006). The scale measures how people have differed in their selection of products from an assortment of ten items due to their pollutant effects, while at the same time trying to be informed about environmental issues and other related problems. Many studies were also conducted to understand consumers’ environmental concerns and choices in regard to green products (D’Souza *et al.*, 2006; Kaman, 2008). The more informed or conscious the consumer is, the more pro-social (and conscious) his or her behaviour will be, for instance: “*search for information about environmentally friendly products, product choice based on an environmentally friendly attribute, and recycling*” (Minton and Rose, 1997). Furthermore, it has also been known for more than four decades that socially conscious individuals would manifest consumption decisions and that the more conscious are more likely to purchase products geared to enhance social or environmental welfare (Anderson and Cunningham, 1972). Thus, it can be hypothesized that:

H2: Consumers’ sustainability consciousness positively influences the consumers’ perception towards products with sustainable attributes.

Wong *et al.* (1996), state that if the environmental (or sustainable) product characteristics are not clear to the consumers, determinants of product preference remain the main driver for choice. A good eco-labelling becomes crucial when it brings the consumer understanding of what he or she is actually buying. As suggested by Salgado and Lafuente (2005), an ecological product should be developed as part of a process from beginning to end of the life cycle, being this perspective the one that distinguishes it from other traditional products. The author also enunciates which product characteristics can be reflected in the purchase decision: healthy food (e.g.: “good-for-me”); replacement of scarce products by abundant ones (in the composition of the package for instance); respect for the environment and natural resources preservation; non chemical raw materials; energetic efficiency; price; recyclable packaging and/or low quantities of it; availability (supply of products) and clear Eco labels.

Thus, and according to Calomarde (2000), “*establishing the price of a green product, and including the normal costs of production must also take into account environmental values, so the price of a green product should reflect the value perceived by consumers, so that their market competitiveness is related to the level of information of the ecological benefits it aggregates*”. Salgado and Lafuente (2005) identified eight reasons why consumers purchase ecological products: 1) Ecological conscience; 2) Acceptance; 3) Fashion; 4) Confidence; 5) Wellbeing; 6) Sufficient information regarding use; 7) Brand and 8) Visual aspect. These characteristics might show a less injurious attitude towards the environment, generating a change in the conscientious consumers’ life styles (Salgado and Lafuente, 2005). To do so, a perceived intrinsic and truthful set of corporate sustainable values and good accessibility (both in terms of availability and pricing) to the products has to be taken into consideration. It is therefore predictable that perceptions towards products sustainable attributes influences purchase intention, concerning the two dimensions of trust and assessibility proposed by Carvalho *et al.* (2015b):

H3a: Consumers’ perceptions towards product sustainable attributes positively influence sustainable purchase intention regarding the dimension of trust.

H3b: Consumers’ perceptions towards product sustainable attributes positively influence sustainable purchase intention regarding the dimension of accessibility.

6.3.3 Brand Sustainable Attitudes

The state of the art concept of Shared Value was recently developed by Porter and Kramer (2011), who understand that it is not possible for a capitalist system to sustain corporate growth if businesses maintain a just for-profit perspective. This has been seen as a major cause of social, environmental, and economic problems. The concept of Shared Value is therefore explained as “*creating economic value in a way that also creates value for society by addressing its needs and challenges*” (Porter and Kramer, 2011). In other words, businesses should begin to understand that there is a concrete path to increase productivity and expand markets if societal needs are recognized as a priority to be addressed, in detriment to the conventional economic needs. The authors admit that this could incense the next big transformation in business thinking.

Baker and Sinkula (2005) predict that enterprises with sustainable values will replace the current market players that are not integrating the necessary changes to a more responsible positioning. This renovation will introduce a fresh perspective in the market and therefore a better adaptation to new consumer needs. The author also refers to solutions to be developed that will enable companies to: 1) be more efficient, eliminating waste from their industrial manufacturing processes; 2) close the loops from consumer end-of-life processes (for instance cutting the use of virgin raw materials); 3) improve the environment as a whole; 4) provide a sustainability vision, values and strategy, and 5) potentially save money. In other words it is important to review firms’ ability to effectively apply sustainable practices on their marketing mix to launch and mantain products in the linears. This is nevertheless not for everyone. It “*can be considered a unique resource for firms that adopt it as an operating philosophy (and) may eventually become the norm as we evolve toward a sustainable business paradigm*”. (Baker and Sinkula, 2005).

Despite all this, it is unfortunately common sense that making a profit is a golden rule for most businesses in the world. Borland (2009) however, states that the corporate economic dimension should not dominate the social and environmental ones. The author suggests that these last two dimensions should not take second thoughts or be measured against the economic dimension. This might happen because socio-cultural and environmental (physical) wellbeing is usually dependent on economic (financial) wellbeing. Considering the above, corporate strategic sustainability arises when the integration of the principles of sustainability

start becoming embedded in the management processes. In this sense, corporations will have to understand how, for example, to: i) close the loops of product life cycles (because life systems are not linear); ii) integrate all parts of the system instead of segregating them (the same way that nature works around synergies and biodiversity); iii) introduce eco-efficient procedures and production processes and especially, iv) how to truly add value to society with their portfolios. Corporate impact on the environment (and society) needs to be positive or at least neutral (Hart, 1997), therefore “*recognising the need for an “individual, collective and cultural transformation and paradigm shift”*” (Borland, 2009). In the latter case, the desire for profit should be embedded in the desire to do the right thing (Baker and Sinkula, 2005).

Furthermore, if brand attitude can be defined as consumers' evaluation of a brand (Mitchell and Olson, 1981) and several semantic differential scales measuring brand attitude have frequently appeared in the marketing literature; a Sustainable Brand can, specifically, be defined by having a specific set of brand attributes and benefits related to the reduced environmental and social impact of the brand and its perception as being sustainably sound. A well-implemented sustainable brand attitude should provide benefits to sustainability conscious consumers. So, developing and building a brand with a solid and coherent background holds great potential value as a source of competitive advantage to those firms who integrate sustainability into their business models. Given that consumers often bond with brands in order to improve or enhance their self-definitions (Bhattacharya and Sen, 2003), the results further demonstrate the ability of sustainability (and righteousness) oriented brands to establish and build shared values with their consumers.

Furthermore, ethics and product attribute information is suggested to interact with and produce effects on consumers' attitudes towards firms (Folkes and Kamins, 1999). Moreover, in terms of brand sustainable attitudes, it is known that more engagement in social and environmental activities and strategies, leads to more trust and commitment from brands conscious customers, also in helping them to foster even more sustainable attitudes (Lacey and Kennett-Hensel, 2010).

Carvalho et al. (2015c) proposed the Consumers' Perception towards Brand Sustainable Attitudes (CPSBA) as a two dimensional construct, including a “positive” dimension of Righteousness and a “negative” dimension of Opportunity. Hence, it can be postulated that Consumers' Sustainability Consciousness influences the righteousness perception, which,

in turn, impacts the two dimensions of Sustainable Purchase Intention (Carvalho *et al.*, 2015b). Therefore, it can be hypothesised that:

H4a – Consumers’ sustainability consciousness positively influences consumers’ perception towards sustainable attitudes regarding the righteousness dimension.

H5a – There is a positive influence from consumers’ perception towards Brands’ Sustainable Attitudes (regarding the dimension of righteousness), on their sustainable purchase intention regarding the dimension of trust.

H5b – There is a positive influence from consumers’ perception towards Brands’ Sustainable Attitudes (regarding the dimension of righteousness), on their sustainable purchase intention regarding the dimension of accessibility.

On the other hand, if a firm engages in ethical behaviour solely for extrinsic motives rather than for intrinsic ones, consumers may not view that as favourably as if it was done the other way around (Folkes and Kamins, 1999). It is also known that consumers become confused about brand attitudes and real intentions, and that this may bring a negative perception towards certain brands, which could in turn, come from a perceived trade-off between the brand’s functional attributes and environmental (or social) responsibility (Schlegelmilch, *et al.*, 1996). If sustainable brand attitudes are not clear to the consumer, it means that the brand is not able to effectively implement a true sustainable brand attitude, and therefore should not expect to provide benefits to sustainably conscious consumers (De Carvalho *et al.*, 2015). Madrigal and Boush (2008) also suggest that corporations “*must stand for something meaningful or act to uphold promises, relative to the product or the corporation*”. If this promises are not kept, there might be a dramatic change in consumers' purchase decisions (Kucuk, 2010). Hence, it can be assumed that Consumers’ Sustainability Consciousness influences opportunity perception, which, in turn, impacts the two dimensions of Sustainable Purchase Intention (De Carvalho *et al.*, 2015). It can therefore be postulated that:

H4b – Consumers’ sustainability consciousness positively influences consumers’ perception towards sustainable brand attitudes regarding the dimension of opportunism.

H6a – There is a positive influence from consumers’ perception towards sustainable brands’ attitudes (regarding the dimension of opportunity), on sustainable purchase intention (regarding the dimension of trust).

H6b – There is a positive influence from consumers’ perception towards sustainable brands’ attitudes (regarding the dimension of opportunity), on sustainable purchase intention (regarding the dimension of accessibility).

Even though there is great interest for academia to put forward insights to help the corporate world build a new consumption paradigm, no model was found to demonstrate an integrated view of the “triple bottom line” in a consumer perspective. The main aim of this study is therefore to provide academia with a theoretical framework on how consumers become aware or conscious and therefore start changing their consumption patterns until intending to consume sustainably. This paper proposes the conceptualization and validation of such a model.

6.4 Methodology

To validate the proposed model, a set of items was used to measure the 4 proposed constructs, which were defined using C-OAR-SE methodology (Rossiter, 2002) and pre-tested after integrating the qualitative results and literature review using a first sample. At this stage, and for each construct, an Exploratory Principal Components Factor Analysis was conducted using IBM SPSS 22. A second independent sample was gathered for the main study. The collected data were subject to Confirmation Factor Analysis (Bollen, 1989; Hair *et al.*, 2010) in order to validate the measurement model. Then, SEM (Schumacker and Lomax, 1996) was used to validate the proposed CSC model and to test the research hypothesis. The robust maximum likelihood estimation procedure implemented in LISREL 8.80 was used for model estimation.

6.4.1 Qualitative Analysis

A group of consumers that have, at least once, consumed a product with sustainable attributes was considered. Each one of the 20 consumers belonging to the selected group was interviewed individually using in-depth interview methods. This sample size was considered appropriate since common qualitative sample sizes are constituted of 15-40 participants (De Ruyter and Scholl, 1998). A semi-structured guideline presenting a broad agenda was applied. Firstly, a broad and main question was placed (“What, in your opinion, is considered a sustainable product?”) to allow for spontaneous references to the topic. Sub-questions were then asked according to the result of the literature review and aiming to answer the research objective/aim. The ordering of questions was flexible and dictated by the interviewee’s responses. Varying perspectives were often delved into in more detail in each interview, depending on the interviewee’s knowledge of sustainability. Examples include more specific debates regarding how the interviewee started consuming sustainable products or become aware of sustainable brands, leading to a conversational style of interview in keeping with the study’s exploratory nature.

6.4.2 Constructs Operationalization

Likert type scales from 1 - strongly disagree; to 7 - strongly agree were used to measure the items of the four main constructs. A more detailed explanation of each construct follows.

Consumer’s Sustainability Consciousness (CSC) construct was proposed by De Carvalho *et al.* (2015) as a second order construct with five underlying dimensions measured by 19-items of the original 20 items where one of them was dropped due to low factor loadings). For the complete wording of items C1 to C20 see table 6.1.

The results showed that individuals might start consuming sustainable products from many different perspectives and that the triggers for sustainable decision-making are influenced by many different factors, which may be summarized in the following 5 dimensions: 1) Sense of Retribution (SR): When people began looking at the effects their ecological footprints had on people and the planet as a whole, many consumers started searching for alternative products

that would minimize the impact on our habitat; 2) Access to Information (AI): The revolution the internet has brought to people's lives came with the benefit of taking information to the most isolated places on the planet. As people became more informed, better consumption decisions started being made; 3) Labelling and Peer Pressure (LPP): As the more conscious consumer tends to search for more information during the purchasing process, labels and word-of-mouth appeared to be the most important means of gathering the necessary information and therefore leading the consumer to trust the product, as more and closer information means more transparency; 4) Health (HLT): New patterns of illnesses are affecting part of our population, giving public health practitioners the need to recognize the interdependence between sustainability of the environment and the human species. Those individuals who are becoming increasingly concerned with sustainability and improvements in quality of life are undergoing social and environmental changes within their lifestyles; and 5) Crisis Scenario (CS): The socio-economic scenario that the world is currently facing directly impacts purchasing decisions. If today there is at least the perception of having less money to spend, the consumer should be more cautious about where to spend it. Indeed, the price increase of so many products has led people to really choose between what is indispensable and what is not, therefore becoming therefore, more sustainable as a whole.

Items per Dimensions	Adapted From
Consumer Sustainable Consciousness	
Question: "I started consuming more sustainably when...:"	
Sense of Retribution	
C14 - I realized I could contribute to a better world by buying fair trade products	Bezençon and Blili (2010)
C12 - I started buying fair trade products to help small communities to have better working conditions	QR/ Bezençon and Blili (2010)
C13 - I began to want to give my contribution to my local community or society	Anderson and Cunningham (1972) / Fraj and Martinez (2006)
C15 - I realized the superior quality of organic products	QR / D'Souza <i>et al.</i> (2006)
C11 - I started making an effort to buy products in recyclable packaging	QR / Fraj and Martinez (2006)
C10 - I stopped buying products tested on animals	QR / Fraj and Martinez (2006)
Access to Information	
C5 - I saw information on the internet that led me to change my consumption patterns	QR
C4 - I saw a documentary or shocking information that led me to be more careful about what I buy	QR
C6 - I felt alert to the importance of social and environmental certifications	QR
C9 - I realized we were polluting or destroying Nature	QR / Fraj and Martinez (2006)
Labeling and Peer Pression	
C16 - The product labels called my attention to characteristics that fit with my values	QR

C17 - I realized that I would buy sustainably even with a lower product quality	D'Souza <i>et al.</i> (2006)
C20 - I wanted to try products / practices that people close to me recommended	QR
C19 - I began to have interest about information on product labels	QR / D'Souza <i>et al.</i> (2006) / Fraj and Martinez (2006)
Health	
C1 - I started to pay more attention to my health	QR / Fraj and Martinez (2006)
C2 - I started practicing a vegetarian diet	QR / Fraj and Martinez (2006)
C3 - I began to consume more fruits and vegetables	QR / Fraj and Martinez (2006)
Crisis Scenario	
C7 - I suffered personally the issues of the current crisis and had to pay more attention to what I really needed to buy	QR
C8 - I was showered that consuming Portuguese products made more sense for the local economy	QR

Table 6.1: Complete wording of the 19 items used to measure the five dimensions of the CSC construct.

Consumers' Perception on Product Sustainable Attributes (CPPSA) construct is proposed as a one-dimensional construct, measured by consumer opinion on sustainable attributes. Resulting from the qualitative analysis and literature review, the items regarding the perception that the respondents have towards sustainable product attributes, were identified following a general procedure of putting together object item parts with attribute item parts to form scale items. The 6 items were first analysed using principal component analysis Results from EFA using the pre-test sample indicate that, given the original 6 items, one dimension is needed to capture consumer perception on product sustainable attributes. After conducting a Confirmatory Factor Analysis using the main sample, it was necessary to drop one of the original items due to low factor loadings. Table 6.2 presents the complete wording of the five items proposed to measure CPPSA.

Items	Adapted From
Consumer Perception on Product Sustainable Attributes	
Question: "For me, buying sustainable products,"	
PC1 - Gives an extra guarantee of quality	QR
PC2 - Is a good idea	QR / Chan (2001)
PC3 - Assures me to be contributing to sustainable development through the world of certifications	QR
PC5 - Allows me to have more information about what I'm buying	QR
PC6 - Brings transparency in my acts of purchase	QR

Table 6.2: Complete wording of the five items of the CPPSA construct.

Consumers Perception on Sustainable Brand Attitudes (CPSBA) construct was proposed by Carvalho *et al.* (2015c) as a first order construct with two underlying dimensions (righteousness and opportunity) measured by 7-items of the original 9 items where two of them were dropped due to low factor loadings. For complete wording see table 6.3, items BA1 to BA8.

CPSBA is based on the interaction of two opposite points of view where consumer's perception varies between understanding that brands are truly committed to doing good (righteousness), and that brands are not going beyond what they are obliged to do by law (opportunity). These two factors are defined as: 1) Righteousness: The vast majority of studies present an increasing environmental consciousness among consumers, which in turn leads to generalized positive attitude effects on brands that are perceived as sustainably sound. So we can observe that consumers truly believe in brands that show themselves to be honest and careful; 2) Opportunity: corporations that are able to structure their brands' portfolios, not only including the desire to take advantage of market opportunities but also to benefit from them, for instance by gaining market share.

Items per Dimension	Adapted From
Consumer Perception on Sustainable Brand Attitudes	
Question: "Brands feature sustainable products because:"	
Righteousness	
BA4 - They compromise to make serious investments to protect society and the environment	Baker and Sinkula (2005)
BA5 - Make irreversible commitments to sustainable practices	Baker and Sinkula (2005)
BA7 - It is part of their philosophy of work to be committed to sustainable development	Baker and Sinkula (2005)
BA8 - It's the right thing to do	Baker and Sinkula (2005)
Opportunity	
BA1 - They want to create a competitive advantage	Baker and Sinkula (2005)
BA2 - They see environmental and social issues as an opportunity to sell more products	Baker and Sinkula (2005)
BA6 - They want to present a competitive advantage against the competition	Baker and Sinkula (2005)

Table 6.3: Complete wording of the seven items used to measure the two dimensions of the CPSBA construct.

Sustainable Purchase Intention (SPI) was proposed by Carvalho *et al.* (2015b) as a first order construct with two underlying dimensions (trust and accessibility) measured by 9-items of the 11 original items (where two of them were dropped due to low factor loadings). For the complete wording of items I1 to I10 see table 6.4.

The results showed that individuals might intend to consume sustainable products from two main different perspectives, influenced by the following 2 dimensions: 1) *Trust*: consumers need to know and trust products even before intending to buy them. There are many different layers of trust identified, ranging from understanding the labels, to good experiences in the past or simply having the opportunity to try them out before purchase; and 2) *Accessibility*: there are many facets of accessibility within purchase intention such as product pricing, availability in stores, and being sold within a convenient proximity to home.

Items per Dimension	Adapted From
Consumer Perception on Sustainable Purchase Intention	
Question: "I would consume more often sustainable products if:"	
Trust	
I6 - Better understood their benefits	QR
I9 - They offered more opportunities for experimentation	QR
I7 - I understood better what is written on the packaging	D'Souza <i>et al.</i> (2006)
I8 - I knew better the brands	QR
I10 - have had a better consumer experience in the past	D'Souza <i>et al.</i> (2006)
I5 - Had better visibility in store	QR
Accessibility	
I1 - Were cheaper	D'Souza <i>et al.</i> (2006)
I2 - Were available in more stores	QR
I3 - Were available closer to home	QR

Table 6.4: Complete wording of the nine items used to measure the two dimensions of the SPI construct.

6.5 Structural Equation Modelling (SEM)

As a result of recurring bias regarding responses to questions about environmental issues (Garling *et al.*, 2003), seeking a path, which uses maximum likelihood (ML)-based structural equation modelling (SEM) when analysing this topic (Mostafa, 2007) was considered to be important. SEM allows for more appropriate model specification and complex error

structures, and may be considered more flexible compared to other statistical techniques like hierarchical linear modelling approaches (Reisinger and Turner, 1999). SEM also gives more information, which the researcher can develop, and use to test relevant hypotheses (Wendorf, 2002). It therefore seems the appropriate means to test the proposed model, because of the possibility of testing individual relationships while providing an overall statistical measure of the model's fit.

6.6 Results and Discussion

6.6.1 Results from the Qualitative Analysis

It was not surprising to see spontaneous mention of either the social, economic or environmental issues when the respondents were approached with the topic of sustainability. It appeared that for some, the environmental issue was very clear, while for others the social perspective was the most prominent, and for others, the economic or integration of the 3 should be the main focus. In detail, the Social perspective considered: 1) respect for people (respects the local community where the product is produced and is transparent and suitable for the final consumer); 2) human impact (big productions in small communities should be aware of its impact); 3) quality ("good for people" in a health and humanitarian perspective). In the Environmental perspective, the dimensions of: 1) organic (use of natural fertilizers to protect the environment); 2) non-toxic (exclusion of chemicals in the production process); 3) low energy use (oil usage reduced to the minimum; renewable energy usage as preferable; simplification of the production processes); 4) non-tested on animals (animals should not be submitted to any atrocity for human welfare). As for the Economic Perspective, it was considered: 1) more expensive (associated with a premium generally applied in the market in these type of products); 2) low availability (the distribution channels are still not very well developed for this segment); 3) budget efficiency (buying only what is truly necessary). The integrated view of the topic was also spontaneous regarding: 1) interdependence (awareness of how nature and human beings are interdependent and should work in symbiosis); 2) lack of knowledge (sustainable products and consumption are more complex in general, so more information is needed); 3) balanced (doing the best with what is available: reduce pollution to the minimum possible; consider populations welfare, and a fair economic perspective).

6.6.2 Characterizing the Sample of the Main Study

A questionnaire with a total of 46-items was created and pre-tested in an online format via an online survey company, SurveyMonkey.com and carried out through the use of a mailing list of one of the top sustainable projects in Portugal (www.biovilla.org). Likert-type scales from 1 – totally disagree to 7 – totally agree were used. Data for this study were collected from 212 Portuguese consumers, aged between 18 and 80 years old. Due to the specificity of the topic, a snowball sampling technique was used with sustainability products' real consumers. To guarantee that all respondents had consumed a sustainable product at least once, a filter was included as the first question in the questionnaire. After examining the collected data, it was necessary to ignore respondents with missing data, thus leading to a valid sample of 174 fully completed responses.

A final questionnaire was conducted via the same mailing list but this time collecting data from 992 respondents in Portugal who had consumed a sustainable product at least once. To guarantee this the first question of the questionnaire was introduced as a filter. Due to the specificity of the topic, convenience sampling was considered the snowball technique was used. All in all, 60.5% of the respondents were female. Although most of the sample was composed of people that have graduated (71.4%), the vast majority of participants earned less than 1500€ per month (77.5%). Almost half the participants (49.3%) were into holistic practices such as yoga and/or meditation.

6.6.3 Results from Structural Equation Modelling

Data from the second and main sample (n=992) were used to conduct confirmatory factor analysis (CFA) to build the measurement model, as well as to validate the proposed SEM and test the research hypotheses. Each CFA used the same item structure that was obtained from EFA (when the pre-test sample was used). Table 6.5 summarizes the goodness of fit indices that were obtained for the various CFA models, as well as for the overall SEM that was estimated.

Constructs / Proposed Models	χ^2 ^a	df ^b	χ^2/df	RMSEA ^c	SRMR ^d	Model AIC	CFI ^e
CSC / second-order FA model	1035.41	147	7.04	0.078	0.08	1121.41	0.96
CPPSA / CFA model	24.13	4	6.03	0,71	0.027	46.13	0.99
CPSBA / CFA model	176.55	13	13.58	0.11	0.075	206.55	0.96
SPI / CFA model	242.59	26	9.33	0.092	0.068	280.59	0.97
Global SEM	3415.92	722	4.73	0.06	0.075	3611.92	0.95

^achi-square statistic; ^b degrees of freedom; ^c root mean square error of approximation; ^droot mean squared residual; ^eComparative Fit Index

Table 6.5: Comparison of overall fit indices for the CFA and SEM models

The global SEM that was tested presented a relative qui square of 4.73. There is no consensus regarding what an acceptable ratio is, nevertheless, recommendations range from as high as 5.0 (Wheaton *et al*, 1977) to as low as 2.0 (Tabachnick and Fidell, 2007), which was the case for the obtained value. Furthermore, a value of RMSEA=0.06 combined with a SRMR = 0.075, produced a result accepted by Hu and Bentler (1999) as it has a good fit for a two-index presentation format where the acceptable Type II error rates where the recommendation is an RMSEA of 0.06 or lower and an SRMR of 0.09 or lower. Analysing the RMSEA isolated, it is generally reported as a well-fitting model as the lower limit is close to 0 while the upper limit should be less than 0.08 (Hooper *et al.*, 2008), which was the case. Hence, there is an overall acceptable model-data fit for the model under study.

6.7 Hypothesis Testing and Discussion

Model fit estimates enable empirical tests of hypotheses. Figure 6.2 shows the estimated standardized path coefficients between the four constructs under investigation. All the estimated path coefficients were significant at $p = 0.000$ with the direction of influence as hypothesized. Following the recommendations from Hair *et al.* (2010) with the standardized path coefficients ranging from 0.13 to 0.65, it can be concluded that all the hypothesis (with the exception of H3b) are supported as shown in table 7. Using also the recommendations from Cohen (1987), standardized path coefficients with values less than 0.1 are considered small, those with less than 0.3 are medium, values with 0.5 or more are considered large. Table 6.6 summarizes the main results from hypothesis testing, detailing which hypothesis where supported and which were not.

Hypothesis	Standardized Coefficient (SC)	T-Values	Hypothesis Support
H1a: CSC → Trust	0.40*	2.62	Supported
H1b: CSC → Access	0.34*	3.84	Supported
H2: CSC → PSA	0.65*	13.81	Supported
H3a: PSA → Trust	0.42*	4.14	Supported
H3b: PSA → Access	0.21	-0.34	Not Supported
H4a: CSC → Righteousness	0.32*	7.87	Supported
H4b: CSC → Opportunity	0.13*	2.91	Supported
H5a: Righteousness → Trust	0.18*	2.42	Supported
H5b: Righteousness → Access	0.18*	3.44	Supported
H6a: Opportunity → Trust	0.17*	4.01	Supported
H6b: Opportunity → Access	0.22*	5.08	Supported

*Significant at the 5% Level

Table 6.6: Results from hypothesis testing: standardized coefficients, t-values and hypothesis support.

The results of this study confirmed that consumers that are sustainable conscious are prone to build an intention to purchase sustainably, as expected. CSC plays a stronger purchase intention effect through trust (H1a) than through accessibility (H1b), meaning that it is more important to be sure of consuming a product that is socially, economically and environmentally responsible, than to be able to buy it next door or for a cheaper price.

Most importantly, the findings show consumers' sustainability consciousness, impacts in a more positive way the perception of Products with Sustainable Attributes (H2) than Sustainable brand attitudes (H4a and H4b). This means, that a conscious consumer will have a stronger link with a product with the right certifications or attributes than with a brand that claims to be sustainable. Nevertheless, D'Souza *et al.* (2007) states that it is still difficult to predict accurately consumers' reactions to green products, which in turn might contribute to the failure of green products development, as businesses are not able to development new targeting and segmenting strategies properly. This does not mean that brand attitudes are not relevant, but we can just confirm by analysing the findings that CSC as a greater impact on positively perceiving products with sustainable attributes (H2) than perceiving brand attitudes as righteousness (H4a), and even less as opportunistic (H4b). Thus, consumers that are sustainably conscious are searching for the right products that can substitute the "regular" ones before intending to buy sustainably.

Once conscious consumers have found the appropriate products, they intend to purchase sustainably through trust (H3a) rather than accessibility (H3b) since this hypothesis was rejected. This means that after understanding that the product meets its needs, comes trust to close the circle of purchase intention rather than from a functional type of purchase through price or availability.

Curiously, when the consumer perceives the brand attitudes as righteousness, he or she will keep the purchase intention point of view, either through trust (H5a) or accessibility (H5b). This is not the case when the consumer perceives the brand as opportunistic and will probably intend to buy it if from a more functional perspective (via good pricing or availability; H6b). When the first impression of brand attitude is already biased and negative, it becomes more difficult for the consumer to intend to purchase through the dimension of trust (H6a).

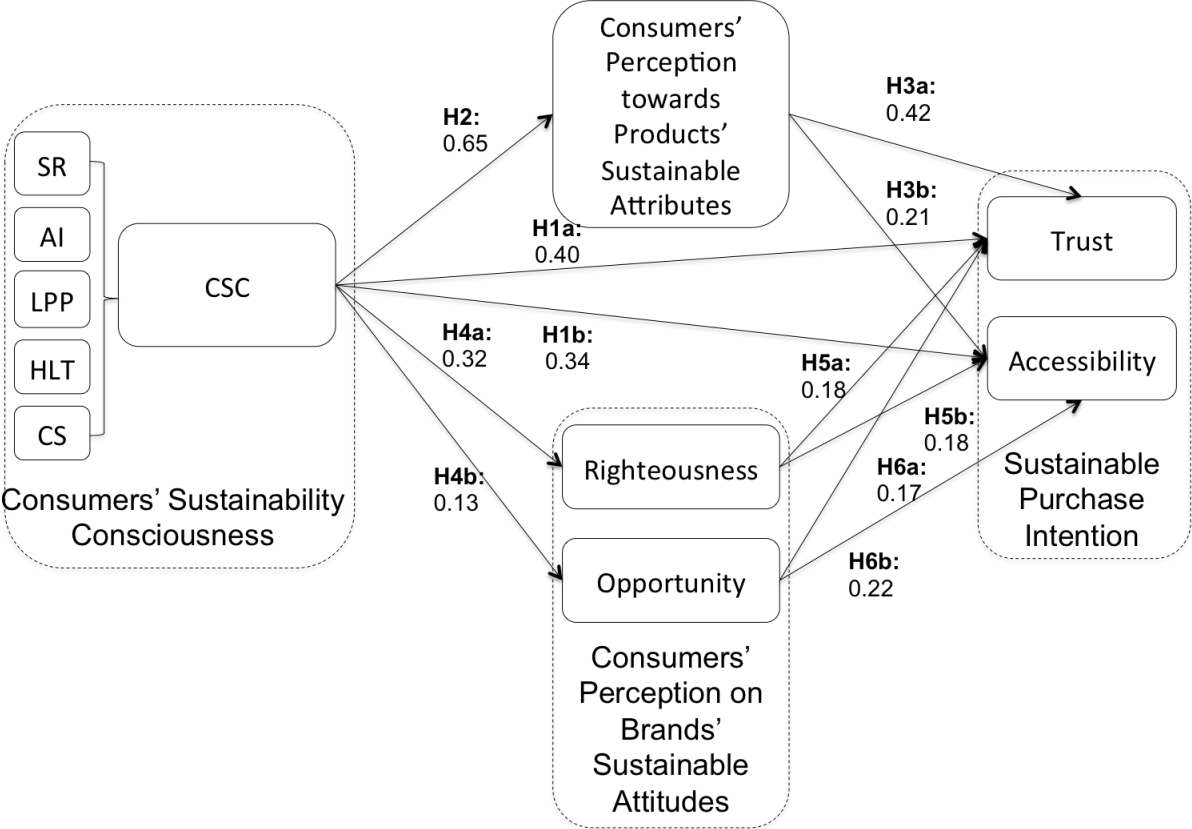


Figure 6.2: Proposed CSC model, with estimated paths coefficients in a standardized solution.

6.8 Main Conclusions, Limitations and Recommendations

Based on the results, the CSC Model proposed in this study was developed and measured with success. There was strong evidence that gave insights into how triggers that awake consumers for a new parading of choices impact intention to purchase green or socially responsible products. Therefore, it substantiates the claim that multiple constructs and dimensions lie behind sustainable consumer behaviour. With all these in mind, it's of main understanding that the ways and paths to intend to consume sustainably are diverse, but they seem to be entangled in a coherent way. Moreover the constructs and hypotheses present us with an overview of the process of sustainable product consumption and its major influencing factors. The originality of the proposed model therefore appears to be presented broadly enough to include the integrated "Triple Bottom Line" perspective, whilst at the same time specifically enough to be accurate regarding the main drivers to a sustainable consumption.

Managers should have in consideration that it is more important to launch a portfolio with the desired sustainable products attributes than to develop a sustainably sound brand. This means that at this stage of the market that there is still the need to bring to market products that can have the potential to substitute the "unsustainable" ones. The findings also showed that it is more relevant for consumers to perceive brand attitudes as righteous than as opportunistic. Even though this might sound common sense, it brings a good reinforcement and reminder that brands need to build claims grounded on truth rather than on the emptiness of vague promises of a "sustainable" product. Brands make more carefully considerations on their wider social and environmental responsibilities as a result of the change in consumer consciousness on sustainability. This happens as a result of not only altruistic reasons, but due to the fact that the potential impact of their policies on consumer relationships must be considered.

Nevertheless, despite the view consumers might have about the proposed two dimensions of brand sustainable attitudes (righteousness and opportunity), this fact doesn't change much their purchase intention. On the contrary, if consumers perceive that products have sound sustainable attributes, this appears to them as a much more relevant factor to purchase sustainably, especially through trust rather than through accessibility. Given the strength of the overall findings, this study should be particularly helpful to managers who are responsible for launching sustainable products and services.

6.8.1 Limitations

One should note that what is often referred to as *ethical* in the literature, is in this study referred to as *sustainable*, for the sake of simplicity of terms. It was also not that straightforward to obtain consumers that have a sound knowledge of sustainability and that consume accordingly. In fact since the investigation concerns an emerging market, some extra difficulties occurred regarding sample gathering for data collection.

6.8.2 Research Contributions and Recommendation for Further Research

The current study puts forward two main research contributions. First, this study identifies consumer sustainable consciousness as a construct exerting a large influence on product sustainable attributes. Moreover, it has a direct impact on purchase intention of sustainable products by consumers, whereby trust receives higher influence than accessibility. Furthermore, consumer's sustainable consciousness impacts both righteousness and opportunity within the consumers' perception on brands sustainable attributes. Thus, consumers' sustainability consciousness shows to be a clearly important antecedent in explaining, directly and indirectly, intention to purchase sustainable products.

Second, our research brings up the role of sustainable product and brand attributes as mediator constructs, with the former emphasizing its impact on trust. The latter addresses the influence of both righteousness and opportunity on trust and accessibility.

Authors recommend the framework developed and the CSC model proposed in this paper are further investigated in future studies in order to increase the understanding of the topic across different cultures.

CHAPTER 7. Conclusions

New scales and insights are needed to provide a better understanding of this consumer consciousness raising. A new way to “look” at the market needs to evolve in order to better predict consumer needs and consumption trends. This research programme aimed to validate the presented Consumer’s Sustainable Consciousness Model that connects both consumers’ consciousness level, Brands sustainable attitudes and product sustainable attributes in a new consumption paradigm.

As for Consumer Sustainable Consciousness, 5 dimensions were identified where the results showed that individuals might start consuming sustainable products from many different perspectives and that the triggers for sustainable decision-making are influenced by many different factors: 1) Sense of Retribution: When people began looking at the effects their ecological footprints had on the people and planet as a whole, many consumers started searching for alternative products that would minimize the impact on our habitat; 2) Access to Information: The revolution the internet has brought to people’s lives came with the benefit of taking information to the most isolated places on the planet. As people became more informed, better consumption decisions started being made; 3) Labelling and Peer Pressure: As the more conscious consumer tends to search for more information during the purchasing process, labels and word-of-mouth appeared to be the most important means of gathering the necessary information and therefore leading the consumer to trust the product, as more and closer information means more transparency; 4) Health: New patterns of illnesses are affecting part of our population, giving public health practitioners the need to recognize the interdependence between sustainability of the environment and the human species. Those individuals who are becoming increasingly concerned with sustainability and improvements in quality of life are undergoing social and environmental changes within their lifestyles; and 5) Crisis Scenario: The socio-economic scenario that the world is currently facing directly impacts purchasing decisions. If today there is at least the perception of they’re being less money to spend, the consumer should be more cautious about where to spend it. Indeed, the price increase of so many products has led people to really choose between what is indispensable and what is not, becoming therefore, more sustainable as a whole.

Two main dimensions were found to be relevant for Brand Sustainable Attitudes in the whole process: 1) *Righteousness*: In most studies, a growing environmental consciousness among

consumers is clear, allowing for an overall positive attitude to affect brands that are seen as environmentally stable (Eagly and Kulesa, 1997). As Baker and Sinkula (2005) state: “*those adopting such a (true sustainable) approach would see environmental (and social) issues as market opportunities, be willing to take risk, make commitments (both financial and non-financial) that are substantial and visible, and possess a fundamental desire to do the right thing*”. We can therefore see that consumers truly believe in those brands that show themselves as honest and careful with people and the planet; and 2) *Opportunity*: If however, consumers become confused about brand attitudes and real intentions, a more negative perception may grow towards certain brands, which in turn could come about from a perceived trade-off between the brand’s functional attributes and environmental (or social) responsibility (Schlegelmilch et al., 1996). A “sustainable brand” is defined by a definitive selection of brand attitudes and benefits related to the reduced environmental and social impact of the brand and its being perceived as being sustainably sound. However if this is not immediately apparent to the consumer, the brand is not able to efficiently implement a true sustainable brand attitude, and should therefore not expect to provide benefits to sustainability conscious consumers. In addition to this, it is clear that consumers tend to create an emotional attachment to brands which they perceive are “doing-things-right”, and reject those that are not, such as those perceived to be opportunists.

The results also showed that individual consumers might intend to consume sustainable products based on two main dimensions, resulting in the following: 1) *Trust*: consumers need to know and trust the products before purchasing them, as there are many different layers of trust that range from understanding labelling, to positive past experiences or merely having the opportunity to try them before purchase. These factors build trust are therefore understandably important dimension of purchase intention. In addition, customers also tend to trust retailers that have a reputation for ethical conduct more others (Castaldo et al, 2009). As Boström and Klintman (2008) mention: “as conscientious consumers, we have become overwhelmed with alarms about food contamination, over-fishing, clear-felled forests, loss of biodiversity, climate change, chemical pollution, and other environmental and health-related risks”, reinforcing how consumers need to trust the products they are buying; and 2) *Accessibility*: There are many facets of accessibility within purchase intention such as product pricing, availability in stores, and being sold in a convenient proximity to home. It is clear that although a consumer trusts the origin and management of a certain product, if it is not readily available on shelves; is too expensive; or constantly out of stock, there will be no way

to intend to purchase it, as is the case for any other product in the market. Although this dimension may appear obvious or intuitive, no research in the literature was found to confirm it, so we consider this new dimension an original contribution for the academy.

Based on the results of the analysis, the Model in this study was successful in its development and measures. There was strong evidence that shone light on how triggers that awaken consumers to a new array of choices impact intention to purchase green or socially responsible products. It therefore substantiates the claim that numerous constructs and dimensions support sustainable consumer behaviour. Considering all the above, the ways and paths to intend to consume sustainably are diverse, but do seem to be entangled coherently. Moreover, corporations and strategists should start to look at the preservation of natural resources not selfishly (to maintain standards of comfortable living) but in a way that respects the whole ecosystem, with the knowledge that humans are merely one species amongst billions of others. If this notion is moved towards a corporate perspective, enterprises making this shift will move from a perspective of competition to cooperation (e.g., sharing know-how and knowledge, enabling corporations to create synergies to avoid waste on duplicated costs of several enterprises developing the same technology at the same time) and from price to value (e.g., valuing natural resources and including them on a quadruple balance sheet, allowing them to provide fair prices for products and services, allowing consumers to discern the right value of the goods they are purchasing. Brands have been made to consider their broader social and environmental responsibilities more carefully, as a result of changes in consumer consciousness on sustainability. This has happened not only because of altruistic reasons, but also due to the consideration of the potential impact their policies could have on consumer relationships. This should be even more pertinent during delicate economic climates (Lancey and Kennett-Hensel, 2010). Given the strength of the overall findings, this study should be particularly helpful to managers who are responsible for demonstrating how conscious consumers' impact purchase intention.

7.1 - Research Contribution

The contribution of the current study resides in bringing out a new conceptual model that is presented uniting consumers perspectives/inputs on sustainability at its triple bottom line (environmental, economic and social) are analysed together in the same model. In this sense, the gap identified in the literature regarding this topic is minimized with the development and measurement of this new model.

7.2 - Managerial Implications

What is believed in this study is that the purpose of a sustainable marketing strategy is to integrate goals, policies and actions into a coherent whole organization that provides products and services that can indeed meet consumers' real needs, while respecting the environment and society as a whole. In this sense, one of the pre-requisites for a paradigm shift to strategic sustainability is to view employees as having both instrumental and intrinsic value, rather than as liabilities (Drucker, 2002). Simply stated, without qualified, motivated, dedicated, well-trained, and well-led employees, strategic sustainability will not succeed (Borland, 2009).

Due to the fact that sustainability is still an emerging market, the educating of the consumer about certifications of sustainable products would help clarify what is being consumed and what value a particular product is contributing to society. It is equally important nevertheless, to intensify the dissemination of these products beyond the necessary development of sustainable products, in order to inform consumers about what a sustainable product is, its main characteristics and attributes in order to impact usual consumption behaviour.

7.3 Limitations

Since this study researches an emerging topic, it was not that straightforward to obtain a sample of consumers that have a sound knowledge of sustainability and that consume accordingly. This limitation brought about some extra difficulties in terms of sample gathering. Also, since we used a sample of convenience using a snowball technique, the results cannot be generally applied to a larger population.

It is to be noted that most of the literature review was based on either the environmental, social or economic parts of sustainability instead of the “triple bottom line” approach as expected. Even in the ethics stream of research (contemplating environmental and social perspectives), the integrated view was not straightforward in the literature.

7.4 Recommendations for Further Research

The sustainability consciousness process of purchase intention framework developed here is recommended to be followed through by further studies examining the perception of the topic across cultures.

References

- Aaker, D.A. and E. Joachimsthaler (2000), The brand relationship spectrum, *California Management Review* 42(4), 8-23.
- Aaker, J.L. (1997), Dimensions of brand personality, *Journal of Marketing Research* 34, 347-356.
- Amaratunga, D., D. Baldry, M. Sarshar and R. Newton (2002), Quantitative and qualitative research in the built environment: application of “mixed research approach”, *Work Study* 51(1), 17-31.
- Anderson Jr, W.T. and W.H. Cunningham (1972), The socially conscious consumer, *The Journal of Marketing* 36(3), 23-31.
- Auger, P., Burke, P., Devinney, T. M. and Louviere, J. J. (2003), What will consumers pay for social product features?, *Journal of Business Ethics* 42, 281-304.
- Bagozzi, R.P. and R.E. Burnkrant (1979), Attitude organization and the attitude–behavior relationship, *Journal of Personality and Social Psychology* 37(6), 913.
- Baker, M. J. (2001), Selecting a research methodology, *The Marketing Review* 1, 373-397.
- Baker, M.J. (2002), Sampling, *The Marketing Review* 3(1), 103-120.
- Baker, W.E. and J.M. Sinkula (2005), Environmental marketing strategy and firm performance: effects on new product performance and market share, *Journal of the Academy of Marketing Science* 33(4), 461-475.
- Barnett, C, Cloke, P, Clarke, N, & Malpass, A 2005, 'Consuming Ethics: Articulating the Subjects and Spaces of Ethical Consumption', *Antipode*, 37, 1, pp. 23-45, Academic Search Complete, EBSCOhost, viewed 4 April 2015.
- Bennet, A. (2005), *Exploring aspects of knowledge management that contribute to the passion expressed by its thought leaders (online)*, retrieved December, 03, 2012, from www.mountianquestinstitute.com
- Bennet, A. and D. Bennet (2008), Moving from knowledge to wisdom, from ordinary consciousness to extraordinary consciousness, *VINE: Very Informal Newsletter on Library Automation* 38(1), 7-15.
- Berkowitz, L. and K.G. Lutterman (1968), The traditional socially responsible personality, *Public Opinion Quarterly* 32(2), 169-185.
- Berkowitz, L. and L.R. Daniels (1964), Affecting the salience of the social responsibility norm: effects of past help on the response to dependency relationships, *The Journal of Abnormal and Social Psychology* 68(3), 275-281.
- Bezençon, V. and S. Blili (2010), Ethical products and consumer involvement: what's new? *European Journal of Marketing* 44(9/10), 1305-1321.

- Bhattacharya, C.B. and Sen, S. (2003), Consumer- Company Identification: A Framework for Understanding Consumers' Relationships with Companies, *Journal of Marketing* 67, 76-88.
- Bollen, K.A. (1989), *Structural equations with latent variables*. New York, NY: Wiley.
- Borland, H. (2009), Conceptualising global strategic sustainability and corporate transformational change, *International Marketing Review* 26(4/5), 554-572.
- Boström, M. and M. Klintman (2008), *Eco-standards, product labelling and green consumerism*. New York, NY: Palgrave Macmillan.
- Bredahl, L. (2001), Determinants of consumer attitudes and purchase intentions with regard to genetically modified food—results of a cross-national survey, *Journal of Consumer Policy* 24(1), 23-61.
- Brown, V., J. Grootjans, J. Ritchie, M. Townsend and G. Verrinder (eds.), (2005), *Sustainability and Health: Supporting global ecological integrity in public health*. London, UK: Earthscan.
- Brundtland, G.H. (1987), Report of the World Commission on environment and development: Our common future, *Transmitted to the General Assembly as an annex to document A/42/427 – Development and International Co-operation: Environment (online)*, retrieved November, 02, 2012, from <http://www.un-documents.net/wced-ocf.htm>
- Calomarde, J.V. (2000), *Marketing ecológico*. Madrid, Spain: Pirámide.
- Carvalho, B., Salgueiro, M.F. and Rita, P. (2015b), Consumers' Perception on Sustainability Purchase Intention, *working paper*, ISCTE-IUL, Business Research Unit (BRU-IUL), Lisbon, Portugal.
- Carvalho, B., Salgueiro, M.F. and Rita, P. (2015c), The Two Dimensions of Consumers' Perception towards Sustainable Brand Attitudes, *working paper*, ISCTE-IUL, Business Research Unit (BRU-IUL), Lisbon, Portugal.
- Castaldo, S., F. Perrini, N. Misani and A. Tencati (2009), The missing link between corporate social responsibility and consumer trust: The case of fair trade products, *Journal of Business Ethics* 84(1), 1-15.
- Cattell, R.B. (1966), The scree test for the number of factors, *Multivariate Behavioral Research* 1(2), 245-276.
- Chan, R.Y.K. (2001), Determinants of Chinese consumers green purchase behaviour, *Psychology and Marketing* 18(4), 389-413.
- Chan, R.Y.K. and E. Ysm (1995), Green movement in a newly industrializing area: A survey on the attitudes and behaviour of the Hong Kong citizens, *Journal of Community and Applied Social Psychology* 5(4), 273-284.
- Chase, D. (1991), The green revolution: P&G gets top marks in AA survey, *Advertising Age* 62(5), 8-10.

- Chen, Y.S. (2008), The driver of green innovation and green image-green core competence, *Journal of Business Ethics* 81(3), 531-543.
- Churchill Jr.G.A. (1979), A paradigm for developing better measures of marketing constructs, *Journal of Marketing Research* 16, 64-73.
- Cohen, B. (1987), Some observations on rating scales, *Marketing Review* 42(4), 25–27.
- Crane, A. (2001), Unpacking the ethical product, *Journal of Business Ethics* 30(4), 361-373.
- D'Souza, C., Taghian, M. and Khosla, R. (2007), Examination of environmental beliefs and its impact on the influence of price, quality and demographic characteristics with respect to green purchase intention, *Journal of Targeting, Measurement and Analysis for Marketing* 15(2), 69-78.
- D'Souza, C., Taghian, M. and Lamb, P. (2006), An empirical study on the influence of environmental labels on consumers, *Corporate Communications: An International Journal* 11(2), 162-173.
- D'Souza, C. (2000), Bridging the communication gap: dolphin-safe “ecolabels”, *Corporate Communications: An International Journal* 5(4), 185-190.
- De Carvalho, B. L., de Fátima Salgueiro, M., & Rita, P. (2015). Consumer Sustainability Consciousness: A five dimensional construct. *Ecological Indicators*, 58, 402-410.
- De Ruyter, K. and N. Scholl (1998), Positioning qualitative market research: Reflections from theory and practice, *Qualitative Market Research: An International Journal* 1(1), 7-14.
- Drucker, P.F. (2002), They're not employees, they're people, *Harvard Business Review* 80(2), 70-77.
- Eagly, A.H. and P. Kulesa (1997), Attitudes, attitude structure, and resistance to change, *Environment, Ethics, and Behavior*, 122-153.
- Eagly, A.H. and S. Chaiken (1993), *The Psychology of Attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich.
- Edwards, J.R. and R.P. Bagozzi (2000), On the nature and direction of relationships between constructs and measures, *Psychological Methods* 5(2), 155-174.
- Eisenhardt, K.M. and M.E. Graebner (2007) Theory building from cases: Opportunities and challenges, *Academy of Management Journal* 50(1), 25-32.
- Fine, B. (2001), *Social capital versus social theory: Political economy and social science at the turn of the millennium*. London, UK: Routledge.
- Finn, A. and U. Kayande (1997), Reliability assessment and optimization of marketing measurement, *Journal of Marketing Research* 34(2), 262– 275.
- Finn, A. and U. Kayande (2005), How fine is C-OAR-SE? A generalizability theory perspective on Rossiter's procedure, *International Journal of Research in Marketing* 22(1), 11-21.

- Folkes, V.S. and M.A. Kamins (1999), Effects of information about firms' ethical and unethical actions on consumers' attitudes, *Journal of Consumer Psychology* 8(3), 243-259.
- Fraj, E. and E. Martinez (2006), Environmental values and lifestyles as determining factors of ecological consumer behaviour: An empirical analysis, *Journal of Consumer Marketing* 23(3), 133-144.
- Francis, J.E. (2009), Category-specific RECIPES for internet retailing quality, *Journal of Services Marketing* 23(7), 450-461.
- Garling, T., S. Fujii, A. Garling and C. Jakobsson (2003), Moderating effects of social value orientation on determinants of pro-environmental behavior intention. *Journal of Environmental Psychology* 23, 1-9.
- Gilg, A., Barr, S. and Ford, N. (2005), Green consumption or sustainable lifestyles? Identifying the sustainable consumer, *Futures* 37(6), 481-506.
- Glavič, P. and R. Lukman (2007), Review of sustainability terms and their definitions, *Journal of Cleaner Production* 15(18), 1875-1885.
- Gore, A. (2006), *An inconvenient truth: The planetary emergency of global warming and what we can do about it*, New York, NY: Rodale.
- Grappi, S., Romani, S., & Bagozzi, R. P. (2013). Consumer response to corporate irresponsible behavior: Moral emotions and virtues. *Journal of business research*, 66(10), 1814-1821.
- Hair, J.F., W.C. Black, B. J. Babin, and R.E. Anderson (2010), *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hart, S.L. (1997), Beyond greening: Strategies for a sustainable world, *Harvard Business Review* 75(1), 66-76.
- Hooper, D., J. Coughlan and M; Mullen (2008), Structural equation modelling: Guidelines for determining model fit, *Electronic Journal of Business Research Methods* 6(1), 53-60.
- Hu, L.T. and P.M. Bentler (1999), Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives, *Structural Equation Modeling: A Multidisciplinary Journal* 6(1), 1-55.
- Jackson, T. and Michaelis, L. (2003): *Sustainable Consumption & Production, Economic, Regeneration*. London: Sustainable Development Commission.
- Jöreskog, K. G., & Sörbom, D. (2006). LISREL 8.80 for Windows [Computer software]. *Lincolnwood, IL: Scientific Software International*.
- Kaiser, H.F. (1960), The application of electronic computers to factor analysis, *Educational and Psychological Measurement* 20, 141-151.
- Kanter, R.M. (2008), Transforming giants, *Harvard Business Review* 86(1), 43-52.

- Kassarjian, H.H. (1971), Personality and consumer behavior: A review, *Journal of Marketing Research* 8, 409-418.
- Kucuk, S.U. (2010), Negative double jeopardy revisited: A longitudinal analysis, *Brand Management* 18(2), 150-158.
- Lacey, R. and P.A. Kennett-Hensel (2010), Longitudinal effects of corporate social responsibility on customer relationships, *Journal of Business Ethics* 97(4), 581-597.
- Lee, K. (2008), Opportunities for green marketing: Young consumers, *Marketing Intelligence and Planning* 26(6), 573-586.
- Lehner, M. and S. Vaux Halliday (2014), Branding sustainability: Opportunity and risk behind a brand-based approach to sustainable markets, *Ephemera* 14(1), 13-34.
- Madrigal, R. and Boush, D.M. (2008), Social responsibility as a unique dimension of brand personality and consumers' willingness to reward, *Psychology and Marketing* 25(6), 538-564.
- Maignan, I., and Ferrell, O. C. (2004), Corporate social responsibility and marketing: An integrative framework, *Journal of the Academy of Marketing Science*, 32(1), 3-19.
- Maiteny, P.T. (2002), Mind in the gap: Summary of research exploring 'inner' influences on pro-sustainability learning and behavior, *Environmental Education Research* 8(3), 299-306.
- Malhotra, N.K., J. Hall, M. Shaw and P.P. Oppenheim (2004), *Essentials of marketing research: An applied orientation*. Prentice Hall, Harlow, Essex, UK: Pearson Education.
- Maloney, M.P. and M.P. Ward (1973), Ecology: Let's hear from the people: An objective scale for the measurement of ecological attitudes and knowledge, *American Psychologist* 28(7), 583-586.
- Mandese, J. (1991), New study finds green confusion, *Advertising Age* 62(45), 1-56.
- Marin, L., Ruiz, S. and Rubio, A. (2009), The role of identity salience in the effects of corporate social responsibility on consumer behavior, *Journal of Business Ethics*, 84, 65-78.
- McEachern, M. G., Warnaby, G., Carrigan, M. and Szmigin, I. (2010), Thinking locally, acting locally? Conscious consumers and farmers' markets, *Journal of Marketing Management* 26(5), 395-412.
- Menon, A. and A. Menon (1997), Environmental marketing strategy: The emergence of corporate environmentalism as market strategy, *The Journal of Marketing* 61, 51-67.
- Mihelcic, J.R., Crittenden, J.C., Small, M.J., Shonnard, D.R., Hokanson, D.R., Zhang, Q., Chen, H., Sorby, S.A., James, V.U., Sutherland, J.W., Schnoor, J.L., 2003. Sustainability science and engineering: the emergence of a new metadiscipline. *Environ. Sci. Technol.* 37, 5314e5324.

- Miles, M. and A. Huberman (1994), *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks: Sage Publications.
- Minton, A.P. and R.L. Rose (1997), The effects of environmental concern on environmentally friendly consumer behavior: An exploratory study, *Journal of Business Research* 40(1), 37-48.
- Mitchell, A.A. and J.C. Olson (1981), Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research* 18, 318-332.
- Moisander, J., and Pesonen, S. (2002), Narratives of sustainable ways of living: Constructing the self and the other as a green consumer, *Management Decision*, 40(4), 329-342.
- Morris, L.A., M. Hastak and M.B. Mazis (1995), Consumer comprehension of environmental advertising and labeling claims, *Journal of Consumer Affairs* 29(2), 328-350.
- Mostafa, M.M. (2007), A hierarchical analysis of the green consciousness of the Egyptian consumer, *Psychology and Marketing* 24(5), 445-473.
- Myers, G. and P. Macnaghten (1998), Rhetorics of environmental sustainability: commonplaces and places, *Environment and Planning A* 30(2), 333-353.
- Navas-Sabater, J., A. Dymond and N. Juntunen (2002), *Telecommunications and information services for the poor: Toward a strategy for universal access*. Washington, DC: The World Bank.
- Ostrom, T.M. (1969), The relationship between the affective, behavioral, and cognitive components of attitude, *Journal of Experimental Social Psychology* 5(1), 12-30.
- Ottman, J.A. (1994), *Green marketing: Opportunity for innovation*. Lincolnwood, IL: NTC Business Books.
- Peattie, K. (1995), *Environmental marketing management: Meeting the green challenge*. London, UK: Pitman.
- Peattie, K. and A. Crane (2005), Green marketing: Legend, myth, farce or prophesy? *Qualitative Market Research: An International Journal* 8(4), 357-370.
- Placet, M., R. Anderson and K.M. Fowler (2005), Strategies for sustainability, *Research-Technology Management* 48(5), 32-41.
- Pogutz, S. & Micale, V. 2011, "Sustainable consumption and production", *Society and Economy*, vol. 33, no. 1, pp. 29-50.
- Porter, M.E. and M.R. Kramer (2011), Creating shared value, *Harvard Business Review* 89(1/2), 62-77.
- Rego, A., S. Leal, M.P. Cunha, J. Faria, and C. Pinho (2010), How the perceptions of five dimensions of corporate citizenship and their inter-inconsistencies predict affective commitment, *Journal of Business Ethics* 94(1), 107-127.
- Reisinger, Y. and L. Turner (1999), Structural equation modeling with LISREL: Applications in tourism, *Tourism Management* 20, 71-88.

- Roberts, J. (1996), Green consumers in the 1990's: Profile and implications for advertising, *Journal of Business Research* 36, 217-231.
- Rossiter, J.R. (2002), The C-OAR-SE procedure for scale development in marketing, *International Journal of Research in Marketing* 19(4), 305-335.
- Salgado Beltrán, L. and A.M.G. Lafuente (2005), Models for analyzing purchase decision in consumers of ecologic products, *Fuzzy Economic Review* 10(1), 47-61.
- Sanchez, M., I. Grande, J.M. Gil and A. Rodriguez (1998), Evaluación del potencial de mercado de los productos de agricultura ecológica, *Revista Española de Investigación de Marketing ESIC* 2(1), 135-50.
- Schlegelmilch, B.B., G.M. Bohlen. And A. Diamantopoulos (1996), The link between green purchasing decisions and measures of environmental consciousness, *European Journal of Marketing* 30(5), 35-55.
- Schumacher, E.F. (1973), *Small is beautiful: Economics as if people mattered*. Evanston, IL: Harper and Row.
- Schumacker, R.E. and R.G. Lomax (2012), *A beginner's guide to structural equation modeling* (3rd ed.). New York, NY: Routledge Academic.
- Sharma, S. and H. Vredenburg (1998), Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities, *Strategic Management Journal* 19(8), 729-753.
- Shaw, D. and E. Shiu (2003), Ethics in consumer choice: A multivariate modelling approach, *European Journal of Marketing* 37(10), 1485-1498.
- Spears, N. and S.N. Singh (2004), Measuring attitude toward the brand and purchase intentions, *Journal of Current Issues and Research in Advertising* 26(2), 53-66.
- Spiggle, S. (1994), Analysis and interpretation of qualitative data in consumer research, *The Journal of Consumer Research* 21(3), 491-503.
- Tabachnick, B.G. and L.S. Fidell (2007), *Using multivariate statistics* (5th ed.text rev.). Boston, MA: Allyn and Bacon.
- Teas, R.K. and K.M. Palan (1997), The realms of scientific meaning framework for constructing theoretically meaningful nominal definitions of marketing concepts, *The Journal of Marketing* 61, 52-67.
- Tourangeau, R., L.J. Rips and K. Rasinski (2000), *The psychology of survey response*. Cambridge, UK: Cambridge University Press.
- United Nations, 2005. 2005 World Summit Outcome. Resolution A/60/1. United Nations General Assembly.
- Valor, C. (2005), Corporate social responsibility and corporate citizenship: Towards corporate accountability, *Business and Society Review* 110(2), 191-212.
- Vermillion, L.J. and Peart, J. (2010), Green marketing: Making sense of the situation,

Proceedings of the Academy of Marketing Studies 15(1), 68-72.

- Wendorfer, C. (2002), Comparisons of structural equation modeling and hierarchical linear modeling approaches to couples' data, *Structural Equation Modeling* 9, 126-140.
- Wheaton, Blair, Bengt Muthen, Duane F.A. and Gene F.S. (1977), Assessing reliability and stability in panel models, in David Heise (ed.), *Sociological methodology*. San Francisco, CA: Jossey-Bass, PAGINAS.
- Wierenga, B. and G. Van Bruggen (2000), *Marketing management support systems: principles, tools and implementation*. Boston, MA: Kluwer Academic Publishers.
- Wilson, A. (2003), *Marketing research: an integrated approach*. New York, NY: Prentice Hall/Financial Times.
- Wind, Y. (1978), Issues and advances in segmentation research, *Journal of Marketing Research* 15(3), 317-338.
- Wong, V., W. Turner and P. Stoneman (1996), Marketing strategies and market prospects for environmentally-friendly consumer products, *British Journal of Management* 7(3), 263-81.
- Young, J.E. (2002), A spectrum of consciousness for CEOs: A business application of ken wilber's spectrum of consciousness, *International Journal of Organizational Analysis* 10(1), 30-54.

Appendices



Instituto Universitário de Lisboa

INTERVIEW GUIDE
CONSUMER

1. Filtros

Filtro 1	Tem mais de 18 anos?	- Sim: Entrevista - Não: Fim de Entrevista
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2. Guiding principles

– Warm-up / questão inicial

Estamos a fazer um estudo sobre produtos sustentáveis junto da população nacional para percebermos melhor as características e necessidades dos consumidores. Para tal estamos a usar um método directo, o que significa que eu não vou colocar questões específicas sobre este tema como num questionário normal.

Após a questão inicial, que eu vou colocar seguidamente, poderá livremente falar tudo aquilo que entender sobre este assunto.

Se não se importar vou gravar esta entrevista, que terá uma duração máxima de 30 minutos.

A minha questão é:

1. “O que representa para si um produto sustentável?”

– Tópicos a desenvolver:⁵

Sustentabilidade

- Como define sustentabilidade?

- Consome regularmente produtos sustentáveis?

⁵ Tópicos assinalados com * tratam-se de tópicos forçados pelo entrevistador caso o entrevistado não se refira a eles espontaneamente.

- Marcas sustentáveis que conheça?

Hábitos de Sustentabilidade

- Constuma ter preocupações ambientais (ex: comprar produtos cujas embalagens se possam reciclar; redução de desperdícios; etc...)?
- Constuma ter preocupações sociais (ex: não compra produtos que sabe que são obtidos através de mão-de-obra infantil; etc...)?

Produto em Si *

- Quando compra produtos sustentáveis, são importantes as certificações (ex: biológico; comércio justo; etc...)?
- Lê com atenção o que está escrito nos rótulos?
- O que é mais importante para si no processo de compra?

Barreiras ao consumo *

- Quais os motivos que sente que os que o (a) impedem de comprar mais produtos sustentáveis? Preço? Não sabe onde os encontrar? Surpreende-se muitas vezes e descobre que não conhecia antes?
- O que o faria comprar mais produtos sustentáveis?

Desenvolvimento Pessoal

- Faz alguma prática de desenvolvimento pessoal? (ex: yoga; reiki; coaching; meditação; etc..)?
- Conhece ou participa em métodos alternativos sociais? (ex: permacultura; ecovilas; etc)?

Appendix B. List of Interview Records

Interviews
1 - Andreza Cunha, Age 35, Gender: Female Date: 23 April 2012. Method: Skype interview
2 - Carolina Cruz, Age 25, Gender: Female Date: 23 April 2012. Method: Skype interview
3 - Ana Infante, Age 34, Gender: Female Date: 23 April 2012. Method: Skype interview
4 - Elsa Pereira, Age 33, Gender: Female Date: 23 April 2012. Method: Skype interview
5 - Filipe Alves, Age 27, Gender: Male Date: 24 April 2012. Method: Face-to-Face interview
6 - Gil Penha-Lopes, Age 31, Gender: Male Date: 24 April 2012. Method: Skype interview
7 - João Brito, Age 42, Gender: Male Date: 24 April 2012. Method: Skype interview
8 - Jorge Alves, Age 67, Gender: Male Date: 24 April 2012. Method: Face-to-Face interview
9 - Leonor Moreira, Age 65, Gender: Female Date: 24 April 2012. Method: Face-to-Face interview
10 - Manuel Trindade, Age 36, Gender: Male Date: 24 April 2012. Method: Skype interview
11 - Manuel Vital, Age 34, Gender: Male Date: 25 April 2012. Method: Skype interview
12 - Margarida do Campo, Age 29, Gender: Female Date: 26 April 2012. Method: Skype interview
13 - Margarida Petinga, Age 38, Gender: Female Date: 26 April 2012. Method: Skype interview
14 - Paula Monteiro, Age 47, Gender: Female Date: 27 April 2012. Method: Face-to-Face interview
15 - Paula Ribeiro, Age 35, Gender: Female Date: 27 April 2012. Method: Skype interview
16 - Rita Rapazote, Age 28, Gender: Female Date: 28 April 2012. Method: Phone interview
17 - Roberto Videira, Age 33, Gender: Male Date: 28 April 2012. Method: Skype interview
18 - Sara Duarte, Age 35, Gender: Female Date: 28 April 2012. Method: Skype interview
19 - Teresa Leal, Age 37, Gender: Female Date: 1 May 2012. Method: Skype interview
20 - António Carvalho, Age 73, Gender: Male Date: 1 May 2012. Method: Face-to-Face interview

Table B.1 – List of respondents of in-depth interviews

Note: All the interviews were recorded digitally in Portuguese but not transcribed into English (see digital file).

Appendix C. List of Main Quotations and Qualitative Outcomes

Topics Analysis

Sustainable Products Perception (I)

<ul style="list-style-type: none">• biológico• qualidade• fraca disponibilidade• saudável• Independência (energética; alimentar)• Mais caros em média• Equilibrado• Minimo de toxicos• Pouca energia gasta na produção• Nao testados em animais	<p>“Produtos (biológicos) com outra qualidade que nós nem sempre temos no nosso mercado” (Female Participant, 36yo) Andresa</p> <p>“Um produto o mais saudável possível, (...) que evite desperdícios” (Female Participant, 34yo) Ana</p> <p>“São produtos habitualmente mais caros” (Female Participant, 34yo) Ana</p> <p>“Toda a cadeia desde a materia prima até ao consumidor final seja equilibrado, (...) e que no final da sua vida possa ser reutilizado ou reciclado” (Female Participant, 34yo) Elsa</p> <p>“É um produto que integra nele proprio um conjunto de características e de éticas. Que desde a sua concepção inicial e ao longo de todo o seu ciclo de vida, ate a sua propria re-utilização, é pensado tendo em conta (...) gestão de recursos, poluição, impacto humano e parte económica” (Male participante, 27yo) Filipe</p> <p>“Que haja um minimo de energia gasta na sua produção e o minimo de toxicos possivel ” (Male participante, 31yo) Gil</p> <p>“Um produto sustentável para mim tem que fazer a ligação do ecologico, economico e etico” (Female participante, 31yo) Margarida</p> <p>“Um produto que não teste em animais” (Female participante, 31yo) Margarida</p>
<ul style="list-style-type: none">• biológico• qualidade• fraca disponibilidade• saudável• Independência (energética; alimentar)• Mais caros em média• Equilibrado• Minimo de toxicos• Pouca energia gasta na produção• Caros	<p>“Ainda são produtos bastante caros” (Male Participant, 40yo) Jorge</p> <p>“A sustentabilidade é tb comprar aquilo que a gente necessita” (Male Participant, 40yo) Jorge</p> <p>“O consumidor nao vê o impacto das suas acções, e decisões de compra na big picture” (Male Participant, 36yo) Manuel</p> <p>“Para mim é importante a certificação, isto porque, por vezes fico com a noção que certas empresas e certas marcas, se aproveitam do nome biológico para passar uma mensagem ao consumidor de que é de facto muito biológico, que respeita o meio ambiente, e afinal está somente a aproveitar-se de uma palavra que toda a gente fala, e não tem certificação. E depois por tras utilizam metodos que não tem nada a ver com a parte biológica, protecção do meio ambiente e das pessoas.” (Female participante, 38yo) Margarida</p> <p>O Consumidor em geral está muito baralhado e nao sabe o que é isso da sustentabilidade” (Female participante, 38yo) Margarida</p>

- biológico
- qualidade
- fraca disponibilidade
- saudável
- Independência (energética; alimentar)
- Mais caros em média
- Equilibrado
- Mínimo de tóxicos
- Pouca energia gasta na produção
- Caros

"Nunca ninguém me alertou para essa situação (consumo sustentável), por isso nunca procurei. (...) Quando me começarem a dar essa informação, começarei a fazer" (Female Participant, 35yo) Paula

"Sinceramente não sei se compro produtos sustentáveis" (Female Participant, 28yo) Rita

"A maior parte das pessoas não sabe o que é que implica a sustentabilidade no consumo" (Female Participant, 28yo) Rita

"Nunca vi nada que chamasse à atenção (rotulos e certificações de sustentabilidade)" (Male Participant, 33yo) Roberto

Topics Analysis

Sustainable Habits – Food (I)

- frutas e legumes biológicos
- Produção própria
- Reciclagem (preocupação com as embalagens)
- Não escolher produtores altamente emissores de CO2
- Não escolher espécies em vias de extinção
- > disponibilidade

"Eu tenho a minha própria horta" (Female Participant, 25yo) Carolina

"Tento fazer uma escolha mais saudável para mim e para o ambiente (escolhendo biológico)" (Female Participant, 34yo) Ana

"Redução do consumo de carne (pelas emissões de CO2) e de peixe em vias de extinção" (Male Participant, 27yo) Filipe

"Estão mais disponíveis do que outro tipo de produtos" (Male Participant, 42yo) João

"Consumo alguns por produção própria" (Male Participant, 72yo) António

"Tenho a sorte de estar ligada a família com produção própria" (Female participante, 38yo) Margarida

"Ou o produto está muito destacado, ou passa despercebido (e não compro)" (Female Participant, 47yo) Paula

- preferencia por produtos locais
- evitar desperdício
- questões de saúde
- Falta de opções sustentáveis
- preocupações de saúde

"Prefiro comprar local a biológico (no caso dos biológicos serem importados)" (Male participante, 31yo) Gil

"Compro nas feiras de biológicos" (Male participante, 31yo) Gil

"Não comprar nunca em excesso para evitar desperdícios" (Male Participant, 27yo) Filipe

"Não como carne vermelha. (...) Faço a minha culinaria sempre que posso numa base vegetariana (por motivos de saúde)" (Male Participant, 67yo) Jorge

"Nota-se que há muito mais tendência para consumir produtos naturais" (Male Participant, 67yo) Jorge

"Nos doces não há opção, porque o sabor não é o mesmo. Ai é difícil tornar o produto sustentável" (Female Participant, 65yo) Leonor

"Tenho sempre a preocupação de perceber como é que determinado produto chegam até mim. Que recursos é que foram utilizados. (...) Leio os rotulos, procuro saber a origem e os metodos que foram utilizados no processo. Se os rotulos não estiverem bem claros, não compro. Se houver falta de informação, na duvida não compro." (Female participante, 38yo) Margarida

Topics Analysis

Sustainable Habits – Home and Personal Care

- Detergentes
- Shampoo
- Gel banho
- Biological as a bonus
- Reciclados
- Equivalencia de opções

"...tento usar produtos que de alguma forma usaram ingredientes sustentáveis" (Female Participant, 36yo) Carolina

"Vou à procura de uma (maquilhagem) que me fique bem, e se for biológico é um bonus. Ou seja, o meu método é que não está correcto. Eu deveria procurar de entre os biológicos aquele que me fica melhor, mas não é esse o meu *mindset* ainda" (Female Participant, 36yo) Carolina

"Já comprei para oferecer" (Male Participant, 67yo) Jorge

"Tudo o que seja reciclado eu tento comprar" (Male Participant, 67yo) Jorge

"Se eu encontrar um produto equivalente que tenha essa informação que me satisfaça, a minha investigação acaba ai. Nao vou procurar informação. Se eu claramente estiver a procura de um produto especifico e nao encontrar equivalencia, vou tentar informar-me." (Female participante, 31yo) Margarida

Topics Analysis

Sustainable Product Characteristics

• certificação	"...(presto) muita atenção ao rótulo, à produção, às origens" (Female Participant, 36yo) Andresa
• Origem dos ingredientes importante	"Gosto de saber que é certificado. Agrada-me." (Female Participant, 25yo) Carolina
• metodo de produção que respeite ambiente e comunidade	"Podemos estar a consumir um produto que seja biológico, e ele estar a ser produzido de forma não sustentável, bem como o método como é transportado. (...) Da mesma forma dizer que um produto de comércio justo é sustentável, é muito redutor (devido ao transporte de longas distâncias)" Male participante, 27yo) Filipe
• Produtos locais	"É um produto produzido localmente, (e) integrado na Natureza" (Male participante, 31yo) Gil
• Integrado na natureza	"O produto de uma maneira geral nota-se que é diferente" (Male Participant, 67yo) Jorge
• Qualidade	"Que nao venham daqueles paises que exploram os empregados, as crianças, etc..." (Female participante, 31yo) Margarida
• Etico	"Eu preferiria um produto portugues sem indicação de ser sustentavel, a um produto sustentavel de outro pais." (Female Participant, 28yo) Rita
• Informação	"Não se pode pedir às pessoas que gastem mais dinheiro, e de ir mais longe comprar os produtos se nao houver vantagens claras e acho que isso não é muito divulgado" (Female Participant, 28yo) Rita

Topics Analysis

Important Factors on Purchase Decision (I)

• Environment Protection	"Leio (os rótulos) mais do que um produto normal (...) sem dúvida" (Female Participant, 25yo) Carolina
• Informação nos rótulos	"Vem tudo embalado, o que para mim não é o ideal" (Female Participant, 34yo) Ana
• Muita embalagem	"(Preciso de) mais informação. (...) Não há muita divulgação" (Female Participant, 34yo) Elsa
• Disponibilidade	"O que importa é a disponibilização desses produtos nesses pontos de venda (supermercados e restaurantes)" Male participante, 27yo) Filipe
• Consciência	"Estamos numa fase de muito mais consciência relativamente a qualquer produto. (...) Estamos a fazer uma transição para uma nova consciência relativamente aos nossos atos de consumo." (Male participante, 27yo) Filipe
• Certificação	"Só dou importância à certificação, quando confio em quem a dá." (Male participante, 31yo) Gil
• Local	"Não compro nada que não seja nacional. Mesmo ao nível de detergentes, o 560 para mim é uma obrigatoriedade" (Male Participant, 27yo) Filipe
• Conveniencia	"O consumidor está sujeito aquilo que lhe aparece, e nao terá dificuldade em mudar os seus hábitos se notar que tem vantagem, que é melhor, mais saudavel e nao tão dispendioso" (Male Participant, 67yo) Jorge
• Nacional	

<ul style="list-style-type: none"> • Environment Protection • Informação nos rótulos • Muita embalagem • Disponibilidade • Consciência • Certificação • Local • Informação 	<p>"O indicado seria haver uma certificação ou algo que pudesse indicar que tem alguma sustentabilidade por tras e algumas normas e parametros de qualidade e sustentabilidade" (Male Participant, 67yo) Jorge</p> <p>"É importante haver a certificação, porque a certificação dá uma segurança ao consumidor. Se eu vir uma carne que tem um certificado de que o animal anda nos campos maravilhosos. Estamos a comer um alimento mais saudavel e isso dá-nos uma garantia. (...) Eu sei que é isenta de hormonas, isenta de quimicos, isenta de outros produtos que fazem cerscer os animais e que são nocivos para a saude." (Female Participant, 65yo) Leonor</p> <p>"É mais o comodismo de fazer as comprar todas num só local" (Male Participant, 36yo) Manuel</p> <p>"Quando eu penso em consumo sustentável, penso que esses produtos têm que estar com um preço competitivo, bem comunicados, no supermercado onde eu vou normalmente fazer as minhas compras" (Male Participant, 36yo) Manuel</p> <p>"(Informo-me) geralmente na internet onde há mais informações disponiveis, de facil acesso e rapidas" (Female participante, 31yo) Margarida</p>
<p>-Non consensual topic - Price:</p>	<p>"(...) o preço (baixo), é e será sempre essencial" (Male participante, 27yo) Filipe</p> <p>"O preço é um dos factores principais" (Male Participant, 67yo) Jorge</p> <p>"Mesmo sendo mais caro, valeria a pena por uma consciência civica" (Female Participant, 65yo) Leonor</p>
<ul style="list-style-type: none"> • Willing to pay more 	<p>"A diferença de qualidade não é justificativa para pagar mais caro. Na situação actual nao me posso dar a esse luxo de comprar as coisas mais caras para me sentir bem. É um bocado triste." (Male Participant, 36yo) Manuel</p>
<p>And...</p>	<p>"Mesmo que seja mais caro, acho que é uma questão de principio" (Male participante, 31yo) Gil</p>
<ul style="list-style-type: none"> • would by more if cheaper 	<p>"Se calhar (estes produtos) são um pouco mais caros, mas tem uma vantagem: só compramos aquilo que precisamos, não compramos as coisas em pacote ou ao kilo. Dá um pouco mais trabalho mas acaba por ser mais barato (por evitar o desperdício)" (Male Participant, 42yo) João</p>
<p>-Non consensual topic – Brand Trust:</p>	<p>"Ainda continua a ser muito caro porque acho que há uma grande exploração na area do marketing de ser biológico" (Female participante, 31yo) Margarida</p>
<ul style="list-style-type: none"> • Trust in Brand is very important 	<p>"Não sou muito apegado ao preço. Prefiro qualidade. (..) O que importa é a nossa saude. (...) é um custo que temos que ter" (Male Participant, 33yo) Roberto</p>
<p>-Non consensual topic – Brand Trust:</p>	<p>"A partir do momento em que eu sei que aquela marca é biológica, eu vou muito por aí. (...) mais do que se a embalagem é bonita ou feia." (Female Participant, 25yo) Carolina</p>
<ul style="list-style-type: none"> • Trust in Brand is very important 	<p>"Não ligo muito às marcas" (Female Participant, 34yo) Ana</p> <p>"A pessoa não compra weleda porque o pack é bonito, (...) compra porque acima de tudo tem a noção de que está a introduzir produtos naturais no seu corpo, e que aquele produto foi feito a pensar nas pessoas e a pensar no ambiente" (Male participante, 27yo) Filipe</p>
<p>And...</p>	<p>"Que as marcas fossem mais honestas e se virassem muito mais para os produtos naturais" (Male Participant, 67yo) Jorge</p>
<ul style="list-style-type: none"> • not relevant 	<p>"Ou eu vou para marcas que conheço e confio e sei que sao boas, ou então vou atraves da certificação" (Male Participant, 36yo) Manuel</p>
<ul style="list-style-type: none"> • not relevant 	<p>"O que me leva a comprar, são as carateristicas do produto. De onde vem, como é que foi feito, se tiver acesso a essa informação, e o preço também, atendendo à situação em que estamos, é importante" (Female participante, 38yo) Margarida</p>

Topics Analysis

Barreiras ao Consumo

- fraca distribuição
- Mais caros
- Falta de informação
- Não compreensão dos lineares
- Pouca informação nos media
- Processo gradual de integração
- Conveniência
- Não serem locais

"... deviam haver mais lojas. De produtos naturais, biológicas... (...) mais acesso." (Female Participant, 36yo) Andresa

"São muito mais caros" (Female Participant, 25yo) Carolina

"Nem todas as (lojas) têm isto simples de se olhar.(...) Acho que poderiam ter uma outra forma de expor estes produtos. Ajudar-me-ia bastante" (Female Participant, 25yo) Carolina

"Para comprar tenho que ir aos sitios grandes" (Female Participant, 25yo) Carolina

"É por etapas, é uma coisa que vai sendo gradual até por nem sempre está disponível. (...) teria que me deslocar para consumir" (Female Participant, 36yo) Ana

"Uma das principais barreiras (ao consumo) é e continua a ser, o preço, e acima de tudo a disponibilidade." (Male participante, 27yo) Filipe

"Muitos dos produtos são importados, (...) por isso chamar-lhe sustentáveis é muito relativo. Têm que ser transportados, têm que vir em packs, etc..." (Male participante, 27yo) Filipe

"Por uma questão de comodidade. Não me dei ao trabalho de ir provar outros produtos no mercado, e habituar-me a consumi-los como me habituei a consumir os outros" (Male Participant, 42yo) João

- fraca distribuição
- Mais caros
- Falta de informação
- Não compreensão dos lineares
- Pouca informação nos media
- Processo gradual de integração
- Conveniência
- Não serem locais

"Aqui na zona ainda não estão muito divulgados os produtos biológicos. (...) a maioria das pessoas não sabe o que isso é..." (Male Participant, 72yo) António

"É difícil identificar que produtos são sustentáveis no mercado" (Male Participant, 40yo) Jorge

"(Nao consumo) umas vezes talvez pelo preço, outras por nao saber se existem alguns produtos dessa gama que possam ser sustentáveis. (...) nao há alternativas" (Male Participant, 40yo) Jorge

"O sabor não é o mesmo. (...) não gosto, por isso não compro" (Female Participant, 65yo) Leonor

"Os produtos biológicos são um nicho muito pequeno com pouca distribuição, a distribuição ainda é muito pequenina" (Female Participant, 65yo) Leonor

"Com os meus horários, nunca tenho muita coisa aberta (lojas), e nas grandes superfícies não têm esses cuidados, e os produtos que têm são muito caros" (Female participante, 31yo) Margarida

"O Factor preço, é a primeira grande barreira" (Female participante, 38yo) Margarida

Topics Analysis

Sugestões I

- Shopping Sustentável / possibilidade de ser online
- Produção própria
- Produtores actuais reconverterem a sua produção para mais sustentável
- Transição sem fundamentalismo
- Consumir menos

“Acho que seria muito importante abrir um espaço em Lisboa, à semelhança de um shopping, um espaço onde só houvesse lojas sustentáveis. Era importante as pessoas unirem-se num único espaço para divulgar produtos sustentáveis” (Female Participant, 33yo) Elsa

“Num supermercado (“normal”) haver uma prateleira (/espaço) só com produtos sustentáveis. Ou mesmo online” (Female Participant, 33yo) Elsa

“Se eu pudesse, não consumia de todo. Produzia eu próprio.” (Male participante, 27yo) Filipe

“Vão haver empresas com os seus produtos altamente insustentáveis a tentar reinventar (...) os seus próprios produtos” (Male participante, 27yo) Filipe

“Ou viro fundamentalista e deixo de andar de carro, vou de volta para o campo e produzo os meus próprios alimentos, ou então assumo o compromisso de fazer uma transição (gradual)” (Male participante, 27yo) Filipe

“Não é só aquilo que consumimos, é também a quantidade do que consumimos. (...) termos noção de que não precisamos de consumir tanto” (Male participante, 27yo) Filipe

“(As marcas) deviam investir mais na ética e na parte ecológica, porque isto é de todos” (Female participante, 31yo) Margarida

- Uso colectivo de bens
- Comprar em 2ª mão
- Sampling
- Informação
- Promoção de feiras e encontros
- Zonas específicas em supermercados
- Consumo em comunidade
- Maior proximidade com produtores

“Ultimamente estou a tentar promover o uso colectivo dos produtos. Ou seja, uma máquina fotográfica que eu não utilizo 24h por dia, tal como computadores e afins, estou a tentar perceber como é que pode ser dado o uso colectivo para que estes produtos sejam ainda mais sustentáveis” (Male participante, 31yo) Gil

“Tento também comprar usado, mas de pessoas de confiança” (Male participante, 31yo) Gil

“Existem realmente outros produtos no mercado, (...) que só precisam de ser testados” (Male Participant, 42yo) João

“Tem que haver uma informação muito profunda” (Male Participant, 67yo) Jorge

“O lado do contacto pessoa-a-pessoa. Dar uma cara ao produto, dizer que é o agricultor X ou pessoa Y que faz aquilo, estabelece outra relação com o consumidor” (Male Participant, 36yo) Manuel

“Através de feiras e encontros, as marcas poderiam fazer o targeting dessa população e essa população também poderia conhecer essas marcas muito melhor” (Male Participant, 36yo) Manuel

“Uma linha de marca branca desses produtos. Uma cadeia de distribuição podia conseguir um posicionamento diferente com isso.” (Male Participant, 36yo) Manuel

- Mais informação nos lineares
- Integração de informação
- Mais reciclagem e criatividade

“Haver mais reciclagem, mais imaginação. Pessoas mais criativas, criarem de todos os resíduos de “lixo”, peças de qualidade, com conceitos inovadores a preços justos.” (Female Participant, 47yo) Paula

“Separar mais os espaços (sustentáveis e não sustentáveis), como dois distintos” (Female Participant, 47yo) Paula

“Criar espaços específicos dentro dos supermercados para os pequenos produtores” (Female Participant, 47yo) Paula

“Mais informação as prateleiras” (Male Participant, 33yo) Roberto

“(as marcas) deviam-se destacar pelo bem que causam” (Male Participant, 33yo) Roberto

“Há uma grande falta de uma certificação que junte tudo (parte ambiental social e económica da sustentabilidade)” (Female Participant, 35yo) Sara

“Ter produtos que as pessoas estão habituadas a comer” (Female Participant, 35yo) Sara

“Temos que tentar ser melhor todos os dias. Mas mudar radicalmente, é impossível. A sociedade não está preparada para isso” (Female Participant, 35yo) Sara

Topics Analysis

Spontaneous Reference to Sustainable Brands

- Celeiro
- Feiras de Biológicos
- Miosótis
- Brio
- Weleda

“Compro muita coisa no Celeiro porque sei que têm algum cuidado na aquisição dos seus produtos, (...) e gosto de comprar também nas feiras biológicas” (Female Participant, 34yo) Elsa

“(...) ponto de vista de compra ou de revenda a Miosotis ou a Brio” (Male participante, 27yo) Filipe

“Quando escolhemos uma marca como a Weleda, que é uma marca que está para lá de Biológico” (Male participante, 27yo) Filipe

“Compro na Brio em Carnaxide” (Male Participant, 42yo) João

Topics Analysis

Triggers (I)

<ul style="list-style-type: none">• Processo Gradual	<p>“Tem a ver com respeito mutuo (com a Natureza) e no fundo acho que é uma coisa que surge naturalmente” (Female Participant, 34yo) Ana</p>
<ul style="list-style-type: none">• Gosto pela Natureza	<p>“Viver em Harmonia connosco e com o que nos rodeia” (Female Participant, 25yo) Carolina</p>
<ul style="list-style-type: none">• Insustentabilidade economica	<p>“Foi um Processo. Comecei a despertar para as questões ambientais que depois se combinaram com as questões de insustentabilidade económica e monetária, que depois se interligam com as questões de responsabilidade social, com as questões da parte humana. E quando interligamos isto tudo e faz sentido, é quando temos a força para mudar” (Male participante, 27yo) Filipe</p>
<ul style="list-style-type: none">• Responsabilidade social	<p>“Factores do ponto de vista de saúde” (Male participante, 27yo) Filipe</p>
<ul style="list-style-type: none">• Saude	<p>“Acho que esta questão da crise que toda a gente fala, é capaz de trazer a consciência para este tipo de coisas” (Male Participant, 27yo) Filipe</p>
<ul style="list-style-type: none">• “Crise”	<p>“Um dia experimentei e vi que aquilo tinha muita qualidade. Vi os princípios que estavam por detras disso e tem tudo a ver comigo” (Male Participant, 40yo) Jorge</p>
<ul style="list-style-type: none">• Qualidade	<p>“Quando eu vejo um produto novo, muitas vezes tenho vontade de o experimentar, pq ele me alicia ou me promete alguma coisa diferente. E essa comunicação é feita através do packaging” (Male Participant, 36yo) Manuel</p>
<ul style="list-style-type: none">• Processo Gradual	<p>“Há varias maneiras de despertar, uma é se tu vires um filme, como a produção de galinacios e ovos no Reino Unido, ficavas assustada com o que vias. (...) os audiovisuais são importantissimos, a comunicação, a televisão. Nem nos passa pela cabeça como muitas coisas são produzidas” (Female Participant, 65yo) Leonor</p>
<ul style="list-style-type: none">• Gosto pela Natureza	<p>“As imagens ficam sempre, ficam e perduram. (...) Cada vez mais as pessoas são confrontadas com reportagens sobre estas situações” (Female Participant, 65yo) Leonor</p>
<ul style="list-style-type: none">• Insustentabilidade economica	
<ul style="list-style-type: none">• Responsabilidade social	
<ul style="list-style-type: none">• Saude	
<ul style="list-style-type: none">• “Crise”	
<ul style="list-style-type: none">• Qualidade	
<ul style="list-style-type: none">• Informação chocante	

Appendix D. Final Questionnaire

Quais os meus padrões de consumo sustentável?

Boa tarde, o meu nome é Bárbara Leão e enquanto aluna de Doutoramento em Marketing do ISCTE - IUL, estou a desenvolver tese em assuntos de sustentabilidade. Estou interessada em saber a sua visão acerca de consumo sustentável.

Assim, pedia a sua colaboração para a realização deste questionário que não demorará mais que 10min a ser respondido.

Muito obrigada pela colaboração.

1. Entenda-se por Produtos Sustentáveis os seguintes exemplos: biológicos; comércio justo; com embalagens recicladas ou recicláveis; livres de trabalho infantil; livres de Organismos Geneticamente Modificados; etc...

Pode for favor indicar o seu grau de concordância, numa escala de 1_Discordo Totalmente a 7-Concordo Totalmente, com a seguinte afirmação:

“Comecei a consumir de forma mais sustentável quando...”:

	1 - Discordo Totalmente			Nem Concordo nem Discordo			7 - Concordo Totalmente	N/A
Comecei a estar mais atento à minha saúde	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comecei a praticar uma dieta vegetariana	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comecei a consumir mais frutas e vegetais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vi um documentário ou informação chocante que me levou a ter mais cuidado com o que compro	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Me deparei com informação na internet que me levou a alterar os meus padrões de consumo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Me senti alerta para a importância das certificações ambientais e sociais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sofri pessoalmente as questões da crise atual e tive que prestar mais atenção ao que verdadeiramente precisava de comprar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Me mostraram que consumir Português fazia mais sentido para a economia local	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Percebi que estávamos a poluir ou a destruir a Natureza	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deixei de comprar produtos testados em animais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comecei a fazer um esforço para comprar produtos em embalagens recicláveis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comecei a comprar produtos de comércio justo para ajudar as pequenas comunidades a terem melhores condições de trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comecei a querer dar a minha contribuição para a minha sociedade ou comunidade local	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Percebi que podia contribuir para um mundo melhor através da compra de produtos de comércio justo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Me apercebi da qualidade superior dos produtos biológicos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Os rótulos dos produtos me chamaram à atenção para características que encaixam com os meus valores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Quais os meus padrões de consumo sustentável?

Percebi que os compraria sustentavelmente mesmo com uma qualidade inferior	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fui educada para a questão da reciclagem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comecei a interessar-me pela informação nos rótulos dos produtos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tive vontade de experimentar produtos / práticas que pessoas próximas me recomendaram	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outro (especifique)	<input type="text"/>						

2. Pode for favor indicar o seu grau de concordância, numa escala de 1_Discordo Totalmente a 7-Concordo Totalmente, com a seguinte afirmação:

"As marcas apresentam produtos sustentáveis porque:"

	1 - Discordo Totalmente	<input type="radio"/>	<input type="radio"/>	Nem Concordo nem Discordo	<input type="radio"/>	<input type="radio"/>	7 - Concordo Totalmente	N/A
Querem criar uma vantagem competitiva	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vêem as questões ambientais e sociais como uma oportunidade para venderem mais produtos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O fazem como uma obrigação e não de forma proactiva	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Se comprometem a fazer investimentos sérios para proteger a sociedade e o ambiente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fazem compromissos sólidos com práticas sustentáveis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Querem apresentar uma vantagem competitiva face à concorrência	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faz parte da sua filosofia de trabalho o compromisso para um desenvolvimento sustentável	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
É a atitude certa a tomar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Porque a lei as obriga a ter praticas que respeitam mais a sociedade e o ambiente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outro (especifique)	<input type="text"/>							

Quais os meus padrões de consumo sustentável?

3. Pode for favor indicar o seu grau de concordância, numa escala de 1_Discordo Totalmente a 7-Concordo Totalmente, com a seguinte afirmação:

"Para mim, a compra de produtos sustentáveis:"

	1 - Discordo Totalmente			Nem Concordo nem Discordo			7 - Concordo Totalmente	N/A
Dá uma garantia extra de qualidade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
É uma boa ideia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dá-me garantia de estar a contribuir para o desenvolvimento sustentável do mundo através das certificações	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Não faz sentido	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Permite-me ter mais informação acerca do que estou a comprar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traz-me transparência nos meus atos de compra	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outro (especifique)	<input type="text"/>							

Consumo de Produtos Sustentáveis

1. Entenda-se por Produtos Sustentáveis os seguintes exemplos: biológicos; comércio justo; com embalagens recicladas ou recicláveis; livres de trabalho infantil; livres de Organismos Geneticamente Modificados; etc...

4. Com que frequência consome produtos sustentáveis? (escolha apenas 1 opção)

Todos os dias			Todos os meses				Menos de uma vez por ano	N/A
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Quais os meus padrões de consumo sustentável?

5. Pode for favor indicar o seu grau de concordância, numa escala de 1_Discordo Totalmente a 7-Concordo Totalmente, com a seguinte afirmação:

"Consumiria mais frequentemente produtos sustentáveis se:"

	1 - Discordo Totalmente			Nem Concordo nem Discordo			7 - Concordo Totalmente	N/A
Fossem mais baratos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estivessem disponíveis em mais lojas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estivessem disponíveis mais perto de casa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Confiasse mais nas suas certificações e proveniência das matérias primas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tivessem melhor visibilidade na loja	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compreendesse melhor os seus benefícios	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Percebesse melhor o que está escrito na embalagem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conhecesse melhor as marcas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oferecessem mais oportunidades de experimentação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tivesse tido uma melhor experiência de consumo no passado	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As minhas marcas de sempre oferecessem este tipo de produtos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Outro (especifique)

Caracterização

6. Eu sou:

- M
 F

7. O meu vencimento mensal líquido é de:

- Menor que 500€
 Entre 501€ a 1000€
 Entre 1001€ a 1500€
 Entre 1501€ a 2000€
 Mais de 2000€

8. A minha escolaridade é:

- Inferior ou equivalente ao 9º Ano
 12º Completo
 Licenciatura
 Mestrado ou Doutoramento

Quais os meus padrões de consumo sustentável?

9. Faço praticas holísticas regularmente (ex: yoga; meditação; reiki; tai-chi; etc...)

Sim

Não

Outro (especifique)