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Belgian Consumer Behaviour Regarding ECO Labels on Packaging

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Abstract

This study examines Belgian consumer behaviour towards ECO labels on consumer packaged goods (CPG). It aims to enhance the effectiveness of ECO labels in high-awareness product categories, considering the intricate nuances of Belgian consumer behaviour. The research utilises survey-based data collection and statistical analysis to unravel the complex interplay of ECO labels and consumer preferences. The findings reveal that Belgians exhibit heightened awareness of ECO labels in vital product categories driven by a fusion of health-consciousness and sustainability concerns. Personal values and beliefs profoundly influence purchase intent, emphasising the global call for sustainability commitment.

The study also uncovers a paradoxical relationship between yearly income and purchase intent. The research recommends tailoring marketing strategies to the Belgian context, recognising the pivotal role of culture, economics, and societal factors in shaping consumer choices. It calls on CPG companies to adapt strategies to local market nuances, embrace sustainability, and evolve harmoniously with changing consumer behaviours, contributing to a more sustainable world where business success aligns with environmental and consumer well-being.

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1. Introduction

1.1 Introduction

Global consumer spending has been a significant force behind economic expansion and prosperity in the last century. However, this achievement also has environmental and social costs associated with making, shipping, and disposing of these consumer goods. Therefore, it should be morally required for both businesses and consumers to recognise and take into account these effects on the environment and society when making decisions about what to buy and other ESG-related activities. Claims on product labels have the potential to play a significant role in upholding this moral requirement, provided they reflect genuine, significant environmental and social activity.

There is no one-size-fits-all approach for businesses at the vanguard of producing and marketing consumer packaged goods when investing in ecologically and socially conscious features and claims. Numerous opportunities present themselves. Retailers and consumer firms should first choose and fund ESG-related initiatives that best fulfil their overall objectives and then tell customers about these initiatives—including through information on product labels. This study offers some insights that businesses should consider as they work to fulfil their ESG obligations and create differentiated development.

As global environmental challenges continue to escalate, people worldwide are becoming increasingly conscious of their consumption patterns and their effects on the environment (Bastounis et al., 2021). This heightened awareness has driven rising demand for eco-friendly and sustainable products, resulting in a significant surge in eco-labelling initiatives, such as the EU Eco-label, in the European Union (D'Souza et al., 2006; Laroche et al., 2001). These labels effectively convey the environmental benefits of products to consumers, promoting responsible consumption. Such initiatives are critical in encouraging sustainable production practices across various industries, including the Consumer Packaged Goods (CPG) sector (NielsenIQ, 2022b).

Recognising the importance of eco-labels in informing consumers' purchasing decisions and fostering sustainable living habits, companies have the opportunity to align with these values and establish themselves as environmentally conscious brands (Pelsmacker et al., 2006; Tascioglu et al., 2019). This alignment increases brand appeal among environmentally-conscious consumers and positively impacts society's efforts toward lasting environmental preservation. Given the intricate interplay between eco-consciousness and shifting consumer demand, companies, particularly those in the CPG industry, find it increasingly necessary to adopt eco-labelling strategies that signal environmental stewardship and appeal to consumers' evolving tastes (CB et al., 2018; McKinsey & Company, 2022; Murphy & Contreras, 2022).

The Consumer Packaged Goods (CPG) sector, encompassing various products such as food, beverages, cosmetics, and cleaning supplies, plays a substantial role in the GDP of numerous nations. For instance, in Belgium, private consumption has contributed an average of 52% to the Nominal GDP over the past 42 years, with a notable portion resulting from CPG (Dinesh, 2023). With its vast scale, enhancing sustainable practices within the CPG industry is essential for promoting a greener economy. In Belgian supermarkets, it is now more common to find items marked as "environmentally sustainable," "biodegradable," and "cruelty-free," among other descriptions that denote an eco-friendly or socially responsible status (CB Insights Research, 2018).

This study examines how Belgian consumer characteristics align with their purchasing behaviour in response to Ecologically- and Socially Responsible (ESR) labelling of supermarket CPG products. The scope of this study is limited to CPG in the food category. It aims to provide valuable insights for companies and retailers to refine their strategies.

