INSTITUTO
UNIVERSITÁRIO
DE LISBOA

# Factors Influencing Generation Z Consumer Behavior Towards Sustainable Packaging in the French Cosmetic Sector

Valentina Spada

Master in Marketing

Supervisor:
PhD. Ana Margarida Mendes Camelo Oliveira Brochado,
Associate Professor with habilitation, Department of Marketing, Operations and General Management
at Iscte Business School

September 2025

BUSINESS
SCHOOL

Department of Marketing, Operations and General Management

# Factors Influencing Generation Z Consumer Behavior Towards Sustainable Packaging in the French Cosmetic Sector

Valentina Spada

Master in Marketing

Supervisor:
PhD. Ana Margarida Mendes Camelo Oliveira Brochado, Associate Professor with habilitation, Department of Marketing, Operations and General Management at Iscte Business School

September 2025

**ACKNOWLEDGEMENT**

I would like to express my sincere gratitude to all those who have contributed to the completion of this dissertation.

I would like to extend my warmest thanks to my friends, especially those with whom I shared my semesters at KEDGE Business School and ISCTE Business School in Lisbon. Their support, encouragement and the many moments we shared together greatly contributed to making this academic experience more rewarding.

I would also like to express my gratitude to both institutions, KEDGE Business School and ISCTE Business School as well as my tutor Professor Brochado, which provided me with a stimulating and international learning environment conducive to my personal and academic development.

Finally, I would like to thank all the participants in my survey who took the time to contribute to this study. Their involvement was essential to the success of this study.

**RESUMO**

Esta investigação decorre num contexto em que as preocupações ambientais, as pressões regulatórias e as mudanças nas expectativas dos consumidores estão a transformar profundamente o setor. As embalagens, há muito consideradas um simples elemento funcional, são agora vistas como um indicador central da responsabilidade ambiental das marcas.

Este estudo investiga os principais fatores que influenciam o comportamento dos consumidores da Geração Z em França no que diz respeito às embalagens sustentáveis de cosméticos. Para responder a esta investigação, o estudo utiliza a Teoria do Comportamento Planeado (Ajzen, 1991) e a Teoria do Valor-Crença-Norma (Stern et al., 1999). Foi realizada uma pesquisa quantitativa utilizando um questionário online distribuído a inquiridos franceses da Geração Z.

Os resultados mostram que atitudes favoráveis, alta consciência ambiental e influência social são fatores significativos da intenção de compra. No entanto, a percepção estética e a sensibilidade ao preço parecem ser fatores ambivalentes que podem atuar tanto como alavancas quanto como barreiras. A credibilidade dos rótulos e a narrativa desempenham um papel importante, mas desigual, devido a um certo ceticismo em relação ao greenwashing. Por fim, o estudo confirma a existência de uma lacuna entre intenção e comportamento, mostrando que intenções positivas não se traduzem sistematicamente em comportamentos de compra reais devido a restrições financeiras, práticas ou de disponibilidade do produto. Esta pesquisa contribui para a literatura ao aplicar modelos comportamentais ao caso específico das embalagens sustentáveis em cosméticos franceses.

**Palavras-chave**: Indústria cosmética, Embalagens sustentáveis, Geração Z, Comportamento do consumidor

**JEL Classification System:** M31 (Marketing), Q01 (Sustainable Development)

**ABSTRACT**

This research takes place in a context where environmental concerns, regulatory pressures and changing consumer expectations are profoundly transforming the sector. Packaging, long perceived as functional, is now considered a central indicator of brands' environmental responsibility.

This study investigates the main factors influencing the behaviour of Generation Z consumers in France regarding sustainable cosmetic packaging. To answer this investigation, the study uses the Theory of Planned Behavior (Ajzen, 1991) and the Value-Belief-Norm Theory (Stern et al., 1999). A quantitative survey was conducted using an online questionnaire distributed to French Generation Z respondents.

The results show that favourable attitudes, high environmental awareness and social influence are significant drivers of purchase intention. However, aesthetic perception and price sensitivity appear to be ambivalent factors which can act as both levers and barriers. The credibility of labels and storytelling plays an important but uneven role due to a certain scepticism about greenwashing. Finally, the study confirms the existence of an intention–behaviour gap showing that positive intentions do not systematically translate into actual purchasing behaviours due to financial, practical or product availability constraints. This research contributes to the literature by applying behavioural models to the specific case of sustainable packaging in French cosmetics.

**Keywords:** Cosmetic industry, Sustainable Packaging, Generation Z, Consumer Behaviour
**JEL Classification System:** M31 (Marketing), Q01 (Sustainable Development)

**TABLE OF CONTENTS**

ACKNOWLEDGEMENT ..... i

RESUMO ..... iii

ABSTRACT ..... v

TABLE OF CONTENTS ..... vii

TABLE INDEX ..... xi

FIGURE INDEX ..... xiii

APPENDIX INDEX ..... xv

GLOSSARY Of ACRONYMS ..... xvii

1.INTRODUCTION ..... 1

1.1 Contextualisation of the Subject ..... 1

1.2 Relevance of the Topic and Definition ..... 1

1.3 Problem Statement, Research Objectives, Questions and Approach ..... 2

1.4 Dissertation Structure ..... 3

2.LITTERATURE REVIEW ..... 5

2.1 Introduction ..... 5

2.2 The Cosmetic Sector ..... 5

2.2.1 Cosmetic Industry Overview ..... 5

2.2.2 Focus on the Sustainable Cosmetic Industry ..... 6

2.2.3 The role and Position of the Sector in Relation to the Generation Z ..... 7

2.3 The Strategy and Symbolism of Packaging ..... 8

2.3.1 Functions of Packaging ..... 8

2.3.2 Transition Towards Sustainable Packaging ..... 9

2.3.3 Innovation in the Field of Sustainable Packaging ..... 10

2.3.4 Consumer Perception Regarding Sustainable Packaging ..... 11

2.4 Sustainable Consumer Behavioural Theories ..... 12

2.4.1 Theory of Planned Behaviour ..... 12

2.4.2 Value Belief Norm Theory ..... 13

2.4.3 Intention Behaviour Gap ..... 14
3.CONCEPTUAL MODEL ..... 15
3.1 Context ..... 15
3.2 Research Hypotheses ..... 15
3.3 Conceptual Model ..... 16
4. RESEARCH METHOD AND IMPLEMENTATION ..... 19
4.1 Research Context and Purpose ..... 19
4.2 Research Strategy and Method ..... 19
4.3 Data Collection ..... 20
4.4 Questionnaire Design and Measures ..... 20
4.5 Hypothesis Testing and Analysis ..... 21
4.6 Conclusion and Limitation ..... 21
5. RESULT AND DISCUSSION ..... 23
5.1 Introduction and Context ..... 23
5.2 Demographic and Consumption Habits Data ..... 24
5.3 Attitude, Environmental Awareness and Social Influence as Factors of TPB ..... 26
5.3.1 Attitude Towards Cosmetic Products ..... 26
5.3.2 Environmental Awareness ..... 27
5.3.3 Social Influence ..... 28
5.4 Value Belief Norm Theory ..... 28
5.4.1 Aesthetic ..... 28
5.4.2 Price Sensitivity ..... 29
5.4.3 Trust Perceived in Labels and Storytelling ..... 30
5.5 Intention Behaviour Gap ..... 30
5.6 Qualitative Data Analysis ..... 31
6 CONCLUSION AND RECOMMENDATION ..... 35
6.1 Main Findings and Contributions ..... 35
6.2 Recommendations and Managerial Implications ..... 36

6.3 Limitation and Reliability ..... 37

6.4 Recommendation for Future Research ..... 38

7. REFERENCES ..... 39

8. APPENDIXES ..... 43

## TABLE INDEX

**Table 3.1:** Summary of Factors and Associated Hypothesis ..... 15

**Table 5.1:** Classification of Levers Regarding Purchasing Cosmetics with Sustainable Packaging (Q13) ..... 32

**Table 5.2:** Classification of the Main Obstacles Regarding Purchasing Cosmetics with Sustainable Packaging (Q14) ..... 33

**FIGURE INDEX**

**Figure 5.1:** Gender Distribution of the 100 Respondents ..... 24

**Figure 5.2**: Age Distribution of the 100 respondents ..... 25

**Figure 5.3:** Attitudes Towards Sustainable Cosmetic Packaging (100 respondents)..... 26

**APPENDIX INDEX**

Appendix A - First Section of the Questionnaire (Objectives of the Research) ..... 43
Appendix B - Second Section of the Questionnaire (Definition)..... 44
Appendix C - Third section of the questionnaire (Consumer Habits)..... 45
Appendix D - Fourth Section of the Questionnaire (Attitude - H1)..... 46
Appendix E - Fourth Section of the Questionnaire (Environmental Concern - H2)..... 47
Appendix F - Fourth Section of the Questionnaire (Social Norms - H3) ..... 48
Appendix G - Fourth Section of the Questionnaire (Aesthetics - H4)..... 49
Appendix H - Fourth Section of the Questionnaire (Price Sensitivity - H5) ..... 50
Appendix I - Fourth Section of the Questionnaire (Labels and Trust - H6) ..... 51
Appendix J - Fourth Section of the Questionnaire (Purchase Intention and Actual Behavior - H7)..... 52
Appendix K - Fifth Section of the Questionnaire (Two Qualitative Questions Q13 - Q14)... 54
Appendix L - Sixth Section of the Questionnaire (Demographic Questions)..... 55
Appendix M - Last Section of the Questionnaire..... 57
Appendix N - Comparison between Women and Men regarding Attitude..... 58
Appendix O - Comparison of Environmental items between Overall score, >2000€ score and <500-1000€ score. ..... 59
Appendix P - Data from the questionnaire related to Social influences ..... 60
Appendix Q - Data from the questionnaire regarding related to Aesthetic..... 61
Appendix R - Data from the questionnaire regarding the items related to Price sensitivity.... 62
Appendix S - Word Cloud representing the levers (Q13)..... 63
Appendix T - Word cloud representing the main obstacles (Q14) ..... 64

**GLOSSARY Of ACRONYMS**

EC - European Commission

EU- European Union

FEBEA - Fédération des Entreprises de la beauté (translated in English as: French Federation for Beauty Companies)

INCI - International Nomenclature of Cosmetic Ingredients

LCA - Life Cycle Assessment

POS -Point Of Sale

RQ - Research Question

TPB - Theory of Planned Behaviour

VBN- Value Belief Norms Theory

# 1.INTRODUCTION

## 1.1 Contextualisation of the Subject

Global warming, environmental collapse and growing piles of plastic waste, every generation is now facing an environmental emergency which is compelling companies and consumers to radically rethink their buying behaviour. The cosmetics industry is frequently criticised for the heavy use of materials in product packaging. Once perceived as purely functional and aesthetic, packaging is now considered as an indicator of environmental responsibility from the consumer perspective. This shift highlights how packaging can shape consumer perceptions of corporate sustainability, at a time when transparency, sustainability, ethics and ecological commitment are increasingly scrutinised and progressively integrated into purchasing decisions.

This shift is particularly noticeable among Generation Z, that is defined as individuals born between 1997 and 2012. This generation, as well referred as digitally native, has grown up in an environment shaped by unlimited access to information, the omnipresence of social media and exponential awareness of climate issues. This conditioning has shaped very specific expectations. Generation Z is no longer satisfied with purchasing a product purely for its utilitarian value. They take into account the values and commitments it represents and what the brand truly symbolises. For this generation, cosmetics are not only a means of individual expression they are also a source of well-being, an element of identity and ethics.

It is in this context that packaging appears as a source of tension and a significant opportunity of innovation for economic players. It represents both a practical need and a symbolic aspect which is a key factor that brands use to communicate their positioning. It is crucial to understand how Generation Z perceives sustainable packaging in the cosmetics sector in order to understand and anticipate changes in consumer behaviour along with the strategic challenges facing companies.

## 1.2 Relevance of the Topic and Definition

The cosmetics industry plays an important role in the global economy and in France's economy. It represents not only a high value-added sector but also an industry under constant pressure to innovate and that must now incorporate eco-responsible innovation. Indeed, the role of packaging which has long been perceived as secondary, is now at the centre of debate. It constitutes both a crucial marketing tool and a major source of environmental impact.

In the academic field, research towards Generation Z's behaviour regarding consumer products has increased significantly in recent years. However, very few studies focus

specifically on sustainable packaging and the cosmetics sector particularly in the French context. Studying this subject therefore allows to fill in this gap in the literature while providing leads for research on the evolution of their consumption behaviour in the context of these environmental challenges.

From a managerial perspective, it is crucial for brands to understand the expectations of Generation Z. This is due to the demographic dimension and what influences their consumption practices. It is a matter of identifying the various factors that orientate purchasing intentions with regard to sustainable packaging. This is in fact an essential lever for adapting and adjusting companies' various strategies, thereby increasing their competitiveness while responding to new societal expectations.

Finally, the author's motivation for investigating "The key factors influencing Generation Z consumer behaviour in France towards sustainable packaging in the cosmetics industry" resulted from a dual academic and personal interest. Indeed, from an academic perspective, consumer behaviour has been a recurring theme throughout the author's education. Particularly throughout their studies in marketing, branding and consumer psychology. The author has been able to develop and gain a deeper understanding of why preferences are formed and how they change in response to societal trends. On a professional level, the decision to focus on the cosmetics sector was driven by professional experience in the cosmetic sector. This has given the author insights into how brands position themselves, develop and innovate in terms of packaging to meet consumer expectations. Then, on a personal level, a growing awareness of environmental stakes and the switch to more eco-friendly consumption habits in daily life led the author to take an interest in this topic. This dual perspective, both internal with brand strategy and external with consumption practices, offers a unique approach and emphasises the relevance of this research.

### 1.3 Problem Statement, Research Objectives, Questions and Approach

Although Generation Z is known to be sensitive to environmental issues, available studies provide little insight into how their attitudes translate into purchasing behaviour, particularly in the French cosmetics sector. Some studies highlight a difference between purchase intentions and actual purchase practices. However, the role of packaging in this process has not been sufficiently studied. This dissertation aims to fill this gap by analysing the perception of sustainable packaging and the factors that influence these purchasing decisions by French Generation Z.

The main question of this dissertation is the following: RQ: What are the key factors influencing Generation Z consumers' behaviour in France toward sustainable packaging in the cosmetics industry?

From this main question arise four sub-questions that aim to understand the perceptions and behaviours of the French generation Z regarding sustainable packaging in the cosmetic industry. The first question (RQ1) examines how the French generation Z consumers perceive sustainable packaging in the cosmetic industry. The second question (RQ2) explores What internal, social or external factors are influencing the purchase intentions of cosmetic products with a sustainable packaging. Then, the third question (RQ3) focuses on which marketing levers (price, aesthetic, labels, storytelling and brand image) influence significantly the purchase intention. Finally the fourth question (RQ4) explores whether a gap exists between declared purchasing intentions and actual behaviour and what are the main obstacles.

Four corresponding objectives emerge from each of these research questions. The first objective (i) is to explore how the French generation Z consumers perceive sustainable packaging in cosmetic (rational and emotional attitudes). The second objective (ii) is to identify the influence of internal (attitudes and values), social (peer norms) and external (label, price and aesthetic) factors on purchase intentions regarding sustainable cosmetic packaging purchase intentions. Then, the third objective (iii) is to analyse which marketing levers (aesthetics, price, brand storytelling, eco-labels) significantly influence the purchase intention of a sustainable cosmetic packaging of the French generation Z. Finally, the fourth objective (iv) is to investigate the existence of a gap between the intention to purchase sustainable cosmetic packaging and the actual buying behaviour.

Finally, the method adopted to answer the questions and meet the objectives combines a detailed review of the literature and a quantitative survey of French Generation Z consumers. This approach aims to offer both theoretical contributions and managerial leads for the cosmetics sector.

### 1.4 Dissertation Structure

This dissertation is structured in six sections that progress in a logical path. It opens with an introduction that sets out the context, the author's motivations, the relevance of the subject and the research questions as well as the objectives. The second part is dedicated to a literature review organized around three main axes: the cosmetic industry, the role and evolution of packaging and finally the consumer behaviour theories particularly the ones that apply to the generation Z. Based on these analyses the third part presents a conceptual model and the

hypothesis of the research. The fourth part presents the employed research methodology and the implementation. Continuing with the fifth part that exposes the results and the associate's discussion that highlights the theoretical and managerial contribution of this study. Finally the sixth part concludes by providing recommendations, highlighting the limitation of the research and providing the possible future leads to further investigation on this topic.

# 2.LITTERATURE REVIEW

## 2.1 Introduction

The literature review aims to establish the theoretical and empirical foundations of three main themes: the cosmetics sector, the role of packaging as well as the strategy, and the behavioural theories, using Generation Z's relationship with each of these areas as a common thread. It is based on academic sources such as books, scientific articles, academic journals, legal texts and reports on the cosmetics industry.

This literature review is structured in a funnel shape, starting with the context of the sector and moving towards the framework theories. This structure allows to identify and highlight the factors that influence the purchasing behaviour of cosmetics products with sustainable packaging and to connect this information to the conceptual framework model of the dissertation.

The first part establishes the context of the cosmetic sector with an analysis of the French and the eco-responsible cosmetics market. It concludes with a focus on Generation Z's relationship with the cosmetics sector. The second part examines the function of packaging then its evolution towards sustainable packaging, followed by a detailed look at innovations and ends with Generation Z's perception of sustainable packaging. Finally, the literature review concludes with the various behavioural theories. The Theory of Planned Behaviour, the Value Belief Theory and the Intention Behaviour gap are the theories explored which will lay the foundations for the theoretical model.

## 2.2 The Cosmetic Sector

### 2.2.1 Cosmetic Industry Overview

The French cosmetics industry is one of the most dynamic and emblematic sectors, both economically and culturally. This sector is well-known for its excellence, innovation, and product diversity. Cosmetic products are generally defined as “non-medicinal products designed to meet human needs in terms of body care, hygiene and beauty” (Larousse, n.d.).

According to European Regulation (EC) No. 1223/2009 and Baki (p. 11. 2022), cosmetics are defined as: “any substance or mixture intended to be placed in contact with external parts of the human body (...) or with the teeth and mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance, protecting them, keeping in good condition or correcting body odours”.

This legal framework provides an understanding that cosmetic products are designed to clean, protect, beautify or perfume the body. From a marketing perspective, cosmetic products are classified into four main categories: skin care products (creams, serums, masks), hygiene products (soaps, shampoos, deodorants), make-up products and perfumes.

In 2023, the global cosmetics industry reached a market value of approximately USD 500 billion with projections of reaching USD 580 billion by 2027 (McKinsey & Company, 2023). With constant growth mostly in the Asian, American and European markets. The industry is one of the fastest growing sectors globally, particularly influenced by consumer trends such as digitalisation, e-commerce as well as sustainable, clean and inclusive beauty trends (Mondello et al., 2024). Additionally, the Covid-19 pandemic accelerated consumer awareness on environmental and ethical concerns regarding the beauty industry. Social media platforms such as TikTok and Instagram have transformed the way products are presented to consumers. This is particularly noticeable among younger generations, who have the opportunity to discover, learn and evaluate products (Lee et al. 2022).

France plays a central role in the European cosmetics market. Although specific market data may fluctuate significantly, academic studies reveal that France is one of the largest markets in Europe and globally, particularly in terms of exports (Turcu & Brancu, 2025). Beyond the economic weight of the French cosmetics industry, it is characterised as dynamic and challenging. The sector is composed of small and medium-sized enterprises alongside global leaders. All are involved in product innovation, R&D and packaging design (Mondello et al., 2024). In addition, there has been a rise of new entrants and independent companies in the ethnic and natural beauty segment. This reflects changes in societal and environmental expectations as well as environmental trends (Amberg & Forgarassy, 2019).

### 2.2.2 Focus on the Sustainable Cosmetic Industry

The sustainable cosmetics segment refers to cosmetic products that incorporate a company's efforts to reduce their environmental and social impact throughout the entire product life cycle. This includes ethical sourcing, formulations, eco-friendly packaging and post-consumption waste reduction strategies (Martins & Marto, 2023). Not only is it a marketing strategy, it is also a holistic approach that encompasses physical appearance (a person's mental, emotional, environmental and spiritual well-being). This cosmetic trend relies on expectation regarding transparency, authenticity and responsibility.

Globally, the sustainable cosmetics segment is experiencing rapid growth, driven by increasing consumer demand and stricter environmental regulations. According to

Transparency Market Research (2024), the global market value of so-called ‘green’ cosmetics was estimated at USD 33.7 billion in 2023. These results are similar to another market estimate. The Business Research Company (2025) estimates this market at USD 41.7 billion in 2024 and forecasts growth of 5.3% for the following year, bringing this segment to approximately USD 43.95 billion in 2025. These data from sector reports confirm the overall momentum of the sector and highlight a long-term trend. This momentum is also fuelled by large multinationals such as L'Oréal and Unilever, which are investing heavily in eco-friendly product lines and by other specialist players such as The Body Shop, Lush and Weleda (with their positioning). Their innovations in packaging are a key differentiator and attractiveness factor in the market.

The European market is also following this global trend, driven by various European regulations that require manufacturers to drastically reduce their use of plastics. In France, the trend towards eco-friendly products is following the global market trend. The organic personal care segment was valued at USD 813.8 million in 2022 and is projected to reach USD 1.57 billion by 2030 (Grand View Research, 2023). The sustainable segment is expanding faster than conventional cosmetics trends. This trend is also corroborated by the Federation of Beauty Companies (FEBEA), which identifies sustainability as a major strategic focus for the entire industry by 2030 (FEBEA, 2024).

This dynamic is driven by several players who contribute to the development of products aimed at reducing plastic use. Among the most emblematic is Aroma-Zone, the leading national brand offering natural cosmetics, which is experiencing strong growth with its “do it yourself” concept. The L'Occitane en Provence and Rocher groups are also pioneers in the sector, offering natural, organic and refillable products.

These market factors and data, which focus on products as a whole, show that the global, European and French markets for sustainable cosmetics are no longer a niche market but are driving the transformation of this sector. Furthermore, this helps to explain the growing role of packaging as a vehicle for sustainability, which is the result of a combination of growing consumer demand and the European regulatory framework.

### 2.2.3 The role and Position of the Sector in Relation to the Generation Z

Generation Z (comprising individuals born between 1997 and 2012) now represents a strategic lever for the cosmetics industry, both in terms of its demographic weight and its influence on consumer expectations. It is composed of individuals who come into contact with beauty products earlier than their elders and thus quickly develop consumer habits. According to Euromonitor International (2025), Generation Z represents 17% of beauty and skincare

spending in Europe, with an increase of up to 20% expected by 2029. This reflects this generation's strong interest in cosmetics.

Furthermore, Generation Z is not only starting to consume at an earlier age, it is also influencing market norms. It is behind several social trends and phenomena that have been popularised through communication channels such as Instagram and TikTok. Certain trends, such as the ‘clean girl’ phenomenon, have shifted the aesthetic towards minimalist beauty based on product transparency and sustainability. This early media usage, combined with a strong awareness of sustainability and the environment, requires brands to offer products that align with their values. This shows that members of Generation Z place particular importance on safety, ethics and sustainability in their choice of cosmetics. Furthermore, this generation stands out from others in its quest for meaning, authenticity and consistency between brands' rhetoric and their actual actions (Shim et al., 2024). Eco-consciousness strongly influences consumer behaviour (Joshi & Rahman, 2015). This is where sustainable packaging comes in as a key criterion, providing a tangible interface that demonstrates brands' environmental responsibility.

In conclusion, Generation Z is a driving force of the expanding market and has become a cultural influencer that is reshaping consumption standards in the cosmetics industry. According to Shim et al. (2024), Generation Z is one of the most sensitive to sustainability issues in the cosmetics industry, making it a driver of change. Therefore, for players in this sector, attracting this customer demographic represents not only considerable revenue potential but also an opportunity to anchor their brand in new aesthetic and social references.

## 2.3 The Strategy and Symbolism of Packaging

### 2.3.1 Functions of Packaging

More than just a container, packaging is a strategic communication tool. It is an essential element of differentiation in the competitive world of cosmetics. Packaging attracts consumers on the Point Of Sales (POS) and has a real influence on their perception of value and purchase intention contributing to the overall consumer experience. It goes beyond its protective role to become a powerful marketing tool (Rundh, 2005).

Packaging has several functions such as utilitarian, informational, aesthetic and symbolic.

First, there is an utilitarian function that ensures the protection of the product from external aggressions such as light, temperature, water or bacteria, ensuring its stability until the consumption.

Then, the packaging plays an informational role since companies use the packaging surface to provide mandatory information. The following elements must figure on the packaging: the International Nomenclature Cosmetic Ingredient list (INCI) which is the list of ingredients of a product, the method of use, the expiration dates, labels (such as “Made in France”, organic or vegan labels) and other information related to the brand (such as its values or history).

To continue, there is an aesthetic role that makes the product attractive and captures the consumer's attention at the point of sales. According to Silayoi & Speece (2004), packaging highlights visual elements such as colours, shapes or designs/graphics that evoke emotions in consumers while providing information that supports their purchasing decisions. It is the first visual contact consumers have with the product, this is why packaging is crucial in the marketing strategy.

Furthermore, packaging fulfils a symbolic function. It is the identity of the product and the brand. It helps build this image and introduce consumers to the product's universe through visual and sensory elements and also serves to build loyalty. It creates an emotional experience and strengthens brand attachment (Srivastava et al., 2022)

Packaging is therefore a decisive factor. Up to 73% of purchasing decisions made at the point of sale (Srivastava et al., 2022). In a context where consumers' environmental and social expectations are changing, these traditional functions are being transformed and brands must rethink their packaging strategy. Therefore a well thought packaging including all the above elements can be the key to a successful cosmetic product.

### 2.3.2 Transition Towards Sustainable Packaging

In everyday life, plastic remains the dominant raw material for cosmetic packaging. However, its environmental impact makes it one of the major challenges to address. More than 15 million tons of plastic packaging waste are generated annually within the European Union (Somlai et al., 2023), with a recycling rate of only 41% (Eurostat, 2024). France's rate is one of the lowest in terms of recycling efficiency of plastic packaging in Europe. In addition, the recycling of other materials is lower than most European countries with 80% recycled glass and 65% of recycled paper and cardboard. This data demonstrate the difficulty of integrating plastic into an effective circular economy (Morel et al., 2024). In addition to the dominance of plastic use for packaging, the use of multi-layers and combinations materials block this circularity (Schmidt et al., 2022).

To address this situation, regulations have been established and are playing a driving role in a plastic-free transition. Indeed, in 2019, the European Union adopted a Directive on Single-

Use Plastics (Directive (EU) 2019/904), strengthening the circular economy. France has also established laws in this regard that progressively impose the reduction in single use plastics and encourage the development of reusable solutions (European Commission, 2019). These regulations are compelling companies in the cosmetics industry to rethink their packaging design strategies by integrating this principle of circularity.

From a methodological perspective, Life Cycle Assessment (LCA) is now an essential tool for measuring the environmental impact of packaging. This method allows the comparison of different options based on their weight, material composition, lifespan, and recyclability (Bher et al., 2024). Regarding cosmetic products, research indicates that strategies that integrate material reduction, the use of mono materials and the implementation of refillable systems have a significant potential to significantly reduce their impacts. According to Vassallo et al., (2024), this reduction can only occur if these new methods are widely adopted by consumers.

Furthermore, packaging is not only a technical and tactical method of sustainability, it also constitutes a strategic communication tool. This allows companies to convey their transparency through labels, environmental declarations, and traceability. According to Sahota (2014), packaging has become a central means for sustainable commitment, directly shaping brand credibility and influencing consumer trust towards the brand and product.

Thus, in this alarming context, sustainable packaging is becoming not only an environmental necessity (imposed by various regulations) but also a strategic brand opportunity enabling differentiation within the cosmetics industry while strengthening its legitimacy among consumers who are increasingly sensitive to sustainability issues.

### 2.3.3 Innovation in the Field of Sustainable Packaging

Demand and the transition towards sustainability have led the cosmetics industry to launch a wave of innovations in packaging. These innovations aim to reduce environmental impact while maintaining quality and brand identity. They target all stages of the product cycle (sourcing, packaging, materials and functions) and can be grouped into three main categories: alternative materials, eco-designed and refillable packaging (Rocca et al., 2022).

Firstly, alternative materials are an innovation made from plants or biodegradable materials. It proposes to replace conventional plastic with a sustainable option that is bio-based, recycled or biodegradable materials (Peelman et al., 2013). For instance, Lush is one of the first companies in the sector to offer this type of packaging. The brand offers biodegradable packaging for its solid shampoos.

Then, eco-designed, single-material and simplified packaging refers to packaging that significantly minimises the impact of brands. Garnier, for instance, sells solid shampoos that are 100% plastic-free, using cardboard as packaging. Another similar example is the French brand Respire, which uses tube-shaped cardboard packaging for hygiene products such as deodorants. These innovations reduce not only the carbon emissions during production and end of the product's life cycle but influence as well the consumer perception. In fact, according to Magnier & Crié (2015), consumers associate the visual simplicity and material to a bigger environmental responsibility.

Finally, the innovation increasingly used in the sector is refillable products. It allows consumers to reuse the main packaging and pay only for the refill, while reducing the environmental impact. Refillable perfumes and cardboard packaging are now becoming commonplace, even in the high-end sector. In the fragrance industry is Kenzo Parfums. This brand launched the fragrance L'Eau Pure in a glass bottle with a glass cap, making the product fully recyclable. In addition, Kenzo has developed a highly innovative Gift With Purchase (GWP): a recyclable paper bag containing the perfume which replaces conventional plastic GWPs.

The success of refillable packaging in the cosmetic industry according to Zdonek & Jawarska, (2024) depends mainly on the practicality and simplicity. As these new innovations are more eco-friendly, they also come with challenges such as practicality, product perception and also the logistics of refilling products.

### 2.3.4 Consumer Perception Regarding Sustainable Packaging

Previously stated, product packaging conveys meaning and image, allowing consumers to judge its sustainability. Several factors can influence the perception towards a product. According to Magnier & Schoormans (2015), visual appearance, including colours, texture and shapes, can signal to consumers the level of sustainability. In addition to these visual appearances, labels can reinforce credibility, clarity and consumer confidence Magnier & Crié (2025). Storytelling is another factor that can as well reinforce influence. Therefore, visuals, labels and storytelling should be part of the strategy so that consumers must be convinced by a coherent and practical message (Rocca et al. (2022) .

Faced with these various factors, consumers may have either a negative or positive reaction, which influences their purchasing decision. Indeed, it may be negative if there is confusion about a product. According to Rocca et al. (2022) and Szabo & Webster (2021), negative reactions may be linked to greenwashing, a lack of understanding of certain labels, and the

perception of a lack of practicality or effectiveness. On the other hand, it can also be positive if sustainable packaging demonstrates the brand's commitment and responsibility to consumers, thereby increasing trust and leading to a purchase.

Regarding Generation Z, the expectations for product transparency are high and require tangible evidence. This sensitivity is therefore significant and brands must offer attractive designs and also leverage the influence of fathers and social media, which are essential for convincing consumers. Consumer perceptions of packaging and sustainability within the cosmetics industry range from a real marketing opportunity to a credibility challenge. It is therefore a key determinant of purchase intention.

## 2.4 Sustainable Consumer Behavioural Theories

### 2.4.1 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB), developed by Icek Ajzen in 1991, is one of the most known frameworks for explaining how an intention becomes an actual behaviour. According to this model, a person's behaviour can be predicted by their intention which itself is influenced by three main factors: attitude towards the behaviour, perceived social norms and perceived behavioural control. Attitude towards behaviour refers to an individual's positive or negative perception of a given behaviour. Then, perceived social norms correspond to social pressures from social circles (family, friends, peers) and societal expectations. Finally, perceived behavioural control is connected to an individual's perception of their ability to adopt the behaviour by taking into account their resources such as financial, time or information (Ajzen, 1991).

TPB has been used in empirical studies regarding sustainable consumption. For instance, Paul et al. (2015) and Yadav et Pathak (2017) have demonstrated that a green purchase is predicted by attitudes, social norms and perceived control. Applied to Generation Z and the consumption of cosmetics products with sustainable packaging, TPB provides a better understanding of their purchasing behaviour. This is a generation that has a positive attitude towards sustainable cosmetics since they perceive them as consistent with their ethical and environmental values. Additionally, social norms have a strong impact on their behaviour, particularly through social media, influencers, friends and peers. As a result, both their inner and outer circle plays a key role in validating their choices (Rocca et al., 2022).

However, perceived behavioural control can limit the transition from intention to the actual behaviour due to a perceived high price or reduced accessibility to sustainable products, which

can in fact constitute major obstacles. Therefore, the TPB suggests that although Generation Z shows a positive attitude and interest in cosmetics with sustainable packaging, their final behaviour is strongly influenced by perceived constraints such as price or accessibility.

Based on this theories and insights, the following hypothesis are proposed:

- H1: A positive attitude towards sustainable cosmetic packaging positively influences purchase intention.
- H2: A high level of environmental concern is positively associated with the intention to purchase a cosmetic product with sustainable packaging.
- H3: Social influence (from peers or social networks) affects purchase intention.

### 2.4.2 Value Belief Norm Theory

The Value Belief Norm theory (VBN) was developed by Stern et al. (1999) and complements the Theory of Planned Behaviour (TPB) by introducing a moral and ethical dimension to the consumer's behaviour journey. Although the TPB focuses on rational intentions, the VBN suggests that pro-environmental behaviours are motivated by a sense of moral obligation. An individual's personal values can therefore influence environmental beliefs and thus have an impact on final purchasing behaviour.

The consumer behaviour towards sustainable cosmetics results from a combination of three factors. According to Fennis & Strobe (2020), internal factors corresponding to individual values and pro-sustainability attitudes can influence this behaviour. Then, Rocca et al (2022) suggest that factors can also be external: use of labels, transparent brand storytelling and price range. An additional factor called social factors is taken into account. This includes different cultural norms, the peer pressure and the influence of external social circles via social media.

The VBN applied to Generation Z is particularly interesting. As previously mentioned, this generation has grown up with climate issues resulting in being highly sensitive to environmental challenges and developing a sense of anxiety (known as eco-anxiety). This context amplifies their values and feelings of moral responsibility as well as developing high expectations regarding the clarity of labels and corporate transparency (Rocca et al., 2022). This is the result of confusion in the market about ‘green’ cosmetics, which are not sufficiently communicated and defined to be well perceived.

Therefore, VBN suggests that ethical values and environmental awareness are strong among Generation Z, which should encourage them to adopt sustainable purchasing behaviours. These behaviours would then depend on internal factors (values and beliefs), external factors (labels and brand image) and social factors (peers, cultural norms).

Drawing on the VBN theory framework and its application to the generation Z, the following two hypothesis can be formulated:

- H4: A favourable aesthetic perception of sustainable cosmetic packaging increases purchase intention.
- H5: High price sensitivity has a negative impact on the purchase intention of a cosmetic product with sustainable packaging.

### 2.4.3 Intention Behaviour Gap

After establishing that behaviour can be predicted by an intention (TPB) and that there is as well a moral and ethical dimension to the decision-making process (VBN), research highlights the existence of a gap between the stated intentions and the final behaviour of consumers. Several barriers may explain this gap: price, product accessibility, perceived product effectiveness, trust and credibility (that an individual has for a brand) and habits.

Firstly, price is a major barrier since sustainable products are often perceived as more expensive (Vermeir & Verbeke, 2006). Accessibility is also a determining factor in the decision-making process. Indeed, availability may be limited for certain sustainable products, as they remain less common than traditional products. Furthermore, the perceived effectiveness and quality of sustainable products is also lower than that of traditional products (Carrington et al., 2010). In addition, the issues of trust and credibility play an important role. There is a strong fear of greenwashing and confusion due to the proliferation of labels, which can undermine a brand's credibility (Joshi & Rahman, 2015). Finally, according to White et al. (2019), consumer habits are a powerful barrier for consumers. Consumers stick to their habits and develop a strong attachment to established brands, which reinforces their resistance to change.

When applied to the Generation Z, the intention behaviour gap highlights a disparity. This generation has a strong intention to buy cosmetics with sustainable packaging due to their high ecological awareness and eco-anxiety. However, the ability to take action is slowed. The main obstacles identified are price, accessibility and a lack of clarity regarding green cosmetics. The green gap suggests that although Generation Z has high intentions regarding sustainable cosmetics purchases, their final behaviour depends heavily on the reduction of these barriers.

From this concept on the intention gap behaviour two hypothesis can be formulated:

- H6: Trust in brand transparency and eco-labels positively influences the intention to purchase a cosmetic product with sustainable packaging.
- H7: Strong purchase intention and actual behaviour may be hindered by internal or external factors.

## 3.CONCEPTUAL MODEL

### 3.1 Context

The conceptual model developed in this dissertation combines three theories: the Theory of Planned Behaviour (Ajzen, 1991), the Value Belief Norm Theory (Stern et al., 1999) and the Concept of Intention-Behaviour Gap (Carrington et al. 2010).

These models provide an approach that offers a comprehensive framework for understanding how attitudes, values, social influences and contextual constraints may shape Generation Z's purchasing behaviour regarding cosmetics with sustainable packaging.

### 3.2 Research Hypotheses

In order to present the conceptual model developed, a summary of the hypothesis with their corresponding factors and literature is presented below:

**Table 3.1:** Summary of Factors and Associated Hypothesis

| Factor | Description | Hypothesis |
|---|---|---|
| Attitude | Individual positive or negative evaluation of sustainable packaging (Ajzen, 1991). | H1: A positive attitude towards sustainable cosmetic packaging positively influences purchase intention. |
| Environmental concern | Values and beliefs that are linked to sustainability and moral responsibility (Stern et al., 1999) | H2: A high level of environmental concern is positively associated with the intention to purchase a cosmetic product with sustainable packaging. |
| Social influence | The impact of peers, influencers and social media (Ajzen, 1991). | H3: Social influence (from peers or social networks) affects purchase intention. |
| Aesthetic | The visual appeal and design of sustainable packaging (Silayoi & Speece, 2004). | H4: A favourable aesthetic perception of sustainable cosmetic packaging increases purchase intention. |

| | | |
|---|---|---|
| Price sensitivity | Perception of sustainable cosmetics appears to be more expensive (Vermeir & Verbeke, 2006). | H5: High price sensitivity has a negative impact on the purchase intention of a cosmetic product with sustainable packaging. |
| Trust and Labels | Brand transparency and credibility perceived regarding eco-labels (Sahota, 2014; Rocca et al., 2022). | H6: Trust in brand transparency and eco-labels positively influences the intention to purchase a cosmetic product with sustainable packaging. |
| Intention behavior Gap | Internal and external barriers (accessibility, price, habits) limit the final purchase action (Carrington et al., 2010). | H7: Strong purchase intention and actual behaviour may be hindered by internal or external factors. |

Source: Own Elaboration

### 3.3 Conceptual Model

The conceptual model is presented by the following figure based on the seven hypotheses, the factors associated with each of them and the literature review provided in the previous chapter.

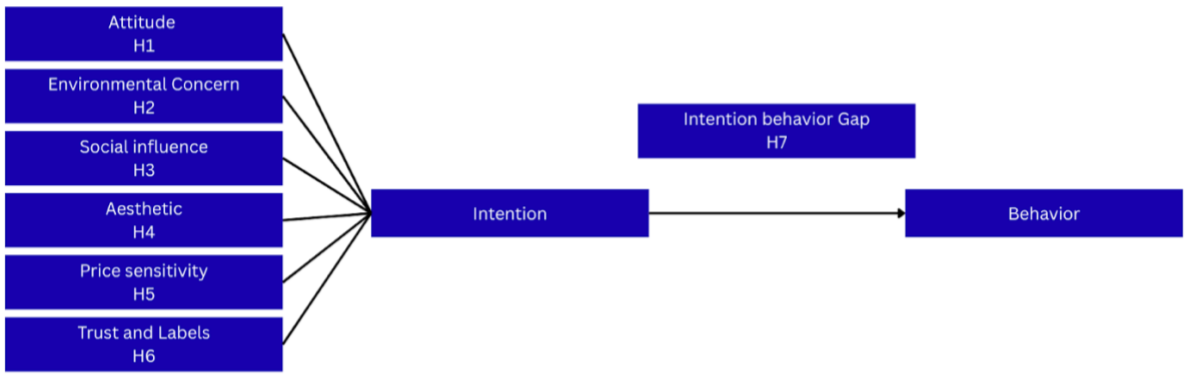



**Figure 3.1:** Conceptual Model - Factors Influencing Generation Z Behaviour Towards Sustainable Cosmetic Packaging

Source: Own Elaboration

The model is structured around two main stages: the antecedents of intention and the transition from intention to behaviour.

The first group on the left of the model is the list of all the independent variables representing the factors hypothesised to influence the purchase intention. These include: attitudes toward sustainable packaging, environmental concerns, social influence, perceptions of aesthetics, price sensitivity and the credibility and trustworthiness regarding labels and storytelling.

At the centre of the model, these factors converge towards the purchase intention. This constitutes the immediate predictor of behaviour according to the TPB. For this model, the intention is conceptualised as the consumer's willingness to purchase a cosmetic product with a sustainable packaging.

On the right side of the model, the intention is linked to the actual behaviour. However, the intention behaviour gap concept is incorporated into the model to account for possible barriers identified in the literature review chapter. This gap reflects the divergence between the positive intention and the actual purchase.

By incorporating these dimensions into the model, it is possible to identify the main factors that precede the purchase intention among the French Generation Z consumers regarding sustainable packaging in cosmetics. In addition, it will allow recognition of the barriers that can prevent the transition from intention to the actual behaviour of the consumer regarding the purchase of a cosmetic product with sustainable packaging.

# 4. RESEARCH METHOD AND IMPLEMENTATION

## 4.1 Research Context and Purpose

The main objective of this study is to identify the factors that influence the purchasing behaviour of French Generation Z regarding sustainable packaging in the cosmetics sector. To achieve this objective, different hypotheses were constructed based on three theoretical frameworks presented in the literature review chapter: TPB, VBN and Intention Behaviour Gap). They will be tested via a quantitative questionnaire with 100 respondents (N=100) and two open questions to complete the analysis.

To structure and guide this chapter, four objectives of this research are as follows:

- (i) Explore how the French generation z consumers perceive sustainable packaging in cosmetic ( rational and emotional attitudes).
- (ii) Identify the influence of internal (attitudes and values), social (peer norms) and external (label, price and aesthetic) factors on purchase intentions regarding sustainable cosmetic packaging purchase intentions.
- (iii) Analyse which marketing levers (aesthetics, price, brand storytelling, eco-labels) significantly influence the purchase intention of a sustainable cosmetic packaging of the French generation Z.
- (iv) Investigate the existence of a gap between the intention to purchase sustainable cosmetic packaging and the actual buying behaviour.

## 4.2 Research Strategy and Method

To conduct this research, the author adopted a quantitative approach based on a self-administered questionnaire designed using the Qualtrics platform. This digital tool is widely used in academic settings and allows the author to design, collect, and store the participants' response data in a secure way.

The link to the online questionnaire was distributed primarily through social media (LinkedIn, WhatsApp, Facebook, and Instagram) and among various French groups and student groups. This choice of channels is explained by the profile of the target population of this study, which is the Generation Z (individuals born between 1997 and 2012), who are digital natives using these platforms daily.

Regarding the structure of this chapter, the author first presents the sample profile and consumption habits, then the results related to TPB: attitude (H1) and environmental awareness (H2), social influence (H3). Then, the author analyses three external levers: aesthetics (H4),

price (H5), trust/labels and storytelling (H6). Then the author test the Intention–Behaviour Gap (H7) before summarising the qualitative findings (Q13–Q14) and proposing a conclusion.

### 4.3 Data Collection

The quantitative questionnaire, supplemented by two qualitative questions, was put online for a period of two weeks during the year 2025. Before distributing the questionnaire, it was tested by fifteen participants in order to identify possible comprehension problems and improve its fluency.

In total, 100 respondents that have completed the questionnaire correspond to the inclusion criteria. The collection of the data via Qualtrics presents numerous advantages. It allows to maintain a certain distance between the researcher and the participants, thus minimizing some risks of data distortion. It also offers integrated statistical analysis and visualization functions (reports, graphs and Excel files).

The inclusion criteria applied are to belong to Generation Z, being French, and consuming cosmetic products. Individuals who did not meet these conditions were excluded from the sample. The sampling method combines convenience sampling and snowball sampling. The first one relies on the author's personal and professional network, while the second one involves inviting the first respondent to distribute the questionnaire to their own contacts. This combination allows for a gradual increase in the number of participants.

### 4.4 Questionnaire Design and Measures

The questionnaire administered in French is structured into six sections to cover all research hypotheses. The questionnaire also includes a visible progress bar to maintain respondents' attention and motivation.

The first section presents the objectives of this research and provides an explanation of the academic use of the data. It also indicates anonymity and the time required to complete the questionnaire (Appendix A).

The second section provides two detailed definitions. Indeed, it seemed essential to explain the terms packaging and sustainable packaging in order to ensure a consistent understanding by all respondents (Appendix B).

The third section ensures the collection of data related to consumer habits and consists of three questions (Appendix C). These relate to purchasing frequency, products used, and the budget allocated to cosmetic products.

The main section is the fourth section. It is constructed from factors emerging from the literature review, which are: attitude (Appendix D), environmental concerns (Appendix E), social norms (Appendix F), aesthetics (Appendix G), price sensitivity (Appendix H), labels and trust (Appendix I), purchase intention, and actual behaviour (Appendix J). Respondents evaluate their agreements with propositions using a five-point Likert scale (from strongly disagree to strongly agree). In addition, a ranking system is used on page 9 to further identify a factor essential in the purchasing decision.

The fifth section consists of two open qualitative questions to precisely collect the obstacles and expectations regarding sustainable packaging (Appendix K).

The sixth section consists of five demographic questions: gender, education level, employment status and monthly income (Appendix L).

The last section is an appreciation message to signal the end of the questionnaire and to ensure that the data is sent to the platform (Appendix M).

### 4.5 Hypothesis Testing and Analysis

Various data analysis strategies were employed and processed using software such as Qualtrics and Excel, allowing results reports and pivot tables to be generated. The first step was a descriptive analysis that summarized demographic data (gender, age, education level, employment status, and monthly income) as well as purchasing habits (frequency, monthly budget).

The core of the analysis focused on the research hypotheses (H1 to H7). These were tested using Likert scales whose internal consistency was assessed using reliability analysis (Cronbach's Alpha) as well as exploratory factor analysis.

Finally, specific items Q13 and Q14 were analysed in relation to Hypothesis H7, which addresses the existence of an intention–behaviour gap. These questions enabled a comparison between declared purchase intentions and actual reported behaviours, providing insights into the barriers that may hinder the translation of intentions into effective consumer actions.

### 4.6 Conclusion and Limitation

Several limitations must be taken into account. For example, the sample size is limited, as we selected participants without any input from them. The approach may also be limited, as it is predominantly quantitative. There is also a risk of social desirability bias when discussing the method used.

The questionnaire developed for this research was pre-tested with a small group of participants to ensure comprehension of the questions and ease of navigation. The internal reliability of the scales was verified using Cronbach's alpha. Content validity was ensured by adapting factors from recognized academic studies. These various steps strengthen the reliability of the study.

However, certain methodological limitations must be taken into account. First, the sample size, while sufficient for an exploratory Master's-level study, remains limited and does not guarantee full representativeness of French Generation Z. Furthermore, the use of a non-probability sampling method (convenience and snowball sampling) may introduce selection bias. Finally, as with any self-administered questionnaire survey, there is a risk of social desirability bias, as some participants may over-report their long-term intentions relative to their actual behaviours.

These limitations do not compromise the relevance of the results obtained. In fact, they must be kept in mind when interpreting them. They also open up perspectives for future research which could rely on larger and more diverse samples (or on mixed methods combining qualitative and quantitative approaches).

# 5. RESULT AND DISCUSSION

## 5.1 Introduction and Context

This chapter presents and discusses the empirical results of the research focusing on the perception and factors influencing Generation Z's intention to purchase cosmetics with sustainable packaging in France. The theoretical framework relies on three theories: Theory of Planned Behaviour (Ajzen, 1991), Value Belief Norm Theory (Stern et al., 1999) and the concept of the intention-behaviour gap (Carrington et al., 2010). These three perspectives guided the formulation of hypotheses H1-H7 tested in this chapter.

In order to organise this analysis, four research questions structure the presentation of the results:

- (RQ1) how the French generation Z consumers perceive sustainable packaging in the cosmetic industry?
- (RQ2) What internal, social or external factors are influencing the purchase intentions of cosmetic products with a sustainable packaging?
- (RQ3) Which marketing levers (price, aesthetic, labels, storytelling or brand image) influence significantly the purchase intention?
- (RQ4) Does a gap exist between declared purchasing intentions and actual behaviour and what are the main obstacles?

The data comes from an online Qualtrics questionnaire distributed to French Generation Z respondents. The sample consists of 100 respondents (N=100). The questionnaire is organised using a 5 point Likert scale (attitude, social influence, environmental awareness, aesthetics, price, trust/labels), two open-ended questions (perceived drivers and barriers) and demographic and habit variables (purchase frequency, budget and consumption categories). The administration and sampling strategy are convenience and snowball.

The analysis follows a progression from the sample profile to the testing of hypotheses H1 to H7. The analysis begins with an examination of demographic data and consumption habits. It then continues with the various factors: attitude (H1), environmental awareness (H2), social influence (H3), external levers such as aesthetics (H4), price (H5) and trust/labels (H6), and the behavioural gap (H7). Finally, the analysis concludes with a qualitative analysis of questions Q13 and Q14 to identify levers and barriers.

### 5.2 Demographic and Consumption Habits Data

The sample for this research is composed of one hundred respondents, all belonging to French Generation Z and consumers of cosmetic products. Figure 5.1 shows that the sample is predominantly female, at 67% against 32% male and 1% non-binary. This predominance of women corresponds to an expected structure within the cosmetics sector, which is traditionally more popular among women. However, the significant presence of men in this sample attests to a broadening of the market to a male audience, revealing an evolution in the cosmetics sector.

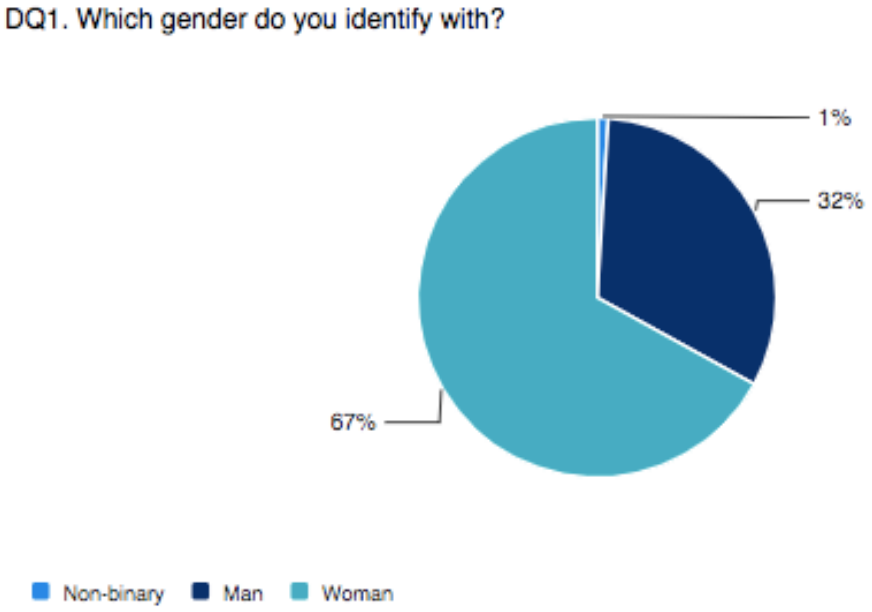



**Figure 5.1:** Gender Distribution of the 100 Respondents

Source: Own Elaboration

Regarding the age of the respondents, the Figure 5.2 shows that the majority belongs to the 24-26 age group (58%) and the 21-23 age group (39%), while only 3% are in the 18-20 age group. This age distribution may be linked to the sampling method, as the questionnaire was distributed via student networks, but it nonetheless corresponds to a population of young adults at the start of their careers or in higher education, who are therefore fully integrated into the logic of cosmetics consumption.

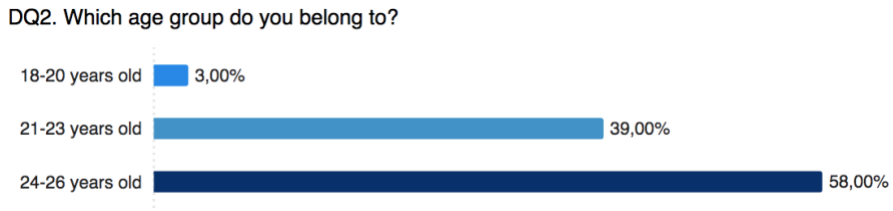



**Figure 5.2**: Age Distribution of the 100 respondents

Source: Own Elaboration

Furthermore, the respondents' level of education confirms this type of profile. Indeed, 86% of respondents have a Master's degree, 8% have a Bachelor's degree and 6% declare themselves as having another qualification. The level of qualification is consistent with the distribution channels used (university group, group of young working people in France) and therefore reflects a relatively educated population that is likely to be more sensitive to sustainability issues (Fennis & Stoebe, 2020).

Finally, in terms of socio-economic status, 38% of participants are students, 23% are managers/intermediate professionals, followed by manual workers at 20%, 10% of participants are seeking employment and finally 6% are civil servants. The incomes declared by respondents correspond to their declared professional status. The majority of the sample has a modest income with 32% reporting earnings of less than 500€ per month, 9% between €500 and €1000, 35% between €1,001 and €2000, and finally 24% exceeding €2000. These data suggest that purchasing intentions can be interpreted as being influenced by significant budgetary constraints, which are identified in the literature as a major barrier to sustainable purchasing (Vermeir & Verbeke, 2006).

In terms of consumption habits, 60% declare that they purchase cosmetic products every month, 28% a few times a year, 7% every week, and 5% rarely or never. This frequency of purchase reflects regular consumption that is integrated into daily life, confirming that Generation Z has entered the world of beauty at an early age (Lee et al. 2022). Furthermore, the monthly budget allocated to cosmetics is generally moderate. Indeed, 41% of respondents estimate that they spend between €21 and €50, 30% spend less than €20, and 2% spend more than €100 per month. These figures confirm a reality of consumption that is constrained by the price criterion, which remains an important and decisive factor in the choice.

Finally, in order to better understand the type of product most used by Generation Z in terms of cosmetics, participants were asked a question with a ranking system. Hygiene products came out on top, followed by skincare, then makeup, and finally perfumes. This hierarchy

observed in the data reinforces the idea that functional consumption is complemented by products linked to identity expression, such as makeup and perfume, in line with the analyses of Shim et al. (2024) on the evolution of beauty practices among younger generations.

In conclusion, these demographic and purchasing behaviour data provide a better understanding of this sample of Generation Z, which is predominantly female and has limited financial resources. Their cosmetics consumption is regular but constrained by budget, with a preference for hygiene and skincare products. This information and these socio-demographic, economic and behavioural characteristics provide an essential framework for interpreting the results relating to the hypotheses on the various theoretical frameworks mentioned in the literature review (attitude as an influencing factor and the act of purchasing).

## 5.3 Attitude, Environmental Awareness and Social Influence as Factors of TPB

### 5.3.1 Attitude Towards Cosmetic Products

Three items were exposed to the respondent about the idea of usage of a cosmetic product with sustainable packaging, the perceived use of a sustainable cosmetic packaging and the importance regarding the usage of it (Appendix D). The results from Figure 5.3 indicate that the sample expresses a highly favourable attitude towards sustainable packaging. On a five-point Likert scale, the mean of the three items measuring this dimension reaches 4.37/5, reflecting an almost unanimous agreement. More specifically, 92% of respondents declared that they appreciate the idea of using cosmetics with sustainable packaging, while only 2% oppose it. The items proposed related to the appreciation of the idea of using sustainable packaging, the perception of the value of sustainable packaging in the cosmetics industry, and the importance attached to its use.

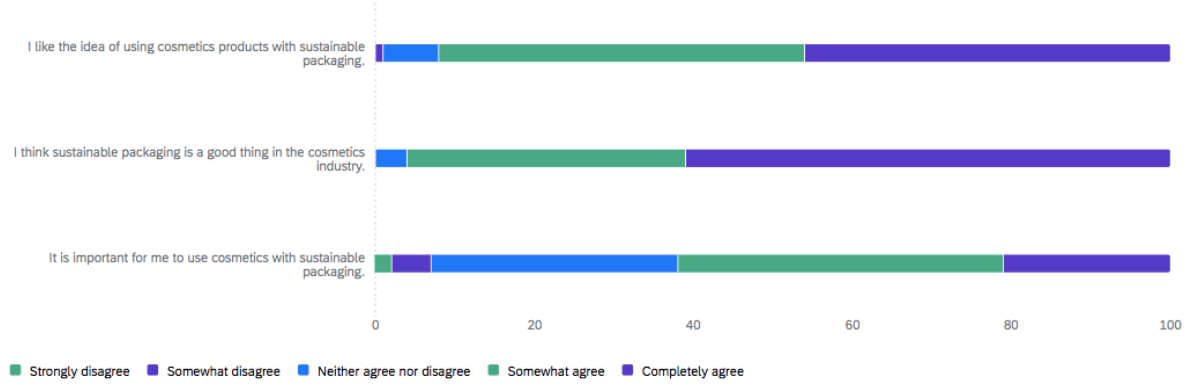



**Figure 5.3:** Attitudes Towards Sustainable Cosmetic Packaging (100 respondents)

Source: Own Elaboration

In terms of attitude, it appears that women are slightly more enthusiastic than men with an average of 4.42 for women versus 4.28 for men (Appendix N) , confirming a trend often noted in the literature review as a more pronounced environmental awareness in female consumption (Joshi & Rahman, 2015). These results corroborate hypothesis H1, which states that a favourable attitude towards sustainable cosmetic packaging would positively influence consumption intentions.

### 5.3.2 Environmental Awareness

Environmental sensitivity emerges as another key factor influencing consumer behaviour. In this questionnaire, three items were used in order to measure this dimension: sensitivity to current issues, awareness of environmental impact in everyday life and belief that individual consumer choices can help protect the environment (Appendix E). The average scores are all above 4 out of 5, more than 90% of respondents recognise their individual responsibility for ecological transition.

Cross-tabulations provide an interesting nuance (Appendix O). Respondents with a monthly income above €2,000 reported a slightly higher average (M = 4.22) than those with incomes between 0-1000€ (average of M = 4.19). This difference suggests that a stronger economic situation may reinforce one's ability to engage in responsible consumption (this may be due to reduced budgetary constraints). However, environmental concerns remain transversal and shared by all participants thereby confirming hypothesis H2.

These results therefore correspond to the Value-Belief Norm theory (Stern et al., 1999), which explains that ecological values and environmental beliefs can foster a sense of moral responsibility that directly influences consumer behaviour. This also ties in with the observations of Roca et al. (2022), who explain that eco-anxiety experienced by young people corresponds to a strong sensitivity to climate issues.

These analyses confirm that French Generation Z adopts very positive and favourable attitudes towards sustainable cosmetics packaging and demonstrates a strong environmental awareness. These two dimensions constitute powerful drivers of purchase intention, as predicted by the behavioural models seen in the literature review chapter. Nevertheless, cross-tabulations suggest that the expression of these sensitivities may be modulated by gender and income, revealing that while a positive attitude may be almost universal, its translation into practice may depend on certain socio-economic constraints.

### 5.3.3 Social Influence

As previously established in the literature review, the theory of planned behaviour with subjective norms (pressure and expectations from family, friends and social circle) are determinants of intention. Three sentences were used to measure this dimension: one relating to encouragement from friends and family to buy sustainable products, another relating to recommendations from friends and acquaintances and finally a sentence on the influence of social networks on the choice of cosmetic products (Appendix F).

The results demonstrate an existing social influence, but one that varies depending on its source. Indeed, the statement 'My friends and family encourage me to buy sustainable products' has an average score of 3.22/5, reflecting moderate family influence. On the other hand, the statement 'I am more inclined to buy a sustainable cosmetic product if my friends or acquaintances recommend it' scores 4.16/5, and 'Social media influences my choice of cosmetic products' scores 3.95/5 (Appendix P). This means that recommendations from peers such as friends and acquaintances dominate over recommendations via social media. Recommendations from close friends and family in the strict sense therefore remain more variable.

There is a concentration towards 'somewhat agree' and 'strongly agree' regarding the influence of friends and social networks. This is more than just encouragement from loved ones. This confirms that Generation Z forms purchasing intentions in relation to their peer community (through recommendations from friends, acquaintances and social content).

These results confirm hypothesis 3, which assumes that subjective norms originating from close circles (friends and acquaintances) and external circles (social networks, influencers) affect purchase intention. This pattern is therefore consistent with the role of reference circles and social media described in the literature review.

## 5.4 Value Belief Norm Theory

This section analyses three factors that can influence the transition from intention to purchase: aesthetics (the desirability of the packaging), price (the affordability of a cosmetic product) and labels and storytelling (perceived credibility). These three levers reflect how Generation Z perceives the value of a cosmetic product with sustainable packaging.

### 5.4.1 Aesthetic

Visual appeal plays a decisive role in the initial evaluation of a product in the beauty and skincare categories (Silayoi & Speece, 2004). Young consumers are exposed to the aesthetic

code of social media, which strongly influences appearance. A literature review on sustainable design shows that less than 15 signs of poorly coded sustainability can penalise the attractiveness of a sustainable product (Magnier & Schoormans, 2015).

The results of the study confirm the decisive role of aesthetics in converting consumers to purchase. Three statements were used for this hypothesis, with the following averages: 4.03/5 for 'the appearance of a cosmetic product's packaging influences my desire to buy it', 3.29/5 for 'sustainable cosmetic products are often less aesthetically pleasing' and 4.16/5 for 'I prefer to buy a product whose packaging is both aesthetically pleasing and eco-friendly' (Appendix Q).

These average results reflect a high sensitivity to product appearance and a clear preference for a combination of aesthetics and sustainability. The average score of 3.29 on the negative item suggests that a large proportion of respondents still perceive the aesthetics of sustainable packaging as negative. This confirms that aesthetics can be a driving force and can also become a hindrance when a cosmetic product is considered sustainable and judged to be less attractive (Magnier & Schoormans, 2015).

These elements confirm hypothesis H4. Aesthetics is a trigger for intention but can hinder conversion to purchase if it is perceived as less appealing to the consumer. In line with Ajzen (1991), a favourable attitude triggered by the combination of aesthetics and sustainability can support sustainable purchasing intentions among Generation Z. In this case, sustainable packaging is perceived as less appealing than the conventional alternative.

### 5.4.2 Price Sensitivity

The demographic data in section 5.2 represent budget constraints. According to Vermeir & Verbeke (2006), the green gap in watches means that price sometimes acts as a major barrier to purchase intention and action.

To better understand the influence of price on purchase intention, three items were tested with the following averages: 'Price is a determining factor in my choice of cosmetics, even if the packaging is sustainable' with 4.29/5, 'I am willing to pay a little more for cosmetics with sustainable packaging' with 2.78/5, and 'I think that sustainable cosmetic products are often more expensive than others' with 3.76/5 (Appendix R). These figures reveal a real disconnect between the importance of price, which is considered high in this case, and the low acceptance of additional costs. This shows that most respondents are unwilling to pay extra for sustainable packaging compared to conventional packaging.

This confirms hypothesis H5: price acts more as a deterrent than as a lever. Here, in the case of Generation Z, if the target audience is students or young professionals, even a relatively modest additional cost can discourage purchase if there is no tangible benefit (e.g. a refill that is actually cheaper to use, greater convenience, etc.) to offset the constraint. This can fuel and confirm the green gap highlighted by Vermeir & Verbeke (2006), where the intention to consume more sustainably comes up against perceptions of alternatives.

### 5.4.3 Trust Perceived in Labels and Storytelling

In a context where greenwashing exists and is perceived by consumers, the informational credibility provided by certification labels and storytelling becomes a risk reducer (Szabo & Webster, 2021). Hypothesis H6 proposes that trust in labels and clear communication strengthens purchase intention.

Three items are then proposed to the questionnaire respondent, relating to trust in eco-labels on packaging, whether attractive packaging and certificates have a positive influence on purchase intention, and finally another item on trust, which can increase when the brand clearly communicates its commitments (Appendix I).

The trust rating for labels is 3.78/5, which is an intermediate level. The trust rating for purchase intention because a cosmetic product has labels or certifications is 3.61/5. Finally, the trust rating for clear communication is 3.62/5. The qualitative Verbatim questions reveal some doubts about effectiveness (particularly regarding deodorants and solid shampoos) and therefore suspicion of greenwashing, which reinforces the demand for proof and transparency.

Hypothesis H6 is therefore partially confirmed, as labels and discourse on environmental responsibility can increase consumer intention. However, evidence must be provided to consumers in order to build credibility and trust (Sahota, 2014).

## 5.5 Intention Behaviour Gap

Hypothesis 7 extends the theoretical framework of TPB (Ajzen, 1991) by postulating that even in the presence of a positive attitude and a high intention, certain constraints and informational uncertainties prevent the conversion of intention into purchase behaviour. (Carrington et al., 2010). To test this hypothesis, two sets of items with a 5-point Likert scale were used. One set focused on purchase intention and the second on actual behaviour (Appendix J).

The first block consisted of three items relating to intentions. The first item concerned the intention to purchase cosmetics with sustainable packaging. The results show that there is a favourable disposition to purchase this type of product (average equal to M=3.55/5). The second

item, concerning ‘strong intentions that are prevented by other factors related to the purchase decision’, shows that even if the intention is strong, there are declared barriers (M=3.44/5). Finally, a last item on ‘various obstacles such as price, practicality and availability of sustainable cosmetics’ shows that there is a strong signal and that this can be an obstacle to making a purchase (M=4/5).

The second block also consisted of three items relating to actual purchasing behaviour for cosmetics with sustainable packaging. Firstly, the item ‘I already regularly buy cosmetics with sustainable packaging’ shows that there is an average or even below-average level of regular purchasing intention (the average being M= 3.01/5). The item relating to ‘I sometimes avoid these products because of their price or appearance’ shows that although the intention to purchase is high, the actual purchase is attributed to a perceived cost or visual appeal that is considered inferior (M=3.67/5). Finally, the item relating to ‘I would like to buy them more often, but it is not always easy’ shows that there is a kind of friction in the purchase (M=3.84/5).

There is therefore a gap between intention (3.66) and regular purchase (3.50) of 0.16. This is consistent with the theories of the Gap book proposed in the literature review. These two blocks of items therefore reflect that there is a gap and that there is a real difficulty in overcoming perceived costs and maintaining the value of use with factors such as practicality, aesthetics and price. This ties in with the idea that a tangible benefit such as simpler use or proven performance and evidence of the real impact of a sustainable product compared to a conventional product is required to justify the effort of purchasing a product that claims to be sustainable (Vermeir & Verbeke, 2006).

Hypothesis 7 is therefore confirmed, there is indeed a significant gap between stated intentions and actual behaviour with regard to the purchase of cosmetics with sustainable packaging.

### 5.6 Qualitative Data Analysis

Two open-ended questions (Q13 and Q14) were asked at the end to supplement the quantitative analysis and to provide further insight into certain factors that encourage or discourage the purchase of cosmetics with sustainable packaging. The responses were analysed and visualised using word clouds (Appendix S & T) through thematic coding and ordered from most mentioned to least mentioned.

The first table below shows the main drivers mentioned for purchasing cosmetics with sustainable packaging (Q13).

**Table 5.1:** Classification of Levers Regarding Purchasing Cosmetics with Sustainable Packaging (Q13)

| Theme | Verbatim | Implications for brands |
|---|---|---|
| Practicality and ease of use | "More convenient and portable product", "Better format", "Easier to use refills" | Offer more intuitive, practical, and durable formats.<br>Work on the ergonomics of refills. |
| Availability and assortment | "Availability in pharmacies", "More choice", "wider range", "Easier access" | Better distribute product inventory.<br>Expand product ranges (with different shades, different sizes, adapting to different needs). |
| Performance/Efficacité / Qualité | "(...) eco-responsible and which works(...)", "Better quality", Must be as effective as a regular product" | It is necessary to guarantee effectiveness at the same level as so-called "classic" products. |
| Transparency | "Clear communication", "communicating about what is sustainable" | Provide access to information and make information verifiable (regarding labels, simple information). |
| Aesthetic | "Visually beautiful", "Aesthetically pleasing (doesn't look too cheap/cardboard)" | Working on designs to combine beauty codes and sustainable materials. |
| Prices and Promotions | "Promotions", "Cheaper", "More reasonable price", "Price reduction" | Review pricing policies and make products more accessible.<br>Offer targeted promotions to lower the barrier to entry. |

| | | |
|---|---|---|
| Awareness raising | "More communication/information about products", Raising awareness of the issues" | Provide simple education and explain the impact of the product compared to a traditional product and why to adopt it. |
| Reference brands | "If big brands (...) Chanel/Dior", "(...)Chanel or Guerlain" | Signaling effect of iconic and flagship brands in the sector to increase credibility and normalize purchasing. |

Source: Own Elaboration

This classification of the themes identified in this qualitative question allows us to understand that the most frequent themes are practicality, availability, performance, transparency, aesthetics, price, awareness and reference brands.

The first table below presents the main obstacles mentioned for the purchase of cosmetic products with sustainable packaging (Q14).

**Table 5.2:** Classification of the Main Obstacles Regarding Purchasing Cosmetics with Sustainable Packaging (Q14)

| Theme | Verbatim | Implications for brands |
|---|---|---|
| Practicality, Refills and Ergonomics | "Less practical to use", "Difficult to recharge", "Not practical", "Gets damaged" | Rethink product ergonomics and use more resistant materials. |
| Efficiency and performance | "Not efficient enough", "Works less well" | Prioritize performance and provide proof of effectiveness to consumers |
| Texture, Sensoriality and Quality | "Poor quality", "Textures and smells that are not good", "I did not like the consistency", "(...) texture, effectiveness or scent were not satisfactory". | Work on the sensory aspects of products through textures, fragrances and product stability. |

| | | |
|---|---|---|
| Aesthetics | "Less aesthetic", "cheap", "cardboard", "less pretty than the others" | Find a solution to counter the so-called "cheap" look by focusing on finishes and aesthetic codes. |
| Availability and Access | "Difficult to find", "you don't see them everywhere", not available enough" | Better distribute products and find ways to promote points of sale to make products more visible. |
| Distrust and Greenwashing | "Labels not clear", "I have doubts", "evidence | Credibility must be strengthened and recognized labels used where possible to reduce this mistrust. |
| Price | "expensive", "a little expensive" | The price must be justified or compensated by offering less expensive refills. |

Source: Own Elaboration

This classification of the themes identified in this qualitative question allows us to understand that the most frequent themes are practicality, efficiency, texture, aesthetics; availability, distrust of greenwashing and price.

The themes emerging from these two qualitative questions confirm that a positive attitude is not enough to convert intention. Indeed, certain perceived constraints (such as price and practicality) and informational norms (such as consumer trust in a brand and labels) remain unfavourable (Ajzen, 1991). Furthermore, the role of aesthetics, which has already been highlighted (Silayoi & Speece, 2004), appears to be central to reducing perceived effort and supporting use value. Finally, respondents' insistence on tangible evidence may echo the recommendations of White et al. (2019) to reduce the behavioural gap by concrete facilitators (adjusting prices, improving and communicating performance, and transmitting credible signals).

# 6 CONCLUSION AND RECOMMENDATION

## 6.1 Main Findings and Contributions

The aim of this thesis was to analyse the factors influencing the behaviour of Generation Z consumers in France with regard to sustainable packaging in the cosmetics industry. Using the Theory of Planned Behaviour (Ajzen, 1991), Value-Belief-Norm Theories (Stern et al., 1999) and the Concept of the Intention-Behaviour Gap (Carrington et al. 2010), seven hypotheses were formulated and tested through a quantitative survey. The results contribute to both the literature review and practical application.

Firstly, the results show that attitude and environmental awareness are the major determinants of purchase intention. Respondents express a largely positive attitude towards sustainable packaging (averages of 4.37 out of 5 on items measured in this dimension), and more than 90% of respondents recognise individual responsibility in the ecological transition. These results therefore confirm hypotheses H1 and H2 and highlight Generation Z's strong alignment with environmental values.

Secondly, social influence also appears to be a relevant factor in accordance with the TPB model. Perceived norms and peer influence play a crucial role in the intention to purchase a cosmetic product with sustainable packaging. This confirms hypothesis H3 and highlights the role of community dynamics and social networks in this generation.

Thirdly, the results show that aesthetics and price act as ambivalent levers. The aesthetic appeal of sustainable packaging is recognised, but certain limitations related to design and cost are identified as potential barriers. Price in particular is an obstacle for respondents with lower incomes, confirming the importance of affordability in democratising the adoption of products with sustainable packaging (H4 and H5).

Fourthly, labels and storytelling generally reinforce trust and purchase intent, but their credibility remains uneven. There is scepticism about greenwashing, which partially confirms H6 and ties in with academic debates on the importance of label reliability (Joshi & Rahman, 2015).

Finally, the study confirms the existence of an international gap identified by Vermeir and Verbeke (2006). Positive intentions do not always translate into actual purchasing behaviour due to certain budgetary constraints of availability or practicality, thus validating hypothesis H7.

Overall, the thesis contributes to understanding the behaviour of Generation Z in France by applying behavioural models to a still relatively unexplored area: sustainable packaging in the

cosmetics sector. The results confirm a generally positive perception of sustainable packaging among Generation Z (RQ1) and show that purchasing intentions are driven by internal factors such as attitude, environmental and social values (the importance of peers, close networks and social networks). It is also modulated by external levers such as aesthetics, price and trust in labels and information provided by brands (RQ2 and RQ3). Finally, the behavioural gap is evident (with a difference of 0.54 points between intentions and regular purchases), which can be explained by barriers relating to practicality, the ergonomics of refills, effectiveness, sensoriality, availability, assortment and the credibility of label information, and finally price. Conversion therefore requires a three-pronged approach based on desirability (design), accessibility and credibility (label, evidence). This is consistent with the Theory of Planned Behaviour, the Value Belief Norm Theory and green gap behaviour.

### 6.2 Recommendations and Managerial Implications

The results of this research have several implications for cosmetics companies, packaging manufacturers and public decision-makers.

The first is to combine sustainability with aesthetics. For Generation Z, packaging is perceived as a functional medium and a symbol of identity. Sustainable packaging is perceived as less attractive than traditional packaging, which may discourage purchasing intentions. The challenge is therefore to reconcile eco-design with premium design in order to encourage purchasing intentions. To achieve this, eco-friendly materials must be incorporated while preserving the visual identity and attractiveness of the packaging. This means that marketing teams must test innovative materials, maintain aesthetic finishes and consider tactile or colorimetric elements that match the brand image. Consumer testing phases can be set up to validate that sustainable packaging remains desirable and in line with the expectations of Generation Z.

The second implication is to make prices more accessible, as young consumers are environmentally conscious but many face budget constraints. This means ensuring that products with sustainable packaging are not perceived as an unaffordable luxury. Companies can consider hybrid ranges, targeted promotions for young consumers, or price adjustments on certain lines. The goal is to make sustainable packaging as competitive as traditional options, in order to facilitate access to these products for a wider audience.

The third implication is to ensure the credibility of commitments. Indeed, a brand's labels and storytelling only have an impact if they are perceived as reliable in the eyes of the consumer. Companies must therefore go beyond generic statements and provide detailed reports, create

specific sections on their websites, and use QR codes on packaging. Generation Z, being particularly connected, will appreciate this transparency and accessibility to information, thereby reinforcing perceived trust and authenticity.

The fourth implication would be to leverage social influence and social media. Companies must take advantage of social influence by using influencers, particularly through seeding (sending products to influencers without direct remuneration) and investing in paid media campaigns to amplify the message. It is also wise to adopt and use certain social media trends to pique consumer curiosity. Finally, it is also important to rethink point-of-sale (POS) promotion, particularly by redesigning displays. This can be done by highlighting campaign images (e.g. a visual model featuring the product and the ambassador) and staging elements that showcase the sustainable product. This allows consumers to better identify products directly in stores, making them more attractive and better integrated into the daily lives of Generation Z.

### 6.3 Limitation and Reliability

Several limitations must be taken into account in order to qualify the interpretation of the results.

The first relates to the size and composition of the sample. The questionnaire was distributed via digital channels, mainly using a convenience sampling method and snowball sampling. This approach made it possible to collect a sufficient number of responses in order to test the hypotheses but it does not guarantee statistical representativeness of the entire French Generation Z.

Secondly, the fact that the method is almost entirely quantitative may be a limitation. The use of a standardised questionnaire allows to identify general trends and verify the hypotheses put forward but it does not allow for a deeper understanding of the respondents' subjective motivations, possible contradictions or emotional trade-offs. A complementary qualitative approach can provide more insight into these dimensions.

The third limitation is the geographical scope of the study. The analysis focused solely on France which limits the possibility of generalising the results to other cultural and regulatory contexts. Different factors such as perceptions of sustainability, price sensitivity and trust in labels can vary significantly from one country to another.

The last possible limitation may be the cross-sectional nature of the research. The data was collected at a given point in time, which prevents analysis of behavioural changes over time.

The intentions and attitudes observed could evolve in response to regulatory changes, industrial innovations or broader socio-economic transformations.

### 6.4 Recommendation for Future Research

Several paths for future research can be considered based on these limitations.

Firstly, the use of mixed methods combining the benefits of quantitative and qualitative research. For example, the use of semi-structured interviews or focus groups could help deepen the understanding of the emotional and symbolic aspects associated with cosmetics sustainable packaging.

Secondly, comparative research on an international scale could deepen the understanding of behaviours by comparing French findings with those of other European and non-European countries. This research would make it possible to assess the impact of cultural, regulatory and economic disparities on the adoption of sustainable packaging.

Thirdly, incorporating digital aspects into behavioural models appears to be a promising path. Given the central role that social media, influencers and e-commerce platforms play in setting consumption standards for Generation Z, a more systematic study of their impact could be considered.

Fourthly, the use of longitudinal methods would make it possible to track changes in attitudes and behaviours over time. This type of study would provide essential information on the strengthening or weakening of purchase intentions in response to the gradual spread of sustainable packaging and changes in comparative prices.

Finally, it would be interesting to analyse in greater detail the interaction between the product and its packaging. Although this thesis has focused primarily on the analysis of packaging, consumers generally view the product and its packaging as an indivisible entity. It would be highly beneficial to existing research to understand how these two aspects combine to influence purchasing decisions.

## 7. REFERENCES


Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior And Human Decision Processes*, *50*(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-t

Amberg, N., & Fogarassy, C. (2019). Green Consumer Behavior in the Cosmetic Market. *Resources*, 8(3), 137. https://doi.org/10.3390/resources8030137

Baki, G. (2022). Introduction to cosmetic formulation and technology (2nd ed.). *John Wiley & Sons*.

Bher, A., & Auras, R. (2024). Life cycle assessment of packaging systems : A meta-analysis to evaluate the root of consistencies and discrepancies. *Journal Of Cleaner Production*, *476*. https://doi.org/10.1016/j.jclepro.2024.143785

Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2010). Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of Business Ethics, 97*(1), 139–158. https://doi.org/10.1007/s10551-010-0501-6

Euromonitor International. (2025). Gen Z Beauty Consumers in Europe: Capturing the Next Generation. *Euromonitor*. https://www.euromonitor.com/gen-z-beauty-consumers-in-europe-capturing-the-next-generation/report

European Commission. (2019). Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment (Text with EEA relevance). *Official Journal of the European Union, L155, 1–19*. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0904

European Union. (2009). Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products. *Official Journal of the European Union, L 342, 59–209*. https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=celex:32009R1223

Eurostat. (2024). 41% of plastic packaging waste recycled in 2022. *Eurostat.* https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20241024-3

FEBEA. (2024). La cosmétique française face aux défis de la transition écologique.[French Cosmetic and the stakes of the sustainable transition] *Fédération des Entreprises de la Beauté.* https://www.febea.fr

Fennis, M., & Stroebe, W. (2020). The Psychology of Advertising (3e éd.). *Routledge.* https://doi.org/10.4324/9780429326981

Grand View Research. (2023). France Organic Personal Care Market Size & Outlook. *Grand View Research.* https://www.grandviewresearch.com/horizon/outlook/organic-personal-care-market/france

Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review, 3*(1–2), 128–143. https://doi.org/10.1016/j.ism.2015.04.001

Larousse. (n.d.). Cosmétique. *Dictionnaire de français Larousse*. Retrieved March 26, 2025, from https://www.larousse.fr/dictionnaires/francais/cosm%C3%A9tique/19545

Lee, J., Kim, D., & Sung, Y. (2022). Sustainable changes in beauty market trends focused on the perspective of safety in the post-coronavirus disease-19 period. *Journal of Cosmetic Dermatology, 21*(5), 1937–1944. https://doi.org/10.1111/jocd.14493

Magnier, L., & Crié, D. (2015). Communicating packaging eco-friendliness. *International Journal Of Retail & Distribution Management*, *43*(4/5), 350-366. https://doi.org/10.1108/ijrdm-04-2014-0048

Magnier, L., & Schoormans, J. (2015). Consumer reactions to sustainable packaging: The interplay of visual appearance, verbal claim and environmental concern. *Journal of Environmental Psychology, 44*, 53–62. https://doi.org/10.1016/j.jenvp.2015.09.005

Martins, M., & Marto, M. (2023). A sustainable life cycle for cosmetics : From design and development to post-use phase. *Sustainable Chemistry And Pharmacy, 35*, 101178. https://www.sciencedirect.com/science/article/pii/S2352554123002127

McKinsey & Company. (2023, May 22). The beauty market in 2023: A special State of Fashion report. *McKinsey & Company.* https://www.mckinsey.com/industries/retail/our-insights/the-beauty-market-in-2023-a-special-state-of-fashion-report

Mondallo.A., Salomone, R., & Mondello, G. (2024). Exploring Circular Economy in the cosmetic Industry : Insights from a literature review. *Environmental Impact Assessment Review,* 105, 107443. https://doi.org/10.1016/j.eiar.2024.107443

Morel, S., Mura, G., Gallarate, M., & Sapino, S. (2024). Cosmetic Packaging : European Regulatory Aspects and Sustainability. *Cosmetics*, *11*(4), 110. https://doi.org/10.3390/cosmetics11040110

Paul, J., Modi, A., & Patel, J. (2015). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal Of Retailing And Consumer Services*, *29*, 123-134. https://doi.org/10.1016/j.jretconser.2015.11.006

Peelman, N., Ragaert, P., De Meulenaer, B., Adons, D., Peeters, R., Cardon, L., Van Impe, F., & Devlieghere, F. (2013). Application of bioplastics for food packaging. *Trends In Food Science & Technology*, *32*(2), 128-141. https://doi.org/10.1016/j.tifs.2013.06.003

Rocca, R., Acerbi, F., Fumagalli, L., & Taisch, M. (2022). Sustainability paradigm in the cosmetics industry : State of the art. *Cleaner Waste Systems*, *3*, 100057. https://doi.org/10.1016/j.clwas.2022.100057

Rundh, B. (2005). The multi-faceted dimension of packaging: Marketing logistics or marketing tool? *British Food Journal,* 107(9), 670–684. https://doi.org/10.1108/00070700510615053

Sahota, A. (2014). Sustainability: How the cosmetics industry is greening up. *John Wiley & Sons,Ltd.*

Schmidt, J., Grau, L., Auer, M., Maletz, R., & Woidasky, J. (2022). Multilayer Packaging in a Circular Economy. *Polymers*, *14*(9), 1825. https://doi.org/10.3390/polym14091825

Shim, J., Woo, J., Yeo, H., Kang, S., Kwon, B., Lee, E. J., Oh, J., Jeong, E., Lim, J., & Park, S. G. (2024). The Clean Beauty Trend Among Millennial and Generation Z Consumers : Assessing the Safety, Ethicality, and Sustainability Attributes of Cosmetic Products. *SAGE Open*, *14*(2). https://doi.org/10.1177/21582440241255430

Silayoi, P., & Speece, M. (2004). Packaging and purchase decisions: An exploratory study on the impact of involvement level and time pressure. *British Food Journal*, 106(8), 607-628. https://doi.org/10.1108/00070700410553602

Somlai, C., Bullock, C., & Gallagher, J. (2023). Plastic packaging waste in Europe: Addressing methodological challenges in recording and reporting. *Waste Management & Research The Journal For A Sustainable Circular Economy, 41*(6), 1134–1143. https://doi.org/10.1177/0734242X221142192

Srivastava, P., Ramakanth, D., Akhila, K., & Gaiwad,K. (2022). Package design as a branding tool in the cosmetic industry. *SN Business & Economics,* 2(6), 38–42. https://pmc.ncbi.nlm.nih.gov/articles/PMC9123395/

Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., & Kalof, L. (1999). A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism. *Human Ecology Review*, *6*(2), 81–97. http://www.jstor.org/stable/24707060

Szabo, S., & Webster, J. (2021). Perceived greenwashing: The effects of green marketing on environmental and product perceptions. *Journal of Business Ethics, 171*(4), 719–739. https://doi.org/10.1007/s10551-020-04461-0

The Business Research Company. (2025). Natural Cosmetics Global Market Report 2025. Dans *The Business Research Company*.

https://www.thebusinessresearchcompany.com/report/natural-cosmetics-global-market-report

Transparency Market Research. (2024). *Green Cosmetic Products Market Size, Share, Growth, Trends and Forecast 2023–2034*. Transparency Market Research. https://www.transparencymarketresearch.com/green-cosmetic-products-market.html

Turcu, O., & Brancu, C. (2025). Cosmetic Industry Performance in the European Union: A Comparative Analysis. *Proceedings of The International Conference On Business Excellence,* 19(1), 2267-2276. https://doi.org/10.2478/picbe-2025-0175

Vassallo, N., & Refalo, P. (2024). Reducing the Environmental Impacts of Plastic Cosmetic Packaging : A Multi-Attribute Life Cycle Assessment. *Cosmetics*, *11*(2), 34. https://doi.org/10.3390/cosmetics11020034

Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the Consumer "Attitude–Behavioral Intention" Gap. *Journal of Agricultural and Environmental Ethics, 19*, 169–194. https://doi.org/10.1007/s10806-005-5485-3

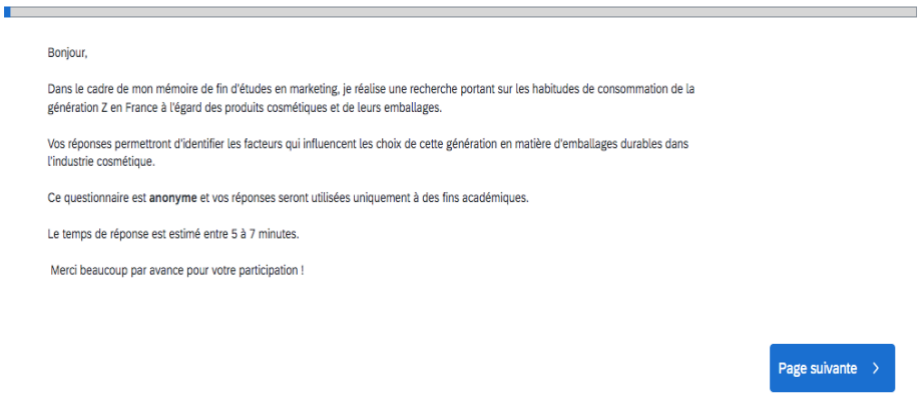
White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT Consumer Behaviors to be More Sustainable: A Literature Review and Guiding Framework. *Journal of Marketing, 83*(3), 22–49. https://doi.org/10.1177/0022242919825649

Yadav, R., & Pathak, G. S. (2017). Determinants of Consumers' Green Purchase Behavior in a Developing Nation : Applying and Extending the Theory of Planned Behavior. *Ecological Economics*, *134*, 114-122. https://doi.org/10.1016/j.ecolecon.2016.12.019

Zdonek, I., & Jaworska, A. (2024). Determinants of the Intention to Use Refills in the Cosmetic Industry. *Sustainability, 16*(23), 10200. https://doi.org/10.3390/su162310200

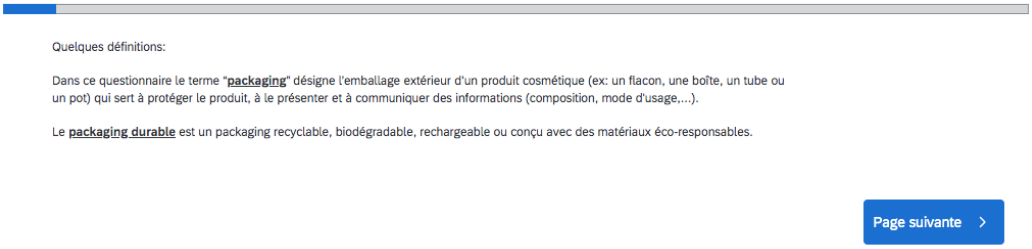
## 8. APPENDIXES

Appendix A - First Section of the Questionnaire (Objectives of the Research)

| | |
|---|---|
| Original French Version |  |
| English translation | Hello,<br><br>As part of my final year dissertation in marketing, I am conducting research on the consumption habits of Generation Z in France with regard to cosmetics and their packaging.<br><br>Your answers will help identify the factors that influence this generation's choices in terms of sustainable packaging in the cosmetics industry.<br><br>This questionnaire is anonymous and your answers will be used for academic purposes only.<br><br>The estimated time to complete the questionnaire is 5 to 7 minutes.<br><br>Thank you very much in advance for your participation! |

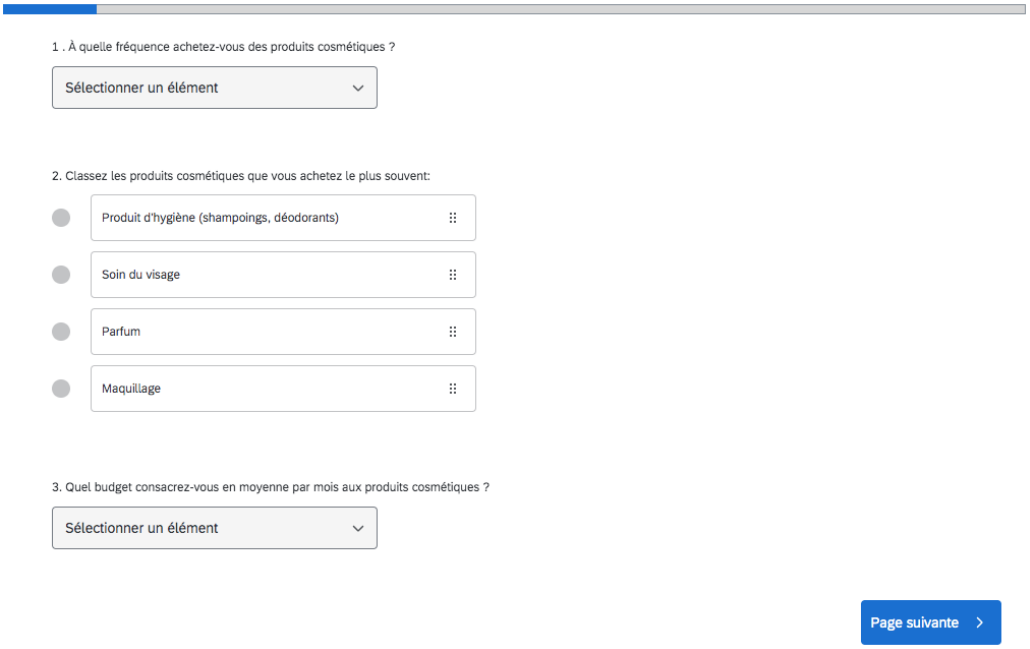
Source: Own Elaboration

Appendix B - Second Section of the Questionnaire (Definition)

| | |
|---|---|
| Original French Version |  |
| English translation | A few definitions:<br>In this questionnaire, the term **'packaging'** refers to the outer packaging of a cosmetic product (e.g. a bottle, box, tube or jar) which serves to protect the product, present it and provide information (composition, instructions for use, etc.).<br><br>**Sustainable packaging** is a packaging that is recyclable, biodegradable, refillable or designed with eco-friendly materials. |

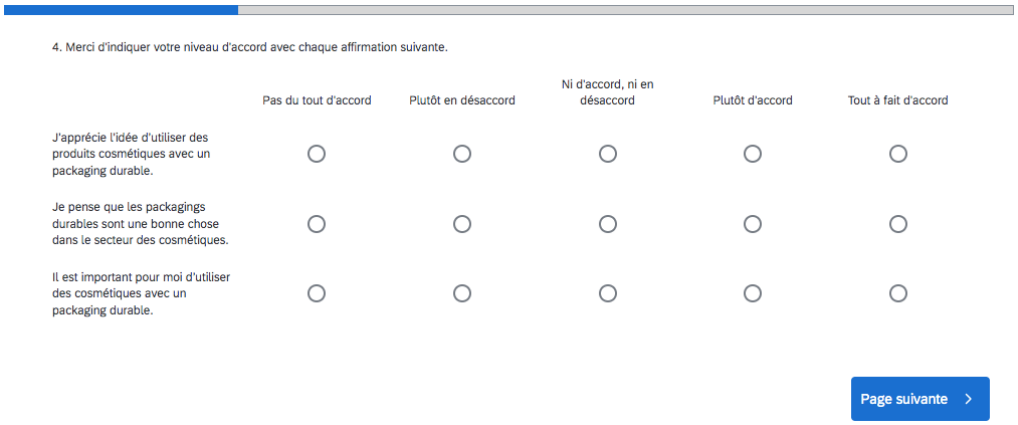
Source: Own Elaboration

Appendix C - Third section of the questionnaire (Consumer Habits)

| | |
|---|---|
| Original French Version |  |
| English translation | 1. How often do you purchase cosmetic products? -> Select an option<br>Option 1 : Every Week<br>Option 2: Every Months<br>Option 3: Few times a year<br>Option 4: Never<br>2. Rank the cosmetic products you purchase most frequently:<br>-hygiene products (shampoos, deodorants)<br>-skincare<br>-fragrances<br>-make-up<br>3. What is your average monthly budget for cosmetic products?<br>-> Select an option<br>Option 1 : <20€<br>Option 2: 21 - 50€<br>Option 3: 51 - 100€<br>Option 4: >100€ |

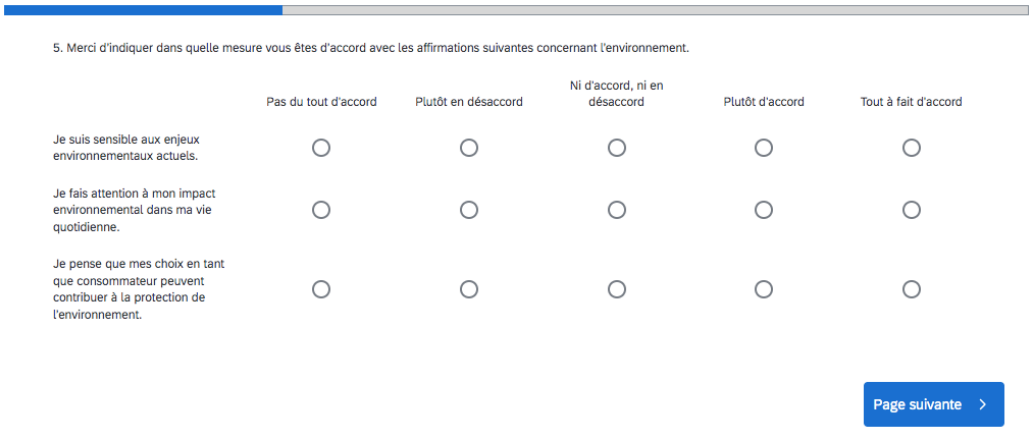
Source: Own Elaboration

Appendix D - Fourth Section of the Questionnaire (Attitude - H1)

| | |
|---|---|
| Original French Version |  |
| English translation | 4.Please indicate your level of agreement with each of the following statements: (→ From left to right : Strongly disagree;Somewhat disagree; Neither agree nor disagree; Somewhat agree; Completely agree.)<br>• I like the idea of using cosmetics products with sustainable packaging.<br>• I think sustainable packaging is a good thing in the cosmetics industry.<br>• It is important for me to use cosmetics with sustainable packaging. |

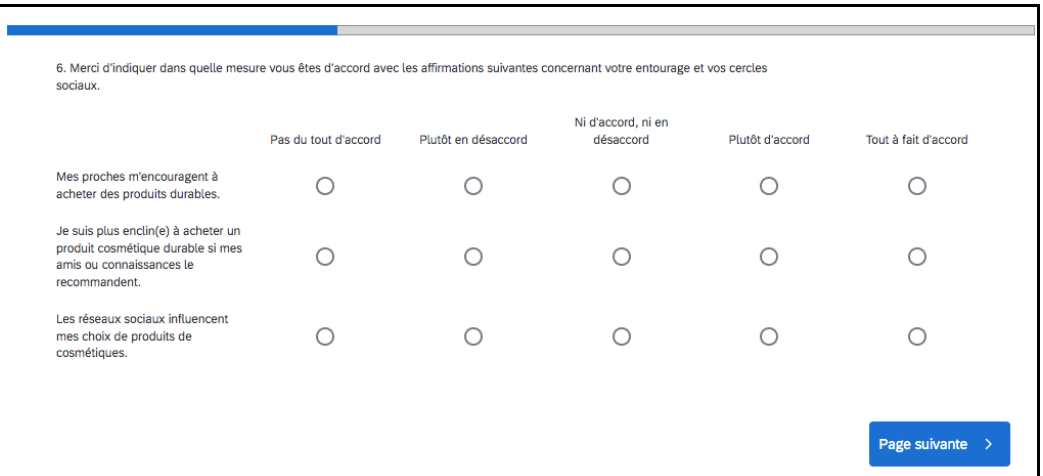
Source: Own Elaboration

Appendix E - Fourth Section of the Questionnaire (Environmental Concern - H2)

| | |
|---|---|
| Original French Version |  |
| English translation | 5. Please indicate to what extent you agree with the following statements about the environment.<br>(→ From left to right : Strongly disagree;Somewhat disagree; Neither agree nor disagree; Somewhat agree; Completely agree).<br>• I am concerned about current environmental issues.<br>• I am mindful of my environmental impact in my daily life.<br>• I believe that my choices as a consumer can contribute to protecting the environment. |

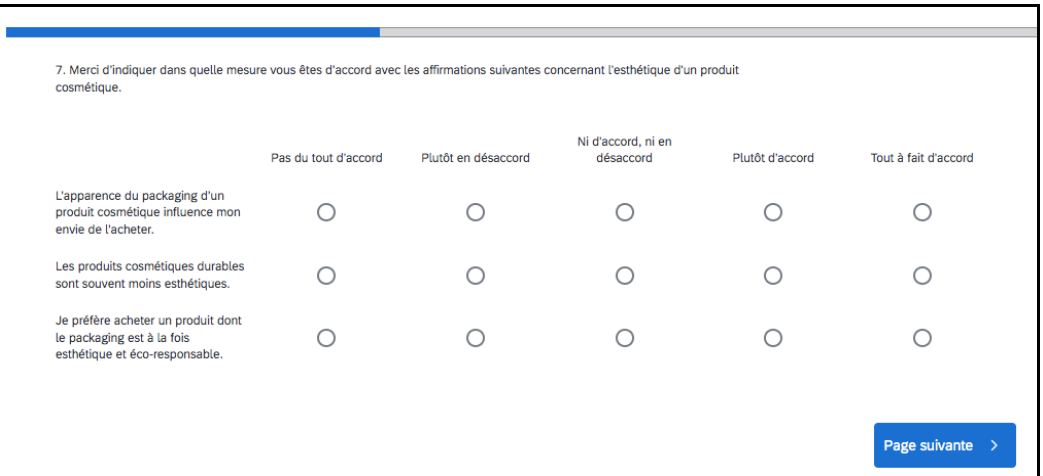
Source: Own Elaboration

Appendix F - Fourth Section of the Questionnaire (Social Norms - H3)

| | |
|---|---|
| Original French Version |  |
| English translation | 6. Please indicate to what extent you agree with the following statements about your friends and social circles.<br>(→ From left to right : Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Completely agree).<br>• My friends and family encourage me to buy sustainable products.<br>• I am more inclined to buy a sustainable cosmetic product if my friends or acquaintances recommend it.<br>• Social media influences my choice of cosmetic products. |

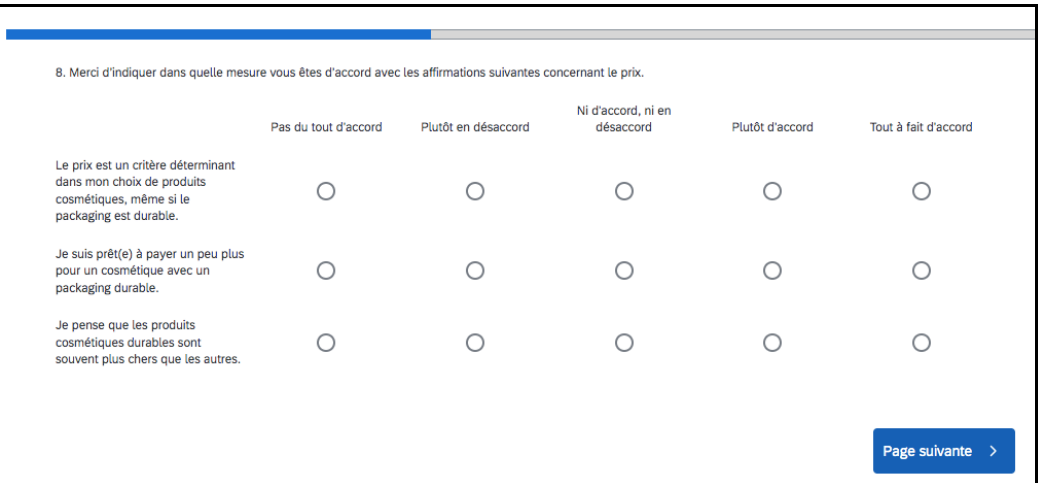
Source: Own Elaboration

Appendix G - Fourth Section of the Questionnaire (Aesthetics - H4)

| | |
|---|---|
| Original French Version |  |
| English translation | 7. Please indicate to what extent you agree with the following statements regarding the aesthetics of a cosmetic product.<br>(→ From left to right : Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Completely agree).<br>• The appearance of a cosmetic product's packaging influences my desire to buy it.<br>• Sustainable cosmetic products are often less aesthetically pleasing.<br>• I prefer to buy a product whose packaging is both aesthetically pleasing and environmentally friendly. |

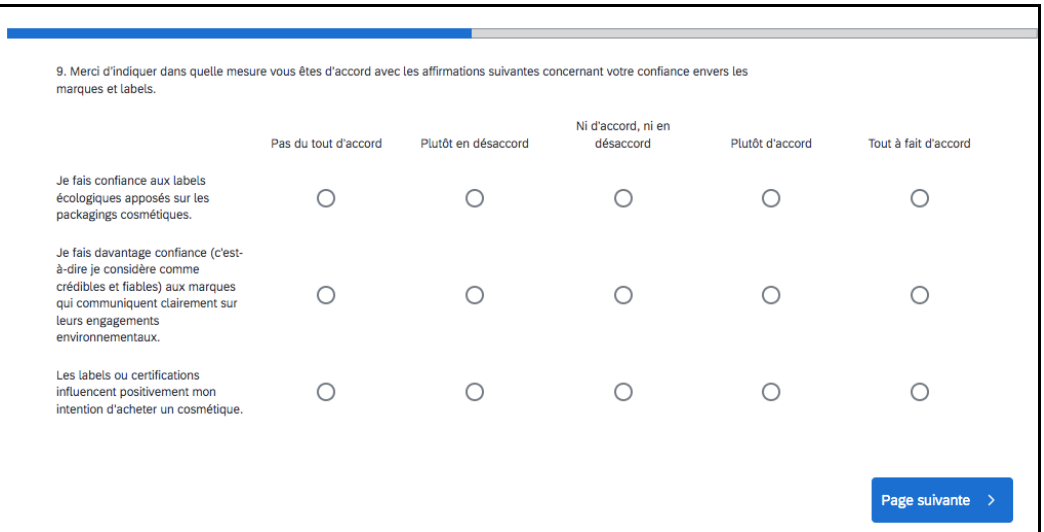
Source: Own Elaboration

Appendix H - Fourth Section of the Questionnaire (Price Sensitivity - H5)

| | |
|---|---|
| Original French Version |  |
| English translation | 8. Please indicate to what extent you agree with the following statements regarding price.<br>(→ From left to right : Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Completely agree).<br>• Price is a determining factor in my choice of cosmetic products, even if the packaging is sustainable.<br>• I am willing to pay a little more for cosmetics with sustainable packaging.<br>• I think that sustainable cosmetic products are often more expensive than others. |

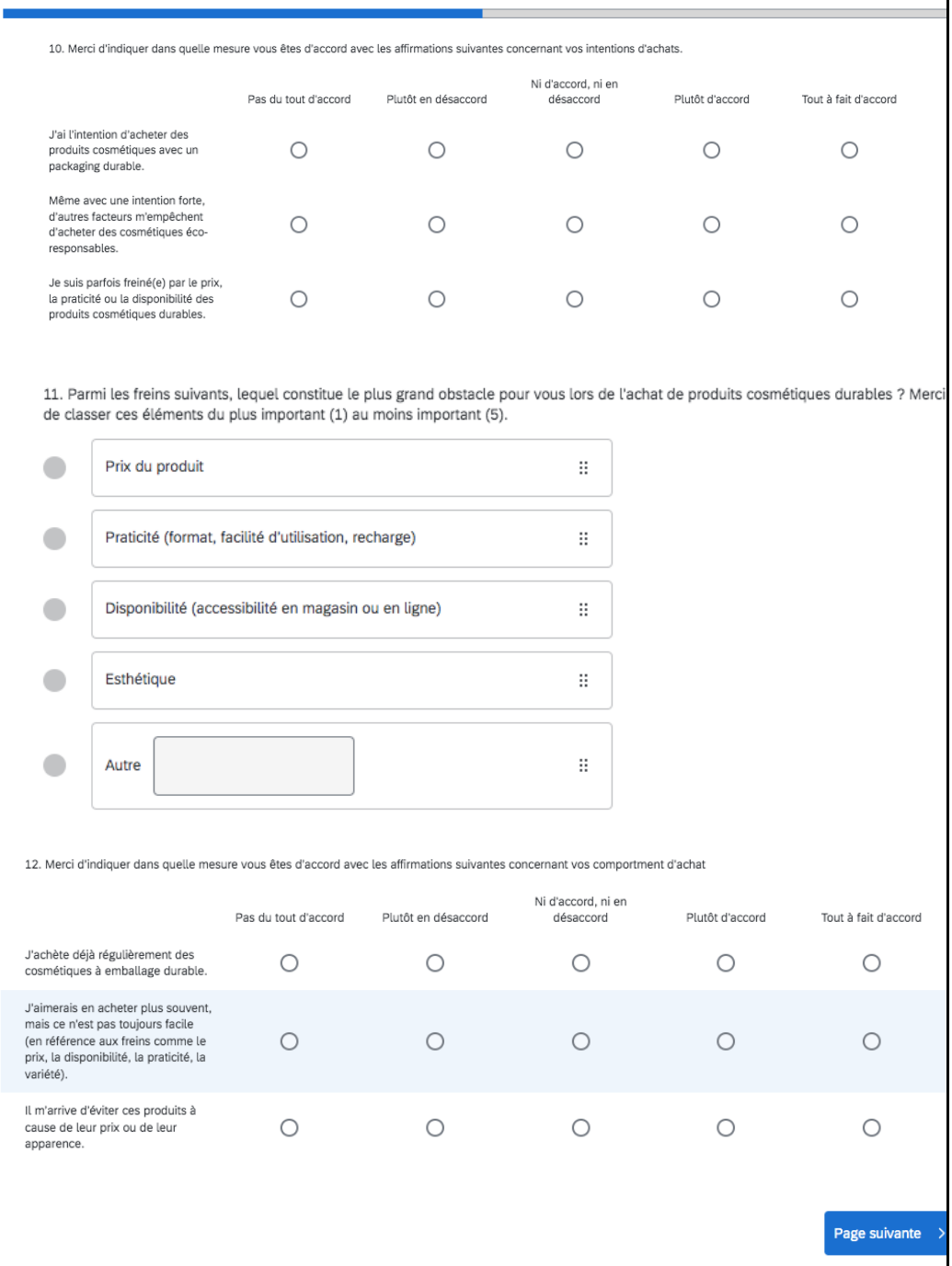
Source: Own Elaboration

Appendix I - Fourth Section of the Questionnaire (Labels and Trust - H6)

| | |
|---|---|
| Original French Version |  |
| English translation | 9. Please indicate to what extent you agree with the following statements regarding your trust in brands and labels.<br>(→ From left to right : Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Completely agree).<br>• I trust the eco-labels displayed on cosmetic packaging.<br>• I trust (i.e. consider credible and reliable) brands that clearly communicate their environmental commitments.<br>• Labels or certifications positively influence my intention to purchase a cosmetic product. |

Source: Own Elaboration

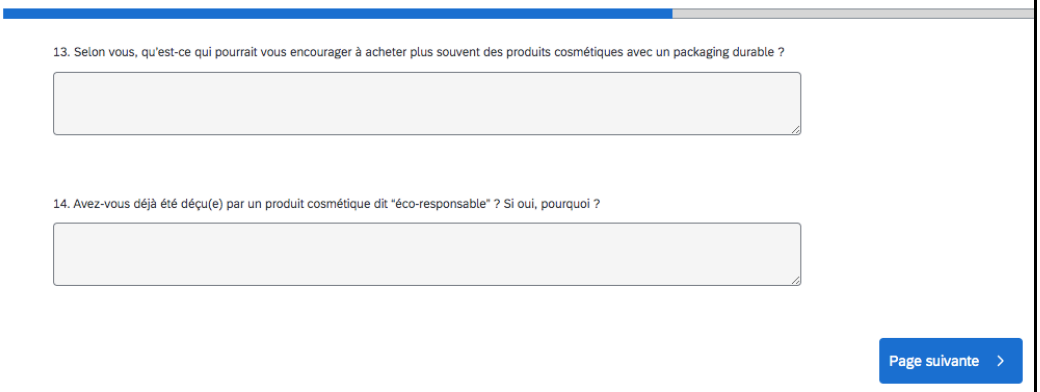
Appendix J - Fourth Section of the Questionnaire (Purchase Intention and Actual Behavior - H7)

| | |
|---|---|
| Original French Version |  |
| English translation | 10. Please indicate to what extent you agree with the following statements regarding your purchasing intentions.<br>(→ From left to right : Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Completely agree).<br>• I intend to buy cosmetics with sustainable packaging. |

| | |
|---|---|
| | • Even though I have a strong intention to do so, other factors prevent me from buying eco-friendly cosmetics.<br>• I am sometimes discouraged by the price, practicality or availability of sustainable cosmetics.<br><br>11. Which of the following factors is the biggest obstacle for you when purchasing sustainable cosmetics? Please rank these factors from most important (1) to least important (5).<br><br>• Product price<br>• Practicality (format, ease of use, refillability)<br>• Availability (in-store or online)<br>• Aesthetics<br>• Other (please specify)<br><br>12. Please indicate to what extent you agree with the following statements about your purchasing behaviour<br>(→ From left to right : Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Completely agree).<br><br>• I already regularly purchase cosmetics with sustainable packaging.<br>• I would like to buy them more often, but it is not always easy (referring to barriers such as price, availability, practicality, variety).<br>• I sometimes avoid these products because of their price or appearance. |

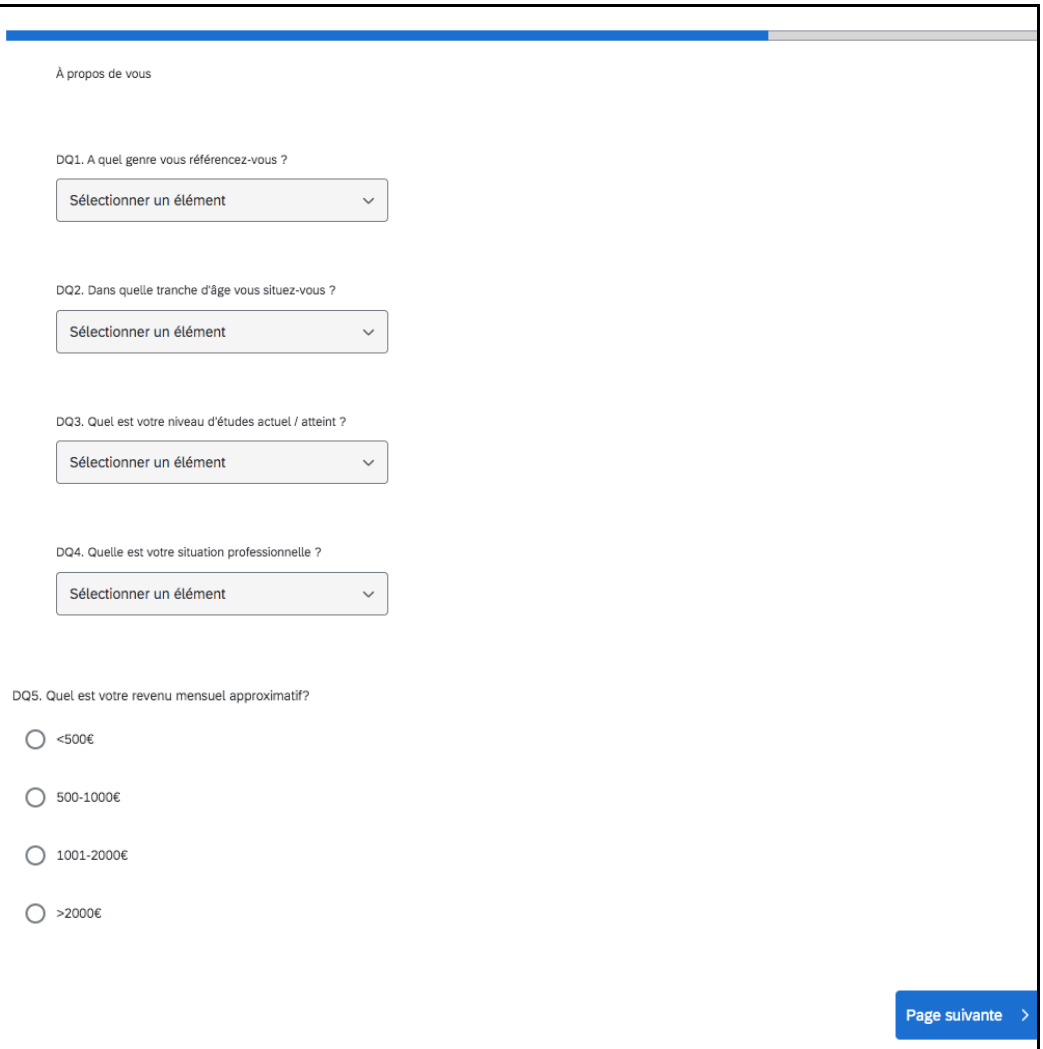
Source: Own Elaboration

Appendix K - Fifth Section of the Questionnaire (Two Qualitative Questions Q13 - Q14)

| | |
|---|---|
| Original French Version |  |
| English translation | 13. In your opinion, what would encourage you to buy cosmetics with sustainable packaging more often?<br><br>14. Have you ever been disappointed by a cosmetic product that was marketed as 'eco-friendly'? If so, why? |

Source: Own Elaboration

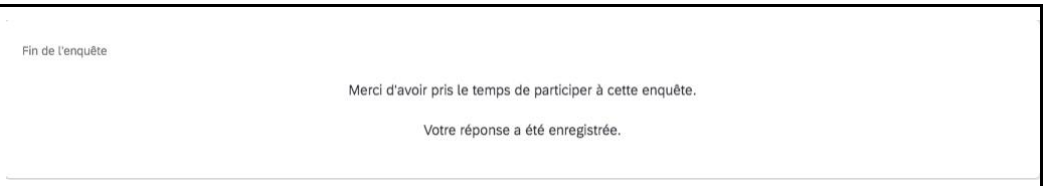
Appendix L - Sixth Section of the Questionnaire (Demographic Questions)

<table>
<tr>
<td>Original French Version</td>
<td>
</td>
</tr>
<tr>
<td>English translation</td>
<td>DQ1. Which gender do you identify with?<br>Select an option<br>• Woman<br>• Man<br>• Non-binary<br>• Does not wish to state<br><br>DQ2. Which age group do you belong to?<br>Select an option<br>• 18-20 years old<br>• 21-23 years old<br>• 24-26 years old</td>
</tr>
</table>

| | |
|---|---|
| | • 27-28 years old<br>• 29-44 years old<br>• 45-60 years old<br><br>DQ3. What is your current/highest level of education?<br>Select an option<br>• high school undergraduate<br>• bachelor's degree<br>• master's degree<br>• Other<br><br>DQ4. What is your professional status?<br>Select an option<br>• Student<br>• Employee/manual worker<br>• Manager/ intermediate profession<br>• Civil servant<br>• Job seeker<br>• Other<br><br>DQ5. What is your approximate monthly income?<br>• <500€<br>• 500-1000€<br>• 1001-2000€<br>• >2000€ |

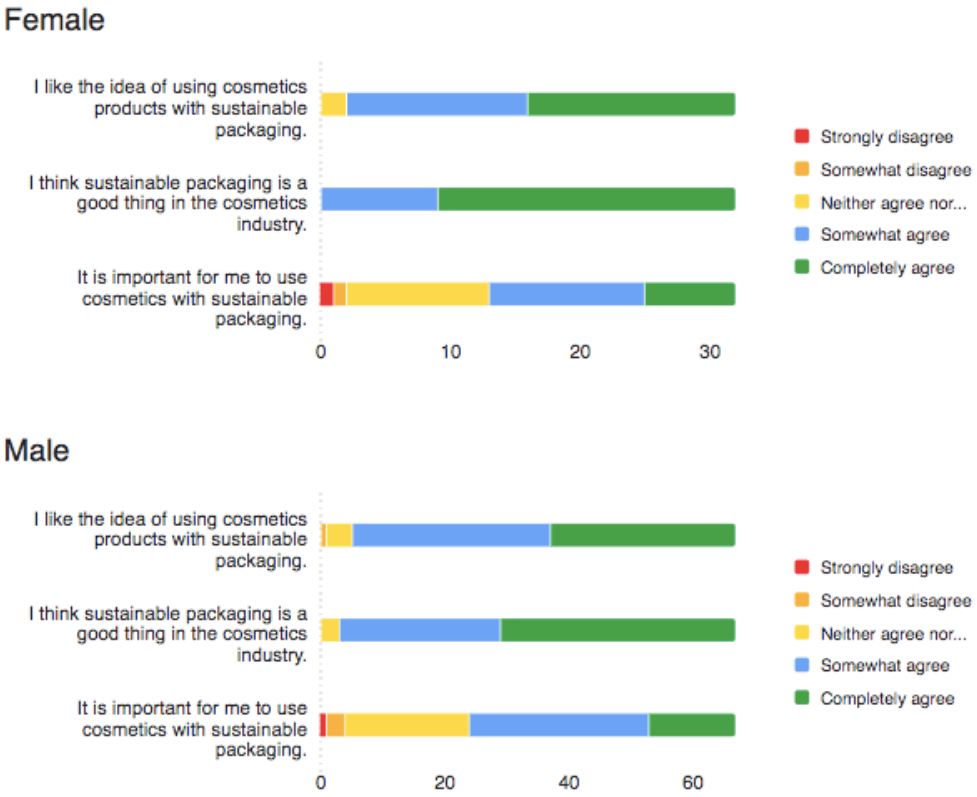
Source: Own Elaboration

Appendix M - Last Section of the Questionnaire

| | |
|---|---|
| Original French Version |  |
| English translation | End of Survey<br>Thank you for taking the time to participate in this survey.<br>Your response has been recorded. |

Source: Own Elaboration

Appendix N - Comparison between Women and Men regarding Attitude




Source: Own Elaboration

Appendix O - Comparison of Environmental items between Overall score, >2000€ score and <500-1000€ score.

| Filter | Data from the Qualtrics Questionnaire |
|---|---|
| Overall | 5. Merci d'indiquer dans quelle mesure vous êtes d'accord avec les affirmat... / Mean / Minimum / Maximum / Standard Deviation<br>I am concerned about current environmental issues. / 4,41 / 1,00 / 5,00 / 0,74<br>I am mindful of my environmental impact in my daily life. / 3,91 / 1,00 / 5,00 / 0,78<br>I believe that my choices as a consumer can contribute to protecting the environment. / 4,08 / 2,00 / 5,00 / 0,82 |
| >2000€ | 5. Merci d'indiquer dans quelle mesure vous êtes d'accord avec les affirmat... / Mean / Minimum / Maximum / Standard Deviation<br>I am concerned about current environmental issues. / 4,46 / 3,00 / 5,00 / 0,64<br>I am mindful of my environmental impact in my daily life. / 4,00 / 2,00 / 5,00 / 0,71<br>I believe that my choices as a consumer can contribute to protecting the environment. / 4,21 / 2,00 / 5,00 / 0,71 |
| <500€ and 501-1000€ | 5. Merci d'indiquer dans quelle mesure vous êtes d'accord avec les affirmat... / Mean / Minimum / Maximum / Standard Deviation<br>I am concerned about current environmental issues. / 4,44 / 3,00 / 5,00 / 0,63<br>I am mindful of my environmental impact in my daily life. / 4,05 / 2,00 / 5,00 / 0,64<br>I believe that my choices as a consumer can contribute to protecting the environment. / 4,10 / 2,00 / 5,00 / 0,84 |

Source: Own Elaboration

Appendix P - Data from the questionnaire related to Social influences

| 6. Merci d'indiquer dans quelle mesure vous êtes d'accord avec les affirmat... | Mean | Minimum | Maximum | Standard deviation |
|---|---|---|---|---|
| My friends and family encourage me to buy sustainable products. | 3,22 | 1,00 | 5,00 | 0,90 |
| I am more inclined to buy a sustainable cosmetic product if my friends or acquaintances recommend it. | 4,16 | 2,00 | 5,00 | 0,66 |
| Social media influences my choice of cosmetic products. | 3,95 | 1,00 | 5,00 | 0,82 |

Source: Own Elaboration

Appendix Q - Data from the questionnaire regarding related to Aesthetic

| 7. Merci d'indiquer dans quelle mesure vous êtes d'accord avec les affirmat... | Moyenne | Minimum | Maximum | Standard deviation |
|---|---|---|---|---|
| The appearance of a cosmetic product's packaging influences my desire to buy it. | 4,03 | 2,00 | 5,00 | 0,80 |
| Sustainable cosmetic products are often less aesthetically pleasing. | 3,29 | 1,00 | 5,00 | 1,08 |
| I prefer to buy a product whose packaging is both aesthetically pleasing and environmentally friendly. | 4,16 | 1,00 | 5,00 | 0,93 |

Source: Own Elaboration

Appendix R - Data from the questionnaire regarding the items related to Price sensitivity

| 8. Merci d'indiquer dans quelle mesure vous êtes d'accord avec les affirmat... | Mean | Minimum | Maximum | Standard deviation |
|---|---|---|---|---|
| Price is a determining factor in my choice of cosmetic products, even if the packaging is sustainable. | 4,29 | 1,00 | 5,00 | 0,77 |
| I am willing to pay a little more for cosmetics with sustainable packaging. | 2,78 | 1,00 | 5,00 | 1,05 |
| I think that sustainable cosmetic products are often more expensive than others. | 3,76 | 2,00 | 5,00 | 0,78 |

Source: Own Elaboration

Appendix S - Word Cloud representing the levers (Q13)




Source: Own Elaboration

Appendix T - Word cloud representing the main obstacles (Q14)




Source: Own Elaboration