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How sustainability and environmental concerns influence consumers' decision-making process in the Haircare Industry

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Master Thesis
presented as partial requirement for obtaining the Master Degree in Information Management

NOVA Information Management School
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How sustainability and environmental concerns influence consumers' decision-making process in the Haircare Industry

by

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Master Thesis presented as partial requirement for obtaining the Master's degree in Information Management, with a specialization in Knowledge Management and Business Intelligence

Supervised by

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STATEMENT OF INTEGRITY

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration. I further declare that I have fully acknowledged the Rules of Conduct and Code of Honor from the NOVA Information Management School.

Lisbon, 29th February 2024

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ABSTRACT

In recent years, the awareness of environmental issues and the pursuit of sustainable practices have significantly shaped consumer behaviours and preferences across various industries. Study the cosmetics' industry is highly relevant today due to evolving consumer preferences, increased emphasis on personal care and appearance, technological advancements, growing awareness of sustainability and ethical practices, and its' significant global economic and ecologic impact. Our study identified which and how sustainability initiatives in this industry influence consumers 'purchasing intentions of sustainable haircare products in the business-to-consumer channel. The methodology developed is applied to a specific subsector operating in the cosmetic industry: the Haircare sector. For this purpose, we designed an innovative theoretical model that combines the Howard & Seth traditional model for consumer behaviour (1969) and Allen's Two Wheels Model (1997-2000). The model was tested using structural equation modelling (SEM), in a quantitative study conducted in a European country. Brand Reputation, Social & Governmental aspects and Symbolic Value were found to influence the purchasing intention of sustainable haircare products. On the contrary, Environmental factors, External factors and Utilitarian Value were not significant in explaining purchasing intention of sustainable haircare products. Most of the respondents prioritizes the brand's quality and value brands which address sustainability concerns and eco-friendly products. The most important symbolic indicators are feeling well after using a haircare sustainable product, easy to use, and the pleasure associated. On Social & Governmental, respondents prioritize organic ingredients, fair pay for employees. Based on this evidence, this study suggests several sustainable initiatives that companies can incorporate into their business strategies in this sector.

KEYWORDS

Sustainable haircare products; ESG factors; Symbolic value; Emotional value; Brand reputation; Purchasing intentions.

Sustainable Development Goals (SDG):

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1. INTRODUCTION

The relevance of sustainability and environmental concerns in today's world is a pressing issue as highlighted by several studies (Woo & Kang, 2020; Petrisor & Lazar, 2008; (Mikulčić et al., 2017). As the United Nations General Secretary stated, "*We must make peace with nature"* (Guterres, 2022). This is a major topic, of huge importance nowadays, and it is reflected at many different levels in in our society and planet (Halkos, 2018); in corporate business (Fauzi et al., 2021), and consumer behaviour (Galbreth & Ghosh, 2013). The momentum towards Environmental, Social and Governance (ESG) practices and Net Zero is undeniable (Baratta et al., 2023). The attainment of Net Zero resolves around a formula that equalizes emissions sources and their absorption by nature (Piderit et al., 2019). This involves minimizing greenhouse gas (GHG) emissions to the greatest extent feasible while augmenting GHG reservoirs to eliminate any residual emissions from the atmosphere (Wegener & Amin, 2019). According to some studies, the global warming is projected to go up as of 2100, suggesting an increase range of 2.0-4.9º for the next years (Raftery et al., 2017). This trend puts at risk the threshold defined on the Paris Agreement, namely the global increase of temperature in our planet up to the limit of more 1.5ºC (McKinsey & Company, 2022).

ESG with all its dimensions (e-g. decarbonization, circularity, alternative nutrition) will reshape the economy, alter what consumers value, and open new markets while putting others at risk (Wegener & Amin, 2019). Many companies are playing defence to protect their core business, in some cases leading to a risk of declining market shares as customers turn to more sustainable alternatives and new competitors enter the market. Now it is time to play offense, by managing companies' portfolio, building green businesses, decarbonizing operations, and making sustainability a competitive advantage (McKinsey & Company, 2021). Across sectors, such as apparel sector (Sadowski et al., 2021); building sector (Ürge-Vorsatz et al., 2020); agriculture and oil & gas (Maltais et al., 2021), companies are making bold commitments to Net Zero, setting ambitious sustainability targets. However, these objectives, while potentially

impactful, are frequently motivated by a pursuit of profit and market dominance, rather than a sincere commitment to environmental conservation (Gouldson & Sullivan, 2013).

The Beauty industry is one of the most polluting sectors in the world, with a significant environmental impact, highlighting the significance of marketing strategies and the creation of environmentally friendly products (Prothero, 1996). From a global perspective, the market of beauty care (colour cosmetics, fragrances, hair care, skin care and personal care) is expected to worth about US$646.20bn in 2024 (Statista Beauty & Personal Care, 2024), and continue growing in the upcoming years, namely in the skincare and personal care categories (McKinsey & Company, 2023). The British Beauty Council's 2020 report (British Beauty Council, 2020) highlighted the following aspects as crucial to solve in the beauty industry: excessive and extravagant packaging (120 billion units annually) encompassing plastics, paper, glass, and metals; plastic pollution from cosmetic containers, which exacerbates ocean pollution; unsustainable resources consumption including non-renewable resources, deforestation for ingredients and air pollution from volatile organic compounds; animal cruelty through testing; child labour; and absence of green washing practices. Global cosmetic companies have been striving to contribute to environmental protection, shaping consumer inclinations towards organic cosmetics (Amberg & Magda, 2018). Nevertheless, the industry encounters ongoing sustainability challenges, particularly in sourcing raw materials and the necessity for a comprehensive evaluation encompassing environmental, social, and economic aspects (Bom et al., 2019).There has also been a growing demand for beauty products worldwide as this type of products are essential and are part of the consumer daily routine ((Vecino et al., 2017); (Loretz et al., 2008)). The face of beauty is changing due to several reasons, namely: (i) major trends in consumers' needs and aspiration, as cited in the L'Oréal Group's mission, "*Beauty defines who we are*", (L'Oréal, 2024) influencing consumers' personal image, wellbeing, and acceptance in social circles (Raison D'être, 2024), (ii) new product-lines, processes and technologies (Butt et al.,

2022), enabling a wider offer with deeper personalization, and (iii) different ways to reach the customer as a result of digital transformation and the influence of social media and influencers over people (Dio et al., 2023).

Some studies shows that consumers are increasingly concerned about the environment, however this is not actually translated into sustainable purchasing intention and behaviour (Finisterra do Paço & Raposo, 2010). Despite other studies point out a growing interest in sustainability and environmentally friendly alternatives in the personal care industry, there are very few studies on the consumption of sustainable haircare products, a gap that we want to fulfil with this work. In addition, as some hairdressers are at risk of skin and respiratory problems due to occupational and continuous exposure to chemicals (Mendes et al., 2011) and as haircare consumers are also in contact with hazardous components, with this work we aim to bring a more detailed overview and understanding of which ESG factors influence consumers' purchasing intentions of haircare products. More precisely, to discover and understand how each ESG factor influence several more traditional purchasing intentions variables like product functional value, product symbolic value, brand reputation, and external factors.

In the second chapter we perform an extensive literature review on existing theoretical models of consumers' purchasing intention, a characterization of main fast-moving consumer goods, beauty and personal care, ending with the cosmetics industry description which includes the Haircare product category. In the third section the conceptual model developed is presented, alongside with the variables and hypotheses proposed.

In the following chapters the work results are presented and discussed, the implications for both research and practice are presented, ending with the main conclusions.

2. LITERATURE REVIEW

2.1. Industry Characterization

The macro category of Fast-Moving Consumer Goods can be divided into Beauty & Personal; Cosmetics and Haircare sectors, being this last one the focus of this work. Figure 2.1 below shows us a graphical composition on how all these components are integrated.

Figure 2.1: Industry Characterization (from authors)

2.1.1. Fast-moving consumer goods

Fast moving consumer goods (FMCG) are items that are swiftly sold at a relatively modest price point. The FMCG sector is marked by substantial sales volumes, rapid inventory rotation, and an array of products design to address consumer requirements. This category encompasses indispensable daily necessities like groceries, beverages, personal care products, cleaning materials, and other economical household articles (Kenton, 2024). Although there is not a clear and universal categorization of FMCG, it is possible to group them into three major categories (i) food and beverages, including packages foods, snacks, dairy products, carbonated and non-carbonated beverages, and alcoholic drinks; (ii) household and cleaning Items, including cleaning supplies, laundry detergents, insecticides, and other essential household items; and (iii) personal care, including cosmetics, soaps, shampoos, skincare items, and oral care products (Deliverect, 2024).The FMCG industry holds immense importance for the economy due to its multifaceted

contributions. Notably it fuels economic growth by generating employment opportunities, while also serving as a catalyst for the expansion of retail and distribution networks. Additionally, this sector contributes with substantial tax revenues to governments, bolstering public finances. Moreover, it plays a pivotal role in fostering innovation and driving technological advancements (Derqui et al., 2022). The state of the FMCG industry often mirrors consumer confidence and overall economic health, making it a vital barometer of economic vitality (Deliverect, 2024). The FMCG market worthed USD 11,329 B in 2023. Also, it is projected to grow at a compound annual growth rate of 5,03% and it is anticipated to reach a value of 15,208B by 2028 (Food and beverage, 2023).

This industry is characterized by several trends form which stand out: (i) a growing demand for health and wellness products; (ii) a shift towards eco-friendly packaging and sustainable practices; (iii) an increase in online sales and e-commerce adoption; (iv) the personalization and customization of products and experiences; (v) the emphasis on data-driven decision-making and analytics (Deliverect, 2024). At the same time several factors are contributing to the growth of the FMCG industry mainly (i) the world's population growth; (ii) urbanization; (iii) rising disposable incomes; (iv) technological advancements; (v) Changing consumer preferences (Deliverect, 2024).

2.1.2 Beauty and Personal Care

The Beauty and Personal Care sector has experienced significant growth, driven by factors such as rising consumer income, changing lifestyles, and the emergence of new distribution channels (Łopaciuk & Łoboda, 2013).

Beauty and personal care industry includes the following major categories: cosmetics, fragrances, skin care and personal care (Gerstell et al., 2020). Based on Statista Beauty & Personal Care (2024) market forecast for 2024, the estimated revenue in the Beauty & Personal Care market will be worth to US$646.20bn, the market is expected to grow annually by 3.33% (2024-2028) and the market's largest segment will be Personal Care with a market volume of US$282.80bn in 2024 (Statista Beauty & Personal Care, 2024). Some trends characterizing this sector include

(Łopaciuk & Łoboda, 2013): (i) an increase of e-commerce and online marketplaces in the beauty industry, with a specific emphasis on their impact on elevating customer satisfaction and engagement (Saputra et al., 2020); (ii) adoption of sustainable and eco-friendly practices, showing the sector's commitment to environmental responsibility; (iii) technology is shaping this sector through Artificial Intelligence integrated into beauty products and services, offering personalized experiences; (iv) inclusivity and diversity have become central themes influencing product development, marketing strategies and brand image. The key difference between cosmetics and personal care products is that cosmetics are chemical compounds used for the enhancement of the appearance of a person, whereas personal care products are chemical compounds and objects that are used to maintain personal hygiene as well the enhancement of appearance (Nazar & Harahap, 2023).

2.1.3 Cosmetics

As the significance of self-care and overall well-being garners increasing attention from global consumers, the cosmetics sector gains elevated importance, with indications suggesting its persistent expansion. The total revenue in the cosmetics market in 2024 is projected to reach US$ 108.4bn and it is anticipated an annual growth rate of 4.43% until 2028 (Statista, 2023).Increasingly, cosmetics have become essential goods in life as they can enhance the individuals' overall appearance and thereby help achieve a positive impact on the personality.

According to Draelos (1995), cosmetics are identified as hair, skin, and nails. Nevertheless, a deeper and comprehensive examination of the distinct categories is lacking, necessitating further research to explore the full range of cosmetic products.

2.1.4 Haircare

Haircare cosmetics serve the functions of cleansing, altering, fostering growth, and maintaining the grooming of hair. Formulated to offer nourishment and prevent hair damage, these products encompass items such as shampoos, conditioners, serums,

oils, and grooming products. With a rising prevalence of hair-related issues globally, these products have garnered significant attention (Morganti et al., 2021). Given the escalating concerns about hair problems, it is imperative to regulate the use of haircare cosmetics to ensure their safety and efficacy for consumers (Pathak & Akhtar, 2019).

The global haircare market is witnessing substantial growth driven by a growing consumer awareness regarding hair health and a preference for natural and traditional approaches to hair enrichment and smoothening (Łopaciuk & Łoboda, 2013). The market is propelled by the accessibility and affordability of various hair care products segmented by (i) product type (shampoo, conditioner, hair oil, hair spray, and others); (ii) distribution channel (supermarkets, hairdressers saloons, specialty stores and pharmacies) and (iii) region (Mordor Intelligence, 2024). As presented in Figure 2.2, haircare market size is valued as US$ 90.59 Bn in 2024 and it's expected to growth at 3,66% (2023-2028) (Mordor Intelligence, 2024).

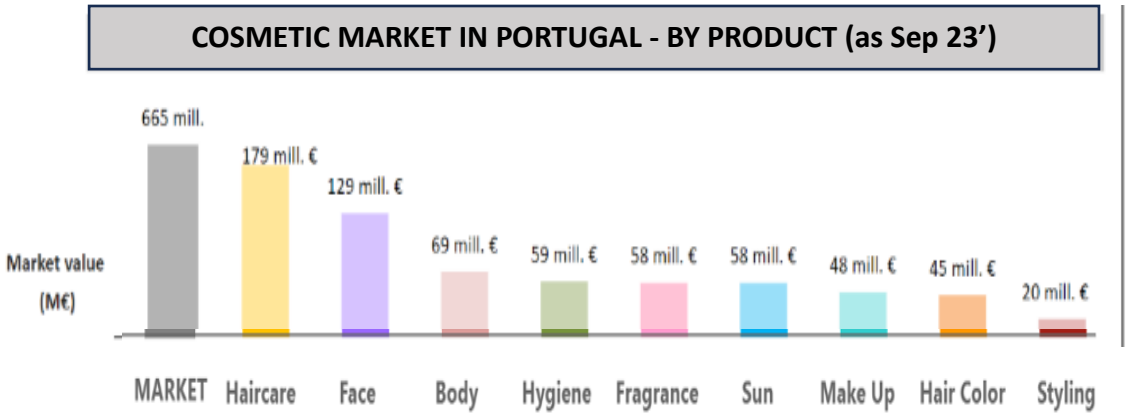
Figure 2.2: Hair Care Market Characterization (Mordor Intelligence, 2024)

According to the "The State of Fashion Beauty Report" (McKinsey & Company, 2023), growth strategies within the industry must adapt to the changing consumer behaviours in hair care. Presently, consumers show a keen interest in incorporating various products into their everyday home beauty regimes. Based on a consumer

survey, over the half of the respondents indicated using three or more brands for their hair care needs. Additionally, one third of respondents reported utilizing five or more brands for their cosmetic preferences.

The haircare market in Portugal is expected to reach 306 million USD$ in 2024 and it is projected to experience an annual growth rate of 1% (2024-2028) according to Statista Hair Care (2024). The increasing emphasis on sustainable and eco-friendly practices in Portugal is rising the demand for natural and organic haircare products in the country (Statista Hair Care, 2024). As shown in Table 2.1, cosmetics market in Portugal is valued in 665 million€ in 2023, from which 179 million€ corresponds to Haircare (around 26%), 45 million€ to Hair Colour and 20 million€ to Styling. In total these three categories sum 244 million€ (weighting around 37% of cosmetics' total market value) (Ekimetrics, 2023).

Table 2.1: Criteria for which consumers



2.2 Environment Social and Governance (ESG)

The Environment, Social and Governance (ESG) principle is often referred to as the three modern cornerstones of CSR (Corporate Social Responsibility). (Miralles-Quirós et al., 2018). It goes by various names, including Green, Ethical, Mission, Impact, Responsible, Values, Socially Responsible, and Sustainability, all of which aim to create a beneficial impact on society. ESG, within this work, is understood as the

practices tied to an organization's environmental interactions, its relationship with human entities and other groups, and its internal governance mechanisms (like processes, traditions, policies, and regulations) that guide and oversee the organization's operations for the benefit of its shareholders and other stakeholders. Broadly, ESG covers environmental concerns such as reducing resource use, social responsibilities like community impact, and corporate governance aspects like ethical guidelines (Karwowski & Raulinajtys-Grzybek, 2021).

ESG Impact Across Product Categories of Fast-Moving Consumer Goods (FMCG)

According to the study from McKinsey (2021) on "Consumer sustainability sentiment analysis in Fast Moving Consumer Goods (FMCG)" performed over 5000 consumers in Europe, the importance of specific sustainability aspects varies across categories, e.g., the avoidance of packaging is more important in fruit & vegetables and personal care than in meat & fish and dairy products. As presented in Table 2.2, this study splits FMCG into four categories of product: groceries, home care, personal care and consumer health:

Table 2.2: Criteria for which consumers would be willing to pay more for a product (McKinsey & Company,2021)

„For which criteria would you be willing to pay more for products in these categories?"

Sustainability criteria		Personal health				Social sustainability				Environmental sustainability						
		Organic ingredients	**Vegan/** vegetarian	**Lactose** free/gluten free	"Free from" **harmful ingredients**[1]	Companies promote **diversity** of employees	Employee **health/ safety**	**Fair pay** for employees	No **child labor**	**Local** manufacturing/ short transport distances	Low CO2 / greenhouse gas **emissions**[2]	Low **air pollution**[3]	Conservation of natural raw materials	Use of **little packaging** material/ plastic	Use of **recycled packaging** material / plastic	"Free from" **environm. hazardous** ingredients/ materials[4]
	Total	60	23	14	57	31	56	76	65	56	67	54	67	65	59	70
	Category															
Groceries	Meat & fish	-5	-	-11	-5	-5	3	7	-7	14	3	-10	-6	-11	-14	-9
	Dairy products	-6	-	4	0	-7	-9	6	-11	15	4	-5	-3	-16	-4	-11
	Plant based protein products	6	17	11	5	6	5	-3	4	-7	5	3	-3	-4	-3	-5
	Fruit	-2	-11	-10	-7	-11	-5	1	-3	18	3	-9	-5	9	-13	-11
	Vegetables	-5	-11	-7	-7	-7	-2	7	1	18	4	-4	-4	6	-11	-11
	Bread & cereals	6	-13	-1	8	-2	-7	1	-5	17	0	-4	-5	2	-9	-1
	Sweet and savory snacks	-2	-4	6	7	6	0	-1	1	-6	1	9	-2	0	3	1
	Babyfood	10	4	14	17	7	-4	-11	-2	-15	-18	-7	-12	-14	-15	-14
	Ready meals	-1	0	5	3	2	5	-4	-6	-7	-1	1	2	-1	-3	-7
Home care	Detergents	-2	3	-3	-10	4	6	-2	5	-15	3	4	5	4	11	10
	Dishwashing liquid	-3	0	-2	-14	7	5	2	7	-14	-5	0	2	1	7	7
	Cleaning supplies	-4	-3	-7	-12	2	3	-3	4	-15	-1	4	6	3	11	6
Personal care	Cosmetics	-2	18	-6	-5	0	-3	-1	6	-11	-4	-2	1	8	5	14
	Skin care	1	9	-4	1	3	2	-1	7	-8	1	4	7	4	4	7
Consumer health	Food supplements	5	11	11	11	4	5	-7	8	-8	0	9	4	0	7	3

1.E.g., sugar, salt | 2. In manufacturing & transport | 3. During manufacturing | 4. E.g., plastic particles, palm oil

Based on this study, there are some drivers for willingness to pay for sustainability from which stand out the following: (i) 76% of consumers are willing to pay a premium if employees receive a fair pay; (ii) 70% of consumers are willing to pay an extra if the products are free from environmental hazardous ingredients/materials; (iii) 67% if the CO2 and GHG emissions associated with the products are low as well as if there is a Conservation of natural raw materials; (iv) and 65% if there is use of little packaging material/plastic.

Regarding Personal Care products, focused on Cosmetics (which includes Hair Care products), the most important sustainability factors are those of Environmental sustainability (for which around 63% of respondents are willing to pay a premium on average) followed by Social Sustainability (for which 57% of respondents are willing to pay a premium on average). In this product category, the most considered criteria in consumers' decision-making process ranked by order of importance are: (i) Vegan/Vegetarian; (ii) Free from environmental hazardous ingredients/materials; (iii) Use of little packaging material/plastic; (iv) No child labour; (v) Use of recycled packaging material/plastic; (vi) Conservation of natural raw materials.

Inversely, the least important criteria are "Local Manufacturing", "Lactose free/gluten free" and "Free from harmful ingredients".

According to the same study, women, Gen Z consumers, people with higher income and online shoppers are more willing to pay a premium for sustainable products.

2.3 Theoretical Models on Consumers' purchasing intention

As this investigation is focused on consumer' purchasing intention for sustainable haircare products, it's relevant to understand the scope and evolution of theoretical models that describe, understand, and predict consumer behaviour. From bibliographic review, the main models explaining consumers' purchasing intention found in the literature were (i) UTAUT (Unified Theory of Acceptance and Use of Technology) (Paulo & Castro, 2014), a model that validates four determining factors and four conditions moderators of acceptance and intention to use Information Technology by people in organizations; (ii) TAM (Technology Acceptance Model), a

model that explains the accessibility of information technologies based around two dimensions, Perceived Usefulness and Perceived Ease of use (Fred D. Davis, 1985); (iii) Nicosia Model, that advocates that purchasing behaviour is determined by research antecedents and evaluation of information (Milner & Rosenstreich, 2013); amongst others. There are two models in which this study is based in, and therefore presented as follows:

A) Howard-Sheth Model (1969)

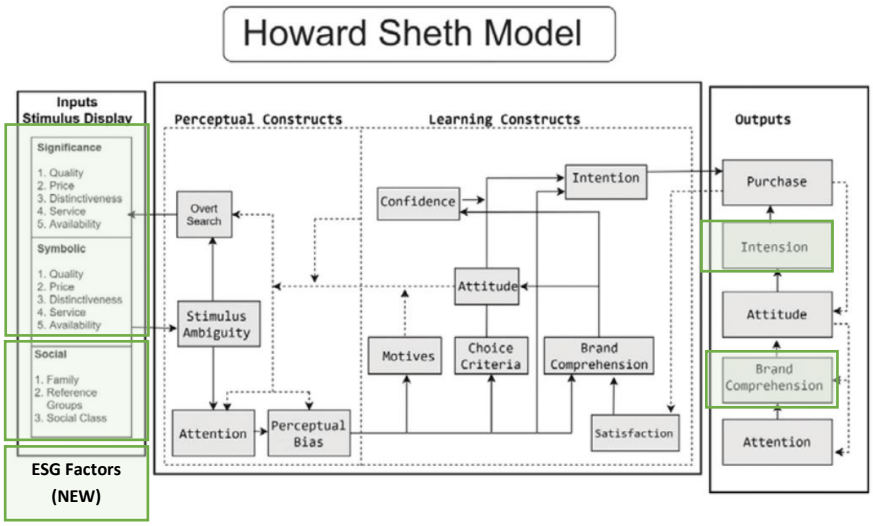


Figure 2.3: Howard-Sheth Model (Haines et al., 1970)

Legend:

Variables considered in this work

As described in Figure 2.3, the HS Model is formed by four groups, each containing four types of variables: input factors, cognitive constructs, learning mechanisms and external influences (Farley & Ring, 1970). In more detail these variables are (i) Inputs stimulus (or product influence factors),including the product's physical attributes, their visual aspects, as well as advertising and social cues – significance and symbolic; (ii) Cognitive Constructs, related to the information gathering and interpretation; (iii) Learning Mechanisms, involving the development of motives, decision-making criteria, predispositions, obstacles, and level of satisfaction; (iv) Social and External influences, that affect the buying process and that include the significance of the

purchase, individual personality traits, social standing, cultural background, social circle, time availability, and the financial situation of the consumer.

Bearing in mind the specificity of haircare products (a fast-moving consumer good) and the importance of influential marketing e social media nowadays (Ismail, 2017), this investigation considers the variable "Influence factors" and enlarges the variable "external influences factors" of the HS Model towards social media, family and friend advice and prescribers' influential channels, as hairdressers and personal care specialized stores play an important role on customer's decisions (Bloemer et al., 2003). This work also introduces a new category of external factors: the influence of ESG-Environment, Social and Governance initiatives on product value proposition and on brand comprehension and reputation, thus on customer's purchasing intention. In this work, it is not considered "Perceptual Constructs" and "Learning Mechanisms", as they make part of the Mental Process of each consumer and have already been extensively studied in other works (Thangadurai & John, 2016); (Nath & Agrawal, 2023).

B) Two Wheels Model from Allen (1997 – 2000)

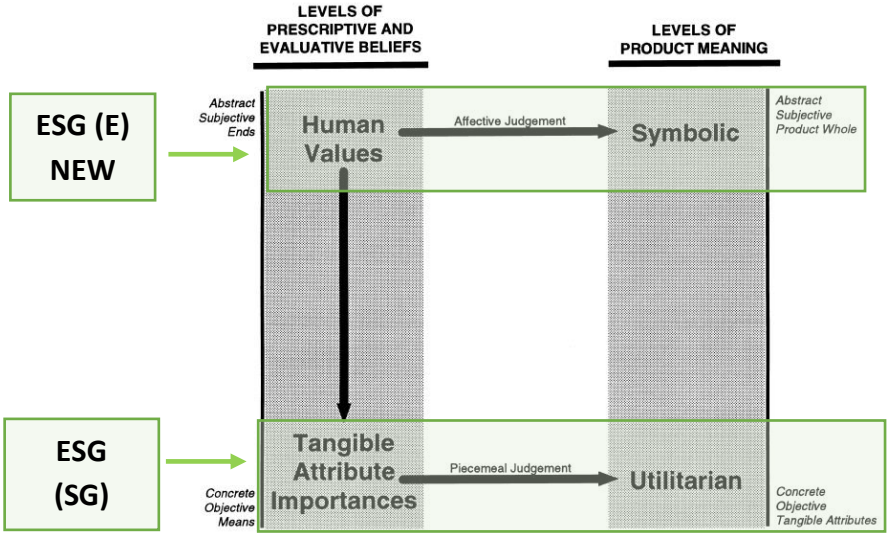


Figure 2.4: Allen's Two Wheels Model of Consumer´s Purchasing Intention (Allen et al., 2002)

Legend:

Variables considered in this work

As depicted in Figure 2.4, the Two Wheel Model seeks to clearly detail the relationship between values and the consumption decision process (Allen et al., 2002). It states that a consumer's purchasing intention depends on two distinct judgments: affective judgement and piecemeal judgement (Torres & Allen, 2009). The first one is characterized by human values and beliefs which are reflected on the product's symbolic value (abstract/subjective ends). The second one is characterized by the tangible attributes importance which influence the product's utilitarian value (Concrete/objective means).

In practical terms, this means that when consumers consider the functional value of a product judging by each one of its' utilitarian characteristics, the human values have an indirect influence on their choice through the tangible attribute of that product. This model has been tested with various products and the results suggest that the route by which human values influence consumers' purchasing intentions of a product is restricted by some conditions when the product has an instrumental function (utilitarian meaning of product and step-by-step judgement). When the product has an expressive function, that is, a symbolic meaning, the consumer makes an affective judgement, and human values transpose the analysis of the product's tangible attributes and directly influence preference.

Both human (intangible) values and tangle attributes are part of the prescriptive and evaluative belief levels and are reflected in the product's significance levels (symbolic and utilitarian).

In the context of this investigation, it is applied the basic principles of the model, and a complementary "two wheels" assumption/hypothesis focused on the influence of ESG factors on both functional value (mostly the "Environment" component of ESG) and emotional value (mostly the "Social" and Governance components of ESG) of haircare products.

3. CONCEPTUAL MODEL, VARIABLES & HYPOTHESIS

Based on the previously discussed constructs, our innovative conceptual framework has been developed and adapted in several core-components to study haircare market specificities:

CONCEPTUAL MODEL - INFLUENCE OF CONSUMERS' PURCHASING INTENTIONS OF SUSTAINABLE HAIRCARE PRODUCTS

This model was constructed by combining the two models above described: Howard & Seth Model (Haines et al., 1970) and Allen's Two Wheels Model (Allen et al., 2002). From these two theoretical models we have retained for this study the variables directly or indirectly linked to the product's characteristics (functional or symbolic) and external factors rather than the mental process that occurs in the consumers' brain, personal beliefs, or motivations/aspirations. (cognitive/learning constructs). The model constructed starts from four main variables that explains purchasing intention: Two variables that are directly linked to the product characteristic (Utilitarian value and Symbolic Value) as well as external factors influencing purchasing intentions (family & friends; prescribers and social media) and Brand Reputation. It then adds an additional layer of how each one of the three ESG component (Environmental, Social and Governance) influence these four variables of purchasing intention. Appendix A shows the indicators of each variable of the model. The model is presented in Figure 3.5 below:

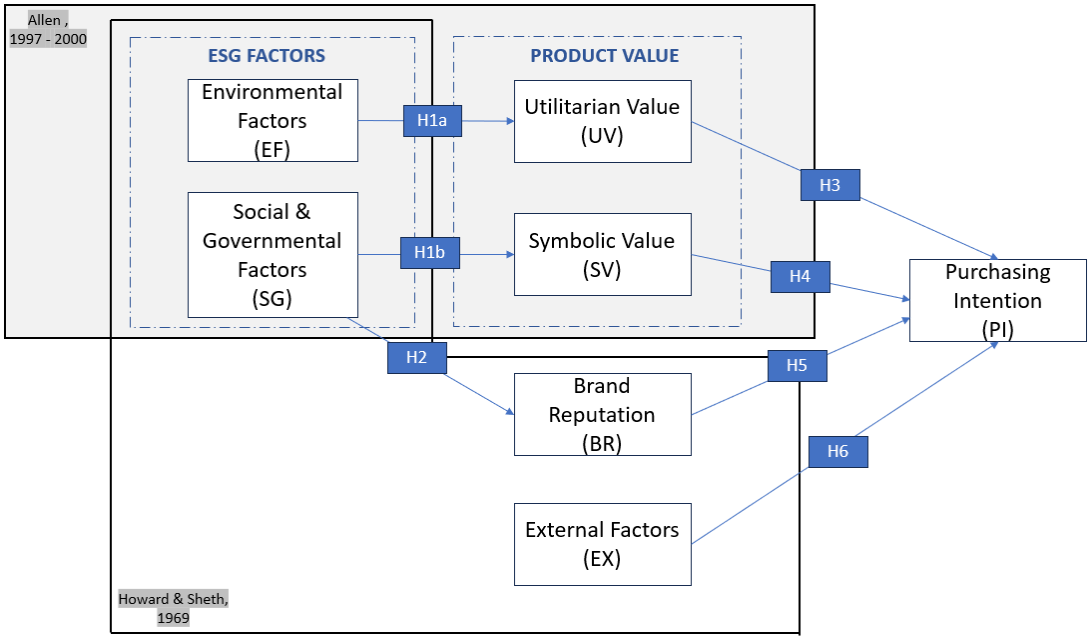


Figure 3.5: Conceptual Model

3.1. ESG Factors and Product Value

Consumers' willingness to pay a premium for sustainable products is driven primarily by environmental and by Social/corporate governance aspects rather than personal health. The top 7 criteria for which consumers are more willing to pay an extra for products are: (i) Fair pay for employees; (ii) No environmental hazardous ingredients or materials, such as plastic particles, palm oil, etc ; (iii) Low greenhouse gas emissions such as manufacturing and transport; (iv) Conservation of natural raw materials; (v) No Child labour; (vi) Avoidance of Packaging materials/plastic; (vii) Organic ingredients (McKinsey & Company, 2021).

A different study focused on modelling the consumer interest on purchase intention and willingness to pay a premium price for green skincare products applied in the Malaysian Market concludes that Cosmetic items imported from the United States, including beauty and skincare products, enjoy a favourable reputation among consumers (Al Mamun et al., 2023). These products are generally viewed as high-quality, eco-friendly, and vegan, with no involvement in animal testing. Additionally, according to Morganti (2020), the COVID-19 pandemic has triggered environmental concerns among people to adopt green lifestyle and consumption. Green skincare

products are made from botanical ingredients and include natural carriers, avoiding synthetic chemicals that could be harmful to the skin. Nonetheless, exaggerated advertising claims have made consumers increasingly cautious about these eco-friendly products (Hsu et al., 2017). At the same time, even though eco-friendly products are gaining importance, the adoption of these items remains an area that is not yet fully explored in research.

Therefore, we hypothesize:

H1a: ESG initiatives, namely Environmental component, positively impact consumers' perception of utilitarian value of hair-care products.

H1b: ESG initiatives, namely Social and Governmental components, positively impact consumers' perception of symbolic value of hair-care products.

3.2. Product Value

Within this work we understood product value as a two-dimensional construct, encompassing both functional and emotional aspects, in line with previous studies such as those by (J. S. Lee et al., 2011); (Dolnicar et al., 2015). Mason et al. (2023) further contend that these two dimensions, emotional and functional values, are the two most effective in predicting consumer attitudes and behaviours than other types of values.

3.2.1. Product Utilitarian Value and Consumer Purchasing Intention

From one perspective, the utilitarian/functional value relates to "beneficial actions" (Chiu et al., 2014), addressing consumers' practical requirements and providing a guaranteed function. In other words, it refers to the perceived usefulness gained from an option's ability to perform functionally, practically, or physically. (Gentile et al., 2007). Ideas akin to functional value are utilitarian value (Gentile et al., 2007), and ergonomic value (Creusen & Schoormans, 2005). Given the lack of standard

definitions, this study assumes functional value encompasses what can be tangibly assessed using known metrics.

From the point of view of consumers, the concept of limited rationality is crucial. Given humans cognitive constraints in real-world scenarios, individuals exhibit restricted rationality instead of perfect rationality (Simon, 1996). Essentially, as technology evolves, evaluating the myriad of functions and choosing the most logical product becomes cognitively taxing for consumers. When the information presented surpasses their cognitive capacity, they experience information overload, complicating their purchasing intentions (Hamilton, 2006). Studies have shown that merely increasing product options and features does not necessarily sway consumer purchasing intentions ((Kato & Tsuda, 2020); (Iyengar, 2010)). This is termed "feature fatigue", where products overloaded with features become less appealing (Hamilton, 2006). In essence, the greater a products' value, the fewer features it requires, which means it is important to focus on the right ones. In terms of functional values, research has delved into aspects like performance and functionality ((Sweeney & Soutar, 2001); (Deng et al., 2010)); efficiency ((Previte et al., 2019); quality and durability ((Han et al., 2019);(Kato, 2021)) for automobile industry and others. In its turn, (Liu-Thompkins & Rogerson, 2012) in a study applied for user-generated content/websites services, provides examples of functional factors including accessibility, ease of use, low cost, quality, and variability.

Utilitarian value items adapted for Haircare products based on peer studies are available in Appendix B - Utilitarian Value and Emotional Value Items: Haircare products vs Peer Industries

Therefore, we hypothesize:

H3: **Product's utilitarian value positively influences consumers' purchasing intentions of sustainable haircare products.**

3.2.2. Product Symbolic Value and Consumer Purchasing Intention

Symbolic/Emotional Value is described as the perceived benefit obtained from an option's ability to evoke emotions or emotional responses (Han et al., 2019). Similar concepts include perceived value ((Ryu et al., 2008); (Sánchez et al., 2006)) and symbolic value (Sánchez et al., 2006). Given the lack of standard definitions, this study assumes emotional value encompasses all subjective elements which change depending on consumers, time, and culture. Historically, firms with advanced technological prowess led the global market and induced consumer choices due to their product performance and longevity. Yet. In recent times, some of these technologically adept companies have faced some business challenges. As technology progresses, the performance and durability often surpass consumer needs, making the advantages less discernible to them. Despite this trend affected durable goods, it is now widespread across multiple sectors (Fujimoto, 2007). The competitive landscape is evolving with a progressive shift from functional value, characterized by performance and durability, to emotional value exemplified by design and costumer experience (Noble & Kumar, 2008).

Regarding emotional value, the following elements have been explored: aesthetics (BHolbrook, 1999.); user-friendliness ((D. Lee et al., 2015); (Kim & Moon, 1998)); comfort ((Previte et al., 2019); (Sánchez et al., 2006)); pleasure (Sweeney & Soutar, 2001); interpersonal connections (Arslanagic-Kalajdzic et al., 2020) and reputation (Holbrook, 1999), (Kato, 2021). (Bath & Reddy, 1998) in a study applied in clothing industry, argue that the emotional values related to the personality of consumers rises elements like freedom of expression, style, fashion, status, happiness, leisure, and exclusiveness.

Symbolic value items adapted for Haircare products based on peer studies are available in Appendix B - Utilitarian Value and Emotional Value Items: Haircare products vs Peer Industries.

Therefore, we hypothesize:

H4: Product's symbolic positively influences consumers' purchasing intentions of sustainable hair-care products.

3.3. Brand Reputation, ESG initiatives and Consumer Purchasing Intentions

Brand reputation has a significant influence on consumer purchasing intentions. A favourable brand reputation can positively impact consumers' attitudes towards the brand and their intention to purchase its products or services. When consumers perceive a brand to have a positive reputation, they are more likely to trust the brand, perceive its products or services as high quality, and have a favourable attitude towards the brand. This, in turn, increases their intention to purchase from that brand (Ngurah et al., 2021).

Indicators of brand reputation that sway buying choices encompass: (i) Brand Recognition: The extent to which consumers are familiar with a brand can directly affect their willingness to make a purchase (Barreda et al., 2015); (ii) Quality perception: How consumers view the calibre of a brand's offerings can positively steer their intent to buy (Malik et al., 2023); and (iii) Overall brand sentiment: the collective consumer opinion and emotional stance towards a brand can elevate the likelihood of purchasing from it (Tsai, 2005).These elements of brand reputation are pivotal in influencing consumer decisions and can significantly affect their choice making process.

The way society views a company's ESG efforts is crucial for fostering trust. According to Du et al. (2007), ESG activities enhance overall social welfare and build trust with customers. This analysis is reinforced in the study of Pivato et al. (2008) which develops a signalling theory that says that ESG indicators contribute to a company's positive reputation and trustworthiness in the eyes of consumers. To bridge the knowledge gap between businesses and consumers, companies convey signals about their brand's ESG accomplishments to underscore quality and boost trust. (M. T. Lee et al., 2022).Several studies defend the influence of perceived ESG on consumer behaviour. Additionally, it is also argued that ESG initiatives, when viewed in the context of stakeholders, society, and the environment, have a positive effect on consumers' purchase intention (Abu Zayyad et al., 2021). Similarly, (Hur et al., 2014),

found that companies perceived to have a strong ESG are more likely to be trusted by consumers. Based on the previous findings, the following hypotheses are proposed:

H2: ESG activities positively influences brand reputation of haircare products.

H5: Brand reputation positively influences consumers' purchasing intention also of sustainable haircare products.

3.4. External Factors

3.4.1. Social Media

According to Barger et al. (2016), social media can sway consumers' intent to buy via elements like electronic word of mouth (eWOM), engagement, enjoyment, incentives, trustworthiness, and contentment. Social media platforms offer consumers the ability to gather information about products, read reviews, and weigh different options, all of which influence their purchasing choices. Additionally, marketers have the opportunity to interact with and tailor their services to customers more effectively on social media than through traditional mass media channels. The study indicates that social media influencers are viewed as trustworthy promoters capable of elevating businesses. Data also confirms the efficacy of these influencers in driving consumer purchasing decisions. According to marketing analyses, approximately half of the companies employ social media influencers for brand promotion. While the network's characteristics do impact results, pinpointing the ideal influencers to boost the spread of consumer reviews and narratives is a complex task. Various factors contribute to this complexity, making it challenging for companies to identify the most effective influencers (Ehlers, 2017).

3.4.2. Family and Friends

The research discovered that social factors, such as the opinions of friends and family, positively impact the intent to purchase (Zhu et al., 2016). Advice from family

members is particularly trusted due to their perceived better knowledge and information. Women are more likely to heed the advice of their close circle when considering purchases, especially those related to popular brands, clothing styles, and pricing. Furthermore, references groups, compassing friends and family, serve as a source of identity shaping for consumers' purchasing habits and even elevate their social standing, therefore influencing their shopping behaviour (Fernandes & Londhe, 2015).

3.4.3. Prescribers Channels - Hairdressers and Personal Care Specialized Stores

Haircare products market can be segmented based on where they are sold. Professional haircare products are typically found in settings where expert hair advice is available, such as salons or specialized hair care shops. Other categories include Supermarket haircare products, which are distributed through large-scale retail outlets like supermarkets and hypermarkets, and pharmaceutical haircare products, which are available for purchase in pharmacies or parapharmacies. Hairstylists are in a unique position to influence consumers purchasing intentions and to enhance both the appearance and overall well-being of clients (Gimlin, 1996). Recommending suitable hair products is no just a courtesy but a vital part of their role. Hairdressers' expertise and product suggestions are trusted as it can save consumers both time and money by helping them make informed choices. Offering these recommended products for sale at salons also adds convenience to clients, fostering their loyalty and encouraging repeat visits from them and their friends. Therefore, we hypothesize:

H6: External factors induce consumers' purchasing intention

4. METHODOLOGY

For this research, the data collection was conducted in Portugal, targeting adult population aged from age 18 onwards. For the purpose of data collection, a survey was created using the Qualtrics platform with three different blocks: (i) Introduction, (ii) variables) and (iii) profile. The first section consists of a brief sum-up of the theme, containing the main goals of the study and its purpose. The second section was divided into seven parts (Environmental Factors, Social and Governmental Factors, Utilitarian Value, Symbolic Value, Brand Reputation, External Factors and Purchase Intentions. All items were assessed using a 7-point Likert scale, where 1 means strong disagreement and 7 indicates strong agreement. The third and last section identifies the respondents' general information and demographic characteristics. In this section, Gender was coded using a 1 (men) or a 2 (women). Age was measured in years and was coded using a 1 (18-26), a 2 (27-42), a 3 (43-59), a 4 (59 or higher) and a 5 (Other). Education level was coded using a 1 (High School), a 2 (Bachelor), a 3 (Masters' Degree), a 4 (PhD) and 5 (Other). Respondents which have kids were coded with a 1 and with a 0 if inversely. Also, Residencial area was coded using a 1 (Lisbon), a 2 (Centre), a 3 (Alentejo), a 4 (Algarve), a 5 (Azores) and a 6 (Madeira). Finally, purchasing channel was coded using a 1 (Internet/Digital Channels), a 2 (Supermarkets), a 3 (Beauty Salons), a 4 (Specialty Stores), a 5 (Groceries Stores) and a 6 (Others).

The questionary was designed in both English and Portugues languages and were available on Qualtrics platform between October and Dezember 2023. The survey was shared through different media channels (namely through WhatsApp, LinkedIn and professional and personal contact network), covering people from different areas and backgrounds. In total, 353 answers were obtained from which 284 corresponded to completed answers (incomplete answers were deleted). Almost 64% of respondents were female, 57% aged between 43 and 58 and 54% with a bachelor's degree. Also, almost 73% of respondents have kids, 84% live in Lisbon and 64% chooses Supermarkets as main purchasing channel. Detailed descriptive statistics on the respondents' characteristics are shown in Table 4.3 below:

Table 4.3: Descriptive statistics on the respondents' characteristics

Measure	Value	Frequency	%
Gender	Male	103	36.3%
	Female	181	63.7%
Age	Between 18 and 26	38	13.4%
	Between 27 and 42	59	20.8%
	Between 43 and 58	161	56.7%
	Over 59	26	9.2%
Education	High School	61	21.5%
	Bachelor	152	53.5%
	Master's Degree & PhD	71	25.0%
Have Kids	Yes	206	72.5%
	No	78	27.5%
Residencial Area	Lisbon	238	83.8%
	Centre	27	9.5%
	North	18	6.3%
	South	0	0.0%
Purchasing Channel	Internet (Digital Channels)	83	29.2%
	Supermarkets	181	63.7%
	Beauty Salons	86	30.3%
	Specialty Stores	107	37.7%
	Groceries Stores	3	1.1%
	Others	19	6.7%

5. DATA ANALYSIS AND RESULTS

Structural Equation Modelling (SEM) is a broad term encompassing various statistical models used to assess the validity of theoretical frameworks using empirical data (Ringle et al., 2022). Two prevalent techniques in SEM are covariance-based and variance-based. In this study, the theoretical research model was examined using a variance-based approach, specifically partial least squares (PLS), implemented with Smart PLS 4 software (Ringle et al., 2022).

PLS is recognized as a versatile statistical method suitable for diverse research scenarios (Henseler et al., 2009) and particularly adept at handling complex models with numerous constructs (Chin, 1998.). The sample size in this study is more than ten times greater than the maximum number of paths directed to a construct (Gefen & Straub, 2005), making PLS a suitable estimation method. PLS is known for its minimal constraints regarding residual distributions and sample sizes compared to covariance-based SEM techniques (Chin, 1998).

The PLS-SEM technique, employed to access the developed model to be further presented, utilizes the SmartPLS tool. This tool has seen consistent growth in marketing research, due to its' robustness and applicability to various marketing research models.

The analysis followed the guidelines proposed by Anderson & Gerbing (1988) involving a two-step process. First, we conducted reliability and validity assessments of the measurement model, followed by an evaluation of the structural model and hypotheses testing. The details of these two steps are outlined below.

5.1 Measurement Model

The model's measurement underwent evaluation for (i) construct reliability, (ii) indicator reliability, (iii) convergent validity, and (iv) discriminant validity. Table 5 lists the average variance extracted (AVE), composite reliability (CR), Cronbach's alfa values, loadings and t-values. The criteria used for this evaluation were:

1. The indicator reliability was evaluated based on the criteria of being higher than 0.7 (Straub & Gefen, 2004). In this sense, the items SV5, SV1, BR1, UV5, BR2, UV6,

EF1 and SG4 were dropped due to low loading factor. The remaining loadings are higher than 0.7 and statistically significant, confirming a good indicator reliability of the instrument.

2. As shown in Table 5.4, all the constructs have both composite reliability and Cronbach's alfa greater than 0.6. Composite reliability values of 0.60 to 0.70 are acceptable in exploratory research while in more advanced stages of research, values between 0.7 and 0.90 can be regarded as satisfactory. Similarly, Cronbach's alfa greater than 0.6 are acceptable (Fornell & Larcker, 1981).
3. The convergence validity was tested with AVE (Average Variance Extracted) and all constructs performed positively against the minimum acceptable value of 0.5 ((Fornell & Larcker, 1981); (Henseler et al., 2015)).

Table 5.4: Quality criteria and factor loadings

Construct	AVE	Composite Reliability	Cronbach's Alpha	Item	Loadings	T-Value
Brand Reputation	0.886	0.871	0.871	BR3	0.941	76.626
				BR4	0.942	89.899
Environmental Factors	0.676	0.842	0.840	EF2	0.829	31.496
				EF3	0.833	33.711
				EF4	0.846	34.512
				EF5	0.781	23.043
External Factors	0.555	0.615	0.613	EX1	0.790	10.033
				EX2	0.735	9.020
				EX3	0.709	7.904
Purchasing Intention	0.712	0.923	0.898	PI1	0.836	33.374
				PI2	0.777	23.497
				PI3	0.763	19.185
				PI4	0.903	59.973
				PI5	0.926	92.059
Social & Governmental	0.842	0.817	0.812	SG1	0.910	57.789
				SG2	0.925	86.040
Symbolic Value	0.726	0.836	0.814	SV2	0.851	30.000
				SV3	0.835	24.026
				SV4	0.870	47.296
Utilitarian Value	0.576	0.839	0.769	UV1	0.818	28.984
				UV2	0.739	15.558
				UV3	0.727	11.257
				UV4	0.748	14.220

4. Discriminant validity was analysed using three criteria (Ringle et al., 2022): (i) Cross-loading criteria (presented in Appendix C), for this criteria, the loading of each indicator should be higher than all cross-loadings; (ii) Fornell-Larcker criteria (presented in Appendix E), for which the Square root of AVE should be greater than the correlations between the constructs as shown in Table 5.5; and (iii) HTMT - Heterotrait-monotrait ratio of correlations (presented in Appendix D) that should be <0.9. The first two criteria were meet. For the HTMT, the variables EF6 and SG3 were dropped to assure the criteria.

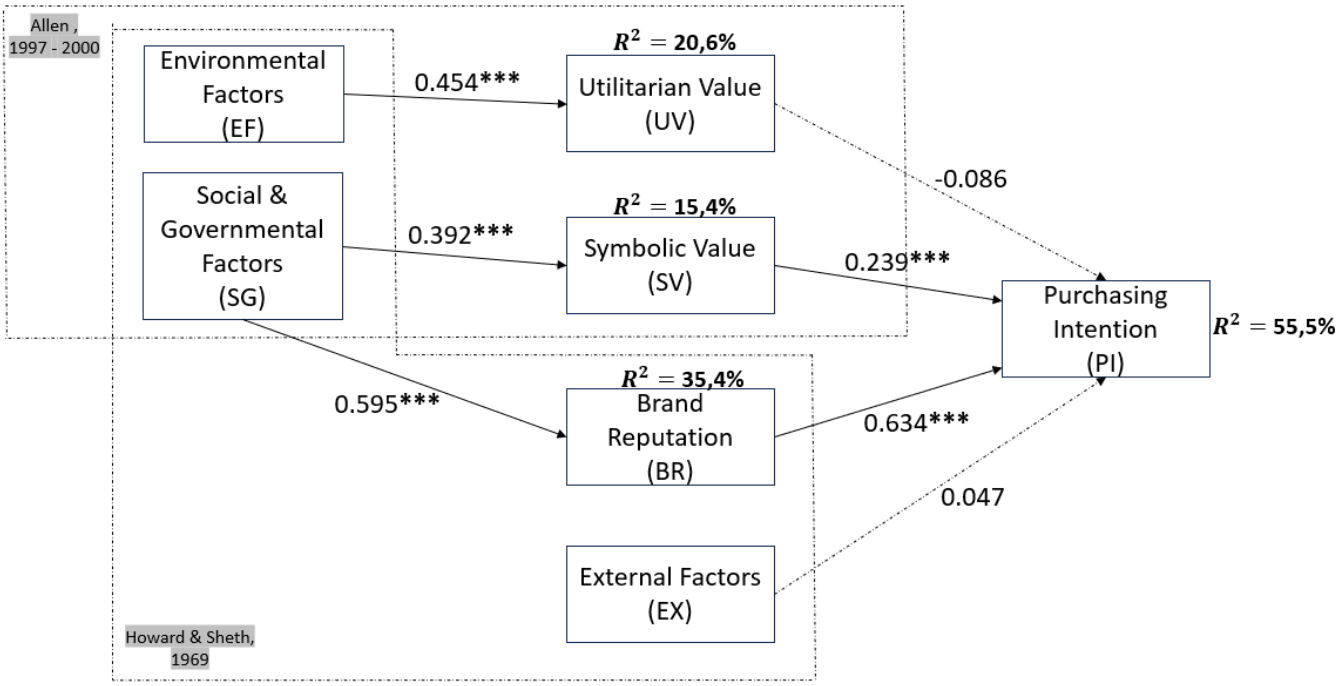
Table 5.5: Square root of AVE

	MEAN	SD	BR	EF	EX	PI	SG	SV	UV
BR	5.439	1.529	**0.941**						
EF	5.063	1.908	0.642	**0.822**					
EX	4.569	1.81	0.263	0.235	**0.745**				
PI	5.37	1.543	0.719	0.64	0.274	**0.844**			
SG	4.962	2.024	0.595	0.737	0.261	0.628	**0.917**		
SV	4.742	2.148	0.493	0.413	0.374	0.515	0.392	**0.852**	
UV	5.744	1.396	0.537	0.454	0.343	0.424	0.391	0.64	**0.759**

The outcomes of the measurement model indicates that the model exhibits good construct reliability, internal consistency, convergence validity, and discriminant validity. This assures that the constructs are statistically distinct, validating their utility in testing the structural model. The variance inflation factor (VIF) was employed to assess multicollinearity among all variables. All VIF values were found to be below the threshold of 5, indicating the absence of multicollinearity issues in the model (Henseler et al., 2015).

5.2 Structural Model and Hypothesis testing

The significance testing of path coefficients was conducted through a bootstrapping procedure involving 5000 resampling iterations (Henseler et al., 2015). The results are summarized in the Figure 5.6:



Note: *p<0.10; **p<0.05; ***p<0.01

Figure 5.6: Model Results

The model explains 20.6% of the variation in Utilitarian value, 15.4% in Symbolic value, 35.4% in Brand Reputation and 55.5% in Purchasing Intention.

The variables Symbolic Value (β^ = 0.239; p<0.01) and Brand Reputation (β^ = 0.634; p<0.01) were found to be statistically significant in explaining Purchasing Intention, therefore, H4 and H5 are confirmed. In the opposite situation are Utilitarian Value (β^ = -0.086; p=0.216) and External Factors (β^ = 0.047; p=0.351) both with p>0.1 which means they are not statistically significant, not supporting hypotheses H3 and H6.

The variable Environmental Factors (β^ = 0.454; p<0.01) was found to be statistically significant in explaining Utilitarian value and, therefore, H1a is confirmed. The variable Social & Governmental Factors (β^ = 0.392; p<0.01) was found to be statistically significant in explaining Symbolic value and, therefore, H1b is confirmed. Additionally, S&G Factors (β^ = 0.595; p<0.01) was found to be statistically significant in explaining Brand Reputation and, therefore, H2 is confirmed.

Overall, of the seven-hypothesis formulated, five were supported by the data collected. The results are presented in the Table 5.6 below:

Table 5.6: Hypotheses Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Hyphotesis
BR -> PI (H5)	0.634	0.631	0.056	11.274	**0.000**	Significant
EF -> PI	-0.039	-0.036	0.032	1.198	0.231	
EF -> UV (H1a)	0.454	0.46	0.054	8.474	**0.000**	Significant
EX -> PI (H6)	0.047	0.051	0.051	0.932	0.351	Not significant
SG -> BR (H2)	0.595	0.596	0.043	13.697	**0.000**	Significant
SG -> PI	0.471	0.471	0.054	8.752	**0.000**	
SG -> SV (H1b)	0.392	0.393	0.058	6.715	**0.000**	Significant
SV -> PI (H4)	0.239	0.237	0.06	3.981	**0.000**	Significant
UV -> PI (H3)	-0.086	-0.079	0.069	1.238	0.216	Not significant

6. DISCUSSION

The theoretical model presented is, as far as we known, unique and innovative, combining the Two Wheel Model Theory from Allen (2002) on consumers' purchasing intention with the variables from Howard Sheth Model (Haines et al., 1970), to explain how ESG factors influence consumers' choices of haircare products.

6.1 MAIN FINDINGS

The research model explains 55,5% of variation in purchasing intentions of haircare products, which is higher to what was obtained in similar studies (Wang, 2014). The factors that positively influence consumers' purchasing intentions are Brand Reputation (BR), Social & Governmental Factors (SG) and Symbolic Value (SV). Inversely, the effects of Environmental factors, External factors and Utilitarian Value were found to be not significant in explaining consumers' purchasing intentions of sustainable haircare products.

6.1.1. Supported Findings

The research model validated three relationships of consumers' purchasing intentions of haircare sustainable products, namely, Brand Reputation (BR), Symbolic Value and Social & Governmental factors (SG).

The Brand Reputation relationship finding was consistent with previous research (Jung & Seock, 2016). Respondents consider Brand Reputation as the most important factor influencing their purchasing intentions. Most of them prioritizes the brand's quality, as well as recognized brands offering sustainable haircare products. Additionally, respondents value brands which address sustainability concerns and eco-friendly products when choosing their haircare products as validated in several studies (Mandarić et al., 2022).

The Symbolic Value relationship finding is also consistent with earlier research (Musiliu Abina & Ajayi, 2022); (Kato, 2021). The most important symbolic indicators for respondents are feeling well after using a haircare sustainable product and having

a sustainable product easy to use (Ghose & Chandra, 2020). Some previous research (Dalziel, 2019) also argue that public figures influence consumers' purchasing intentions of beauty products, in line with the results of this work (which adds the sustainable component).

Social & Governmental factors were also found to be consistent with previous research. Respondents prioritize organic ingredients, as well as vegan haircare products, in line with earlier studies (Ueasangkomsate & Santiteerakul, 2016); (Kaur et al., 2023). The influence of factors such as fair pay for employees is also valued by respondents, which is not 100% reflected in previous studies in which this indicator is less pronounced (Cecchini et al., 2018). Respondents are also more intent to purchase sustainable haircare products whose production does not involve child labour. Studies show a growing consumer consciousness regarding the social consequences of their purchasing behaviour, even within the haircare industry (Breczku, 2022). Nevertheless, price considerations also play a role in shaping consumers' choices (Breczku, 2022). This implies that although consumers may express a preference for sustainable hair care items that are free from child labour, affordability remains a significant factor in their purchasing decisions.

6.1.2. Additional findings

The results did not confirm the significance of Environmental factors, External factors and Utilitarian Value on consumers' purchasing intentions of sustainable haircare products. Environmental factors findings succeed to support the products' Utilitarian Value and, therefore, validating the model theory of (Allen et al., 2002). However, the same variable (EF) failed to support consumers' purchasing intentions of sustainable haircare products being consistent with earlier research (Moslehpour et al., 2021), but contradicting others (E. J. Lee et al., 2020). We believe that consumers in Portugal may have some awareness and understanding regarding the environmental impact of haircare products however higher factors may weigh more heavily on their purchasing intentions, such as price, brand loyalty or even lack of

regulatory standards that make it challenging for consumers to identify genuine eco-friendly haircare products.

External factors results were not found to be significant in consumers' purchasing intentions which contradicts the findings identified on social stimulus such as family influence and social groups (Haines et al., 1970). Other studies such as (Sertori et al., 2023) and (Saeed et al., 2019) also contradict the results of this work both highlighting the role of friends/family recommendations and social media influence over consumers' purchasing intentions. We believe that the consumption of haircare products is largely defined by each person's specific hair types and preferences, which means that what works well for one individual may not necessarily suits another, making friends' recommendations less relevant or applicable. Additionally, many hairdressers lack awareness of the environmental impact of haircare products. Without sufficient information, they may not prioritize eco-friendly options. Finally, this type of products come to a higher price than traditional options and most of Portuguese consumers are price sensitive (Cardoso & van Schoor, 2017).

Utilitarian Value was found not to be significant in consumers' purchasing intentions of haircare sustainable products. This finding is not consistent with earlier research (Chiu et al., 2014) , which concluded that Utilitarian Value are positively associated with buyers' repeat purchasing intention, through product offerings, product information, monetary savings and convenience. However, other research such as Weissmann & Hock (2022) discovered that the product availability had a positive impact on the purchasing intention of sustainable items, suggesting that factors beyond utility may also be influential. Consequently, while the utilitarian value of a sustainable haircare product can affect purchase intentions, it is likely just one among various more crucial factors.

7.IMPLICATIONS FOR RESEARCH AND PRACTICE

This research provides several contributions for both researchers and practice.

For research, it provides an innovative theorical support with a new input stimulus for consumers' purchasing intention, which is the ESG component, not yet explored in literature until now. Taking the Howard-Sheth Model (Haines et al., 1970) as starting point, this research incorporates the sustainability aspect as a new product influence factor (or input stimulus). Similarly, it also adds the ESG component to the theory presented in Allen's Two Wheel Model (Allen et al., 2002), as it can influence both affective judgement (related to the product symbolic value) and objective judgement (related to the product tangible attributes/utilitarian value). In the present era, as awareness of environmental issues continues to grow widely, the ESG concept is recognized as a crucial strategic initiative for business, fuelling consumers' purchasing intentions (Puriwat & Tripopsakul, 2022).

For managers and companies operating in this sector, it is essential to comprehend which factors, namely which ESG components most influences consumers' purchasing intentions.
This study provides some management recommendations or practices for brands to start or to accelerate implementation, by proposing to approach sustainability in a more holistic way along the entire product life cycle and ecosystem.

As this research contributes to marketing literature on sustainable haircare products, it would help companies to implement practices and strategies to address consumer habits and, consequently, to mitigate the impact of this industry on climatic changes. Based in our study results, we suggest brands to stablish sustainable partnerships with suppliers, partners, and consumers, namely through:

i) Selecting suppliers based on principles of agroecology which respect people and the environment while supporting them in their ecological transition;

ii) Choosing manufacturing facilities in favour of local production to shorten distribution chains;
iii) Green-shipping transportation partners;
iv) Recharging stations in stores for refillable packaging;
v) Redesigning in-store experience with AI (Artificial Intelligence), AR (Augmented Reality) and Metaverse in order to eliminate inventory and samples;
vi) Reward programs for adopting sustainable haircare products.

On the Environmental component, beauty brands should innovate with new product formulations that better preserve natural resources. Some interesting initiatives are:

(i) Waterless beauty: consists of manufacturing products with waterless formulas which make products more potent and more sustainable as they use alternative bases such as botanical oils, plant extracts or other active ingredients to preserve natural resources;
(ii) Clinical Beauty: implies recreating natural resources in lab environments by merging natural ingredients with science and technology to avoid depleting natural resources (e.g.: (Tusher, 2024));
(iii) Solid cosmetics: these formats reduce the amount of water used and plastic packaging (e.g.: (Garnier, 2024)).

On the Social component, some good practices should be developed:

(i) Alternative packaging: e.g. moving away from plastic and glass to innovative materials such as paper/cardboard, bioplastics, bamboo, or aluminium (e.g.: Lush Cosmetics is incorporating cork, which is carbon positive, into their packaging);
(ii) Recycling programs: making it more accessible to recycle and offering incentives for consumers (e.g.: (Scouarnec, 2024));
(iii) Reusable products: for a less wasteful beauty regimen;
(iv) Refillable products;

(v) Inclusivity encompassing offer for several segments: Gender, Age, Religion, Ethnicity, Skin type and Disability.

On the Governance component, as beauty brands must disclosure their sustainability positioning towards all stakeholders, best practises should include:

(i) Getting their sustainable products cradle-to-cradle certified. Cradle-to-cradle is the global standard for products that are safe, circular, and responsible made (Cradle to Cradle Certified website), which assures five core pillars: material health (safe for humans and the environment); product circularity (regenerative products and process design); clean air & climate protection (renewable energy and reduced harmful emissions); water & soil safety and social fairness (respecting human rights and contributing to a fair and equitable society);

(ii) Developing a product ecologic comparator to evaluate their carbonic footprint (from design to distribution) against other brands in the same category;

(iii) Stablishing and disclosure concrete sustainability related KPIs such as reducing emissions, recycling (including reusable, refillable, recyclable, or compostable), plastics reduction, etc.

8. LIMITATIONS AND FUTURE RESEARCH

Our work acknowledges certain limitations and proposes recommendations for future research. Many responses collected during the data collection phase were from individuals aged from 43 years old onwards, suggesting a need for future studies to incorporate a more diverse range of age groups, namely Gen Z. Even further, it would be interesting to investigate whether the same results are observed in the Business-to-Business channel (hairdressers, specialized stores) rather than only in the Business to Consumer as professional hairdressers may be more aware of sustainability aspects.

Also, despite the widespread attention sustainability is receiving, sales of sustainable products only represent a small fraction on overall demand. There appears to be a gap between consumers explicit attitudes toward sustainable products and their consumption behaviour. (Luchs et al., 2010). This may suggest that while brand reputation is a key factor, other variables such as price or convenience may also play a role in consumers' decision-making process. In this sense, it would be interesting to quantify how much more are consumers willing to pay for a sustainable haircare product to evaluate the importance they give to this topic and counteract the response writhing effect.

Further research could also investigate which factors would encourage consumers to buy more sustainable haircare products. Some relevant criteria could be: (i) cheaper prices for sustainable products (as sustainable products are more expensive in general) and (ii) tax penalties for non-sustainable products. Additionally, to overcome the price barrier, it would be interesting to analyse if (iii) enlarging the companies' portfolio of sustainable products would encourage consumers to buy these products. Also, investigating if people with (v) higher income intend to buy more sustainable haircare products than people with lower income. Other interesting research would be to deeper investigate on (vi) how information on sustainability practices could increase consumers' willingness to buy more sustainable products, such as (a) more information about the carbon footprint of the haircare product and on brand's sustainability commitments; (b) efficacy of sustainability campaigns of social media

versus paid media; (c) impact of sustainability practices (mentioned on chapter 7) on beauty companies' brand image.

Finally, as beauty is expanding into personal health and wellness, it is relevant to investigate if these individual emerging needs overlap sustainability concerns on purchasing intentions of haircare products (e.g.: Is the consumer less sensitive to the product composition when choosing a shampoo to avoid hair loss? Does he/she value the sustainability aspect under this circumstance?).

9.CONCLUSION

Sustainability holds unprecedent importance in contemporary society that urges concerted efforts to adopt eco-friendly practises. Beyond environmental concerns, there is a growing recognition of the social responsibility of businesses and individuals, making the demand for sustainable products a priority.

The results obtained in this survey show that, among ESG factors, the Social component influence consumers' purchasing intention, with a strong indirect impact on brand reputation and on the product's symbolic value (pleasure, well-being and easy to utilize indicators). Regarding Environmental component, indicators with statistical relevance are recycling packaging, hazardous ingredients and low CO2 emissions. Environmental component impacts the product utilitarian value (performance results, texture, and fragrancy), however with no statistical impact on consumers' purchasing intention.

The study indicates that Brand reputation influences consumers' purchasing intentions (explained 35,4% of consumer purchasing intentions). An important criteria that consumers think of when pretending to buy a haircare product is its' corporate brand (product quality and "trust" are automatically assumed by the consumer as these attributes are associated with that specific brand). Thus, companies should expand their business strategies and adapt their communication policies by incorporating sustainability attribute to its brand image.

The main practical implication of this study for business management is the adoption of initiatives that address sustainability concerns in a holistic view by haircare companies (from selecting sustainable suppliers, alternative ingredients, creative packaging and diversified and inclusive product portfolio, rewards programs, new in-store experiences supported by technologies and reducing waste and samples, etc).

Respondents of the survey indicated that they intend to (i) continue using sustainable products, (ii) they intend to do it frequently, (iii) and they are willing to buy, and even to pay a premium for these products.

We are already seeing that regulatory frameworks worldwide are increasingly emphasizing sustainability, and businesses are realizing the financial benefits of long-term sustainability strategies, but the main challenge remains to accelerate changes on consumers' behaviour.

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APPENDIX

APPENDIX A – SURVEY

Variable	Item	#	Source
E Factors	I value local manufactured sustainable haircare products.	E1	Adapted from
	I value haircare products with production processes which do not generate CO2 nor GHG emissions.	E2	(McKinsey &
	I choose haircare products free from environmental hazardous materials.	E3	Company, 2021)
	I prefer recycling packaging on haircare products.	E4	
	I prefer minimal packaging on haircare products.	E5	
	I choose haircare products with no involvement of animal testing.	E6	
SG Factors	I value vegan haircare products (made with natural ingredients).	SG1	Adapted from
	I choose haircare products from companies which employees receive a fair pay.	SG2	(McKinsey &
	I only choose products made with organic ingredients.	SG3	Company, 2021)
	I value haircare products produced without the use of child labour.	SG4	and (Al Mamun et al., 2023)
Product Utilitarian Value (*)	The application result (performance) of a haircare sustainable product is important for me.	PUV1	Adapted from
	The texture is important when choosing a sustainable haircare product.	PUV2	(Liu-Thompkins
	The fragrancy is important when choosing a sustainable haircare product.	PUV3	& Rogerson,
	The efficiency (low product quantity by application) of a sustainable haircare product is important for me.	PUV4	2012)
	My choice depends on the products quality (composition).	PUV5	
	My choice depends on having a diversified offer of haircare sustainable products for different hair types or needs (product range).	PUV6	
Product Symbolic Value (*)	I value the colours and packaging (aesthetics) of the sustainable haircare products.	PSV1	Adapted from
	It is important for me to feel well after using a haircare sustainable product.	PSV2	(Kato, 2021)
	It is important for me to have a sustainable haircare product easy to use.	PSV3	
	I value the pleasure associated to sustainable haircare products experience.	PSV4	
	When I choose a sustainable haircare product, I am wondering to imitate public personalities.	PSV5	
Brand Reputation	I value the brand quality of sustainable haircare products.	BR1	Adapted from
	I value sustainable haircare products from recognized brands.	BR2	(Bath & Reddy,
	I value brands which addresses sustainability concerns when choosing my haircare sustainability product.	BR3	1998)
	Eco-friendly haircare products increase my brand trust.	BR4	
External Factors	I value my friends and family's advice when choosing sustainable haircare products.	EF1	Adapted from
	I value social likes/reviews in social media of sustainable haircare products.	EF2	(Barger et al.,
	I follow my hairdresser's recommendations to choose my haircare product (shampoo).	EF3	2016), and (Fernandes & Londhe, 2015)
Purchasing Intentions of sustainable	I am willing to buy sustainable haircare products.	PISHP1	From (Venkatesh
	I am willing to pay a premium to buy haircare sustainable products.	PISHP2	et al., 2022)
	I intend to regularly use different types of sustainable haircare products.	PISHP3	
	I intend to continue using sustainable haircare products in the future.	PISHP4	

Haircare products	I plan to continue to use sustainable haircare products frequently.	PISHP5

(*) Items adapted from Table in Appendix B below

Appendix B - Utilitarian Value and Emotional Value Items: Haircare products vs Peer Industries

Utilitarian Value Items – Examples of Peer Studies		
USER-GENERATED CONTENT/WEBSITES (Liu-Thompkins & Rogerson, 2012)	AUTOMOBILE (Kato, T. 2021)	HAIRCARE PRODUCTS
Acessibility	Performance	Application Result
Ease of Use	Functionality	Texture/Fragrancy
Low Cost	Efficiency	Quantity per usage
Quality	Quality	Quality
Availability	Durability	Diversity of types (product range)

Symbolic Value Items – Examples of Peer Studies		
CLOTHING (Bhat, S., & Reddy, S. K., 1998)	AUTOMOBILE (Kato, T. 2021)	HAIRCARE PRODUCTS
Style/fashion	Aesthetics	Aesthetics (colours and packaging)
Freedom of expression	User-friendliness	Well-being along the day
Status	Confort	Easy to use
Positive feelings	Pleasure	Experience's pleasure
Leisure	Interpessoal conextion	Aspirational image
Exclusivity	Brand reputation	Brand confidence

Appendix C – Cross loadings

Constructs		BR	EF	EX	PI	SG	SV	UV
BR	BR3	**0.941**	0.579	0.228	0.683	0.543	0.478	0.51
	BR4	**0.942**	0.629	0.266	0.67	0.576	0.451	0.502
EF	EF2	0.553	**0.829**	0.281	0.575	0.623	0.345	0.366
	EF3	0.564	**0.833**	0.208	0.542	0.707	0.321	0.367
	EF4	0.55	**0.846**	0.143	0.537	0.565	0.323	0.395
	EF5	0.443	**0.781**	0.144	0.449	0.531	0.372	0.363
EX	EX1	0.25	0.228	**0.79**	0.243	0.209	0.308	0.26
	EX2	0.114	0.108	**0.735**	0.135	0.16	0.199	0.24
	EX3	0.188	0.158	**0.709**	0.206	0.203	0.3	0.264
PI	PI1	0.548	0.498	0.202	**0.836**	0.475	0.421	0.344
	PI2	0.468	0.431	0.146	**0.777**	0.439	0.361	0.224
	PI3	0.49	0.493	0.306	**0.763**	0.517	0.404	0.376
	PI4	0.72	0.591	0.249	**0.903**	0.586	0.455	0.402
	PI5	0.736	0.648	0.249	**0.926**	0.608	0.512	0.416
SG	SG1	0.535	0.708	0.175	0.543	**0.91**	0.322	0.328
	SG2	0.555	0.647	0.299	0.607	**0.925**	0.394	0.387
SV	SV2	0.385	0.368	0.242	0.396	0.271	**0.851**	0.523
	SV3	0.412	0.28	0.269	0.411	0.276	**0.835**	0.582
	SV4	0.454	0.396	0.415	0.493	0.426	**0.87**	0.536
UV	UV1	0.482	0.502	0.21	0.441	0.414	0.531	**0.818**
	UV2	0.352	0.259	0.425	0.252	0.279	0.469	**0.739**
	UV3	0.374	0.245	0.263	0.204	0.163	0.457	**0.727**
	UV4	0.384	0.255	0.209	0.299	0.239	0.476	**0.748**

Appendix D – Heterotrait-monotrait ratio of correlations (HTMT)

Constructs	BR	EF	EX	PI	SG	SV	UV
BR							
EF	0.75						
EX	0.335	0.307					
PI	0.795	0.727	0.351				
SG	0.706	0.895	0.355	0.728			
SV	0.58	0.494	0.489	0.589	0.465		
UV	0.633	0.51	0.52	0.46	0.449	0.798	

Appendix E – Fornell-Larcker

Constructs	BR	EF	EX	PI	SG	SV	UV
BR	0.941						
EF	0.642	0.822					
EX	0.263	0.235	0.745				
PI	0.719	0.64	0.274	0.844			
SG	0.595	0.737	0.261	0.628	0.917		
SV	0.493	0.413	0.374	0.515	0.392	0.852	
UV	0.537	0.454	0.343	0.424	0.391	0.64	0.759

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