Additionally, this study enhances our understanding of sustainable consumption habits and the impact of ESR claims on shaping consumer behaviour. Ultimately, the results can guide policymakers and other stakeholders in crafting more impactful initiatives to promote sustainable consumption and production practices in the CPG sector.

This research seeks to answer critical questions regarding the opportunities and threats of the Consumer-Packaged Goods (CPG) and ESR industry, the consumer behaviour concerning ESR products in Belgian supermarkets, and the impact of ESR labelling on the sales of CPG products in Belgian supermarkets.

1.2. Problem Statement

The problem that this research aims to address is whether ECO label awareness and use affect Belgian consumer behaviour. Despite the positive sentiment expressed by consumers towards ESR-labeled products, companies still need help generating sufficient demand for ESG-aligned products. This indicates that there may be a gap between consumers' stated preferences and their actual purchasing behaviour. This makes it difficult for CPG companies and retailers to make informed decisions in implementing ESR practices and marketing their products towards Belgian consumers. Thus, it is crucial to understand the factors influencing Belgian consumers' behaviour and attitudes towards ESR claims on CPG.

1.3. Objectives of the Research

The main objectives of this research are to understand the consumer awareness of ECO labels in Belgium, examine the influence of ECO labels on consumer behaviour, and get a clear view of the demographic relations with eco-labels and consumer behaviour.

1.5. Initial Research Question

What is the Belgian consumer behaviour regarding ECO Labels on the packaging of supermarket products?

1. Literature Review

2.1. Defining Concepts

2.1.1. Consumer Packaged Goods (CPG)

Consumer Packaged Goods (CPG), comprising everyday items like food, beverages, personal care products, and household goods, play a significant role in the economy. The global CPG market was valued at over 11,490.9 billion USD in 2021, with consistent growth projected (Dinesh et al., 2023). The industry offers diverse employment opportunities and contributes to meeting consumers' daily needs (McKinsey & Company, 2019). Wunsch (2022) estimated that in 2017 alone, the Belgian market was worth approximately 17 billion Euros.

The CPG industry encompasses diverse companies, including multinational corporations, smaller niche-oriented businesses, and emerging direct-to-consumer (DTC) brands. Some prominent global CPG companies—such as Procter & Gamble, Unilever, Nestlé, PepsiCo, and The Coca-Cola Company—boast extensive brand portfolios and generate billions of dollars in annual revenue (Murphy & Contreras, 2022). Concurrently, innovative startups and DTC brands challenge market norms and prompt businesses to adapt to shifting dynamics (CB et al., 2018).

The CPG industry is evolving due to digital transformation, sustainability initiatives, AI integration, and e-commerce expansion. Digital technologies streamline supply chain management, enhance customer engagement, and enable data-driven strategies (Pieters et al., 2023). Sustainability practices include waste reduction, eco-friendly packaging, and renewable energy (McKinsey & Company, 2019). E-commerce is reshaping retail and enabling direct connections with consumers

In light of these ongoing industry transformations and heightened consumer awareness regarding ecological responsibility (Bastounis et al., 2021), examining the relationship between Ecological and

Socially Responsible (ESR) labelling practices and sales performance in the Belgian CPG market is essential.

By identifying gaps in knowledge and addressing them through targeted research efforts, businesses can better align their operations with emerging trends while meeting the growing demand for environmentally responsible products from Belgian consumers.

2.1.2. Ecological and Socially Responsible (ESR) Products

Diving into the exploration of how Ecologically and Socially Responsible (ESR) labels impact the sales of Consumer Packaged Goods (CPG) in Belgian grocery stores is vital in gaining insight into the ways that product-specific tendencies affect each item's ESR standing, brand strength, and overall sales performance. Ecologically and Socially Responsible (ESR) products encompass goods and services developed, manufactured, and distributed with attention to their economic, social, and environmental consequences. As highlighted by europe-consommateurs.eu (Europe-consommateurs.eu, 2022), environmentally friendly products minimise their ecological impact throughout their life cycle – from using raw materials in manufacturing processes to their design, transportation to consumers, durability, and recyclability. ESR products frequently emphasise fair labour standards, ethical supply chains, eco-conscious production techniques, and positive community involvement. Throughout this study, any product claiming engagement in one or more of these practices will be classified as an ESR product without evaluating the credibility of such claims.

One instance of an ESR product is Fairtrade-certified coffee. This certification ensures that coffee farmers obtain fair compensation for their produce, fostering economic stability and enhancing living conditions within farming communities. Additionally, the Fairtrade system advocates for environmentally sustainable agricultural approaches like organic and shade-grown cultivation methods that minimise synthetic chemical usage and support biodiversity (Fair Trade Certified, n.d.).

Moreover, beyond Fairtrade certification, there are additional measures companies can take to produce ESR products. Various businesses are putting their resources into green energy solutions like wind turbines and solar panels to power their industrial facilities and workspaces. This lessens their ecological impact and promotes a long-lasting, sustainable world. Additionally, some choose environmentally sound packaging options using recycled substances or eco-friendly alternatives to conventional plastics. Participating in ethical and sustainable activities not only aids the environment but also appeals to eco-aware customers who place great importance on planet-friendly choices and social accountability when making purchases.

All ESR products in this research are categorised into six types of ESR claims. These categories are based on data from NielsenIQ, which found 93 different ESR-related claims on thousands of different CPG products. These claims terms such as "cage-free," "vegan," "eco-friendly," and "biodegradable"—printed on those products' packages.

Table 1

ESR Categories Used in the Research

● Sustainable packaging ○ Biodegradable ○ Plastic-free	● Environmentally sustainable ○ Compostable ○ Eco-friendly
● Plant-based ○ Vegan ○ Plant-based	● Socially responsible ○ Fairtrade/wage ○ Ethical
● Animal welfare ○ Cruelty-free ○ Not tested on animals	● Organic positioning ○ BIO ○ GMO

In this thesis, we examine the influence of Ecological and Socially Responsible (ESR) labels on consumer behaviour, focusing on six ESR product categories and their associated claims.

Understanding the nuances and perceptions of these distinct categories can inform how category-specific trends influence the sales of CPGs and the ESR profiles of various products and brands (Tascioglu et al., 2019). As these different category-specific trends shape Belgian consumer behaviour, product categories, brands, and supermarket CPG sales adapt accordingly to satisfy the growing desire for more sustainable options.

2.1.3. Consumer Behaviour

From Engel, Blackwell, and Miniard's consumer behaviour model, we know that consumer behaviour is influenced by an interplay of three factors: environmental influences, individual factors, and psychological processes (Engel et al., 1995). These components intermingle and determine how consumers perceive, interact with, and decide about products and services.

Consumer behaviour is influenced by three key factors. Environmental influences encompass marketing activities and sociocultural factors. Marketing activities include the 4Ps (Product, Price, Place, and Promotion), with the "Product" and "Promotion" elements being especially relevant for eco-labels and sustainability features. Sociocultural influences consider societal trends towards eco-conscious behavior and cultural attitudes, particularly relevant in the Belgian context (Answered in results section).

Individual factors, such as resources, motivation, knowledge, attitudes, and values, play a significant role. These factors, including a consumer's income level, can impact purchasing decisions, especially when eco-friendly products have a price premium (Laroche et al., 2001). The psychological process is how environmental influences and individual factors shape consumer responses. It involves stages like problem recognition, search, alternative evaluation, purchase, and outcomes, all of which are influenced by eco-labels' clarity and credibility (Answered in results section)

Kotler's "Marketing 4.0" stresses the significance of digital influences on consumer behaviour. This may involve exploring how digital platforms promote eco-friendly products or disseminate information about their benefits. For example, are Belgian supermarkets leveraging their online platforms to advocate for sustainable consumption? If so, how are consumers responding to these digital marketing efforts? (Answered in results section).

In this regard, it is important to consider the "Ask" and "Act" stages of Kotler's path. Consumers in the digital age often seek information and opinions online ("Ask") before making purchase decisions ("Act"). The credibility, visibility, and accessibility of information about a product's sustainability features could significantly affect these stages.

A deeper understanding of consumer behaviour requires considering a broad array of factors, from the societal to the individual, from the physical to the digital. Investigating these elements in the context of Belgian supermarket shopping could gain valuable insights into how and why eco-labels and sustainability features impact consumer behaviour.

Consumer behaviours concerning eco-labels on Consumer Packaged Goods (CPG) in supermarkets involve how consumers interpret, assess, and respond to environmental or sustainability claims presented on product packaging. These eco-labels function as informative instruments, indicating to consumers that the product complies with certain environmental or ethical criteria, such as organic certification, fair trade practices, or lower carbon emissions. Consumer preferences for CPG products with eco-labels are shaped by a blend of factors, including personal values, awareness, comprehension, perceived trustworthiness, price sensitivity and product accessibility (Hameed & Waris, 2018).

Studies show an increasing interest in environmentally friendly products, with numerous consumers prepared to pay a premium for eco-labelled items (Laroche et al., 2001). Nevertheless, eco-labels' influence on actual purchasing behaviours can differ substantially depending on the individual and the specific label involved.

The awareness and understanding of eco-labels are essential in shaping consumer preferences. Consumers with greater knowledge about environmental issues and familiarity with specific eco-label meanings tend to exhibit favourable attitudes towards products carrying eco-labels and consider these labels while making purchase decisions (D'Souza et al., 2006).

The perceived credibility of eco-labels also plays a vital role in consumer preferences. Trust in the certification procedures, the organisation responsible for the label, and the accuracy of the claims can considerably impact consumer attitudes towards products featuring eco-labels (D'Souza et al., 2006).

Consumer behaviour concerning eco-labels on CPG within Belgian supermarkets entails a complicated interplay of multiple factors that can either promote or hinder eco-conscious purchasing decisions. First and foremost, price sensitivity significantly impacts consumer preferences. Eco-labelled products often carry a premium compared to traditional alternatives, leading some consumers to opt for more affordable options (Laroche et al., 2001). Consequently, manufacturers and retailers must work towards aligning the perceived value of eco-friendly products with their higher price points to encourage eco-conscious purchases.

Personal values also play a significant role in driving consumer behaviour. For instance, increased awareness of environmental issues could lead Belgian consumers to choose more sustainable purchasing options consciously (Bastounis et al., 2021; Pelsmacker et al., 2006). As such, educational initiatives must be implemented to raise public awareness regarding the environmental impact of product choices while simultaneously promoting eco-labelled items as viable alternatives (Hameed & Waris, 2018).

2.2. Existing Research

Numerous research studies have demonstrated that adopting environmentally responsible strategies and products can causally enhance product sales and boost companies' long-term profitability (Dinesh et al., 2023; McKinsey & Company, 2022). Thus this research paper will provide the necessary information for the CPG industry to create more effective ESR communications towards consumers. Nonetheless, there is limited research on the connection between ESR claims on packaging and consumer buying behaviour (Tascioglu et al., 2019).

The study by Tascioglu et al. (2019) explores the impact of retail environmental and social sustainability practices on consumer behaviour while considering the roles of price and cultural context. Their findings indicate that these practices positively influence consumers' purchasing intentions, commitment to retailers, customer satisfaction, and loyalty. However, higher prices may hinder these relationships over time. Moreover, consumers from collectivist cultures are more price-sensitive than those from individualist cultures (Tascioglu et al., 2019). While Belgium is, according to Boiger et al. (2013), characterised as an individualistic culture, it is vital to acknowledge that Tascioglu et al.'s (2019) has limitations of the global applicability of their findings.

Primary research incorporating Belgian data is essential to thoroughly understand Belgian consumers' attitudes towards Ecological and Socially Responsible (ESR) products in supermarkets. This investigation should determine whether different demographic groups in Belgium demonstrate varying attitudes towards ESR products, potentially influencing their purchase patterns, and build on Tascioglu et al.'s (2019) findings for more generalisable outcomes.

Roozen and De Pelsmacker's (2000) study examines environmentally friendly (EF) consumer perceptions and preferences in Belgium and Poland. This research compares how individuals in these countries evaluate EF products' attributes and corresponding behaviours. Although EF perceptions are not direct indicators of consumer behaviour, they offer valuable insights into what consumers perceive as environmentally friendly.

The study shows that EF perceptions vary based on location and culture. These disparities suggest that EF behaviour perceptions differ between the two nations due to varying levels of integration and familiarity with specific recycling practices.

The research also emphasises that demographic factors have limited power in explaining differences in EF consumer behaviour preferences (Laroche et al., 2001). Thus, this research paper will perform a regression analysis in addition to identifying the demographic characteristics of the consumers in Belgium. This finding indicates that marketers should not design diverse marketing strategies based on these factors but rather adapt their marketing approaches to local attitudes and value systems (Dinesh et al., 2023; Bastounis et al., 2021). Thus, understanding Belgian consumer behaviour regarding ESR labels on the packaging is crucial for effective marketing within the context of the consumer packaged goods (CPG) industry in Belgian supermarkets (CB et al., 2018; NielsenIQ, 2022b).

This study's limitations encompass its dependence on a student sample, potentially unreflective of the wider population. In order to gain a deeper insight into how consumers perceive Ecological and Socially Responsible (ESR) actions, it is advantageous to broaden our research scope to encompass various nations, product types, and ESR assertions (Bastounis et al., 2021). Since consumer inclinations differ depending on geography, cultural aspects, and numerous other factors, conducting region-specific studies is crucial to obtain accurate results (D'Souza et al., 2006).

Bastounis et al.'s (2021) meta-analysis that explores how eco-friendly labels influence consumers' willingness to pay (WTP) for an array of food products discovered that individuals demonstrated a higher WTP for edibles with green labels, particularly in the meat and dairy sectors. Organic labels held more significant value than other sustainability labels, revealing the importance of consumer familiarity and trust in organic certification labels in shaping their perceptions.

Furthermore, the study indicated an association between participants' demographic characteristics and WTP (Bastounis et al., 2021). Female consumers and individuals with lower educational backgrounds displayed a higher preference for eco-labelled foods. The research findings support earlier studies that show women generally express a heightened sense of environmental awareness and tend to engage in eco-friendly actions more often than men (Laroche et al., 2001). In addition, it was observed that younger individuals below 40 years of age exhibit a stronger receptivity to ecological labels compared to their older counterparts. Consequently, this raises relevant questions for Belgian consumers about the demographic factors influencing ESR labels and their exact impact on consumer behaviours (Patrick De Pelsmacker et al., 2005; Pelsmacker et al., 2006). However, a cautious interpretation of these results is advised due to the limited number of effect sizes contributing to the analysis (Bastounis et al., 2021).

These studies raise the question regarding Belgian consumer behaviour relating to environmentally and socially responsible (ESR) labelling:

- What are the demographic traits of Belgian consumers who respond positively to ESR labels, and how do these characteristics affect their purchasing decisions?

Pelsmacker et al.'s (2006) investigation of Belgian consumers' attitudes, beliefs, and purchasing behaviour towards fair trade offers valuable insights into their perceptions and actions concerning ESR products. The research revealed that respondents understood the fair-trade concept well, with most having favourable opinions on consumer effectiveness and positive attitudes towards fair trade. However, these positive attitudes did not always translate into purchasing behaviour, resulting in an attitude-behaviour gap.

Several factors contribute to this gap: high prices of fair-trade products; their inconvenient distribution; insufficient information provided (Pelsmacker et al., 2005; Roozen & De Pelsmacker, 2000). The study suggests that increasing the availability of fair-trade products in regular supermarkets, offering credible and accessible information at the point of sale, and reducing prices could help mitigate this gap (Pelsmacker et al., 2006). Additionally, the research emphasised the importance of employing semi-commercial communication channels like brochures and sponsored documentaries for credibility enhancement (Dinesh et al., 2023).

The research also recognises that elderly, well-educated, and affluent consumers are the most probable sociodemographic group to embrace fair-trade products (Pelsmacker et al., 2006). This insight challenges conventional marketing strategies for fair-trade organisations, frequently targeting younger and middle-aged demographics. Directing marketing initiatives towards older age segments may enhance the acceptance of ESR-labeled products in Belgium.

Although this study creates a robust foundation for grasping consumer attitudes and behaviours towards fair-trade items, it underlines the necessity for additional research in the context of Belgian consumer behaviour regarding ECO (labels). Examples for further investigation include scrutinising the process of selecting among various ethical claims on products and establishing an explanatory model for fair-trade purchasing behaviour. Consequently, this could offer valuable insights into consumer preferences and values for distinct ESR product categories, impacting Consumer Packaged Goods (CPG) sales in Belgian supermarkets (CB et al., 2018; D'Souza et al., 2006; Dinesh et al., 2023).

Studies reveal that certain product categories and claims significantly influence ESR purchasing decisions and drive long-term growth for brands, particularly private labels (NielsenIQ, 2022a). These labels have gained notable popularity in recent years as they provide more affordable alternatives or unique offerings exclusive to retailers. Profiting from the sustainability trend are especially (premium) private labels that grew above market average during the recent pandemic (www.gfk.com, 2020). According to NielsenIQ (2022a), global sales of private-label foods have witnessed a 16% increase over the past two years, reaching $135.5 billion in 2022, with an acceleration in growth in 2022 due to inflation and potential recession concerns.

Private-label CPG sales now account for 19% of global CPG sales (NielsenIQ, 2022b). The relevance of this knowledge to the thesis topic lies in consumer search habits; many shoppers look for product features rather than brand names when searching online (CB et al., 2018). Thus, products with desired attributes are more likely to appear in search results, allowing retailers and producers to cater better to consumer needs (Laroche et al., 2001). ESR factors, such as "cruelty-free," are often emphasised by private labels. NielsenIQ reported that innovation offers a prime opportunity for CPG manufacturers to respond faster and more effectively, as new products catering to changing consumer demands can quickly gain market share before competitors can adapt (NielsenIQ, 2022c).

The importance of environmentally sustainable and responsible (ESR) products is becoming increasingly evident to Belgian consumers. Research by Roozen and De Pelsmacker (2000) has found that consumers' values and beliefs greatly impact their attitudes towards eco-friendly products. Further studies by Pelsmacker et al. (2006) and Pelsmacker et al. (2005) have also emphasised the significance of consumers' understanding of these products' environmental impact and sustainability in shaping their purchasing decisions.

Various factors influence consumers' behaviour regarding ESR products in supermarkets. Green marketing communication is a crucial factor that significantly impacts consumers' green purchasing behaviour, according to research by Correia et al. (2023). D'Souza et al. (2006) and Riskos et al. (2021) have also demonstrated the significant impact of eco-labels on consumer purchase decisions. These labels inform shoppers about product environmental characteristics, encouraging more sustainable choices.

In addition to these factors, recent research by McKinsey & Company (2023) has highlighted the growing significance of sustainability claims on product packaging in influencing consumer decisions. These claims mediate consumer behaviour, with environmentally conscious shoppers preferring products featuring clear sustainability information. Hence, the focus of this research paper on the eco-labels of products, which are visual indicators of sustainability aspects of the product or brand.

Consumer behaviour regarding ESR products in Belgian supermarkets has garnered significant attention, with studies indicating consumers' willingness to pay extra for environmentally friendly products (Laroche et al., 2001) (Hameed &Waris, 2018). This reflects consumers' global environmental consciousness and underscores the significance of adopting sustainable practices in the retail sector. Embracing sustainability aligns with customer preferences, influencing purchasing behaviour and benefiting retailers' bottom lines (Tascioglu et al., 2019). The shift towards sustainability has increased sustainable product offerings and certification schemes such as EU Eco-label, Fair Trade Certified, and Organic labels (Bastounis et al., 2021; Correia et al., 2023). The role of eco-labels in promoting environmentally responsible consumption is further highlighted by the impact of green marketing on packaging on consumer purchase decisions (Gökirmakli et al., 2017; Hameed & Waris, 2018).

The Belgian CPG market also presents growth opportunities due to the rising focus on ESR products (Wunsch, 2022). The expanding market for eco-friendly and socially responsible goods offers potential for supermarkets to capitalise on changing consumer preferences and strengthen their competitive edge (Pieters et al., 2023). As McKinsey's research suggests, ESG claims on packaging positively impact product sales, indicating a concrete shift in consumer behaviour towards sustainable products (McKinsey & Company, 2023). Furthermore, studies by Pelsmacker et al. (2006) and Roozen & De Pelsmacker (2000) indicate that Belgian consumers perceive environmentally friendly behaviour positively and are more likely to support fair trade initiatives. These findings demonstrate the significance of aligning retail strategies with consumer expectations in the Belgian market. Understanding the factors driving consumer behaviours regarding ESR products in Belgian supermarkets allows businesses to respond to and capitalise on the changing landscape of consumer preferences. As environmental concerns continue to shape individuals' attitudes and purchasing decisions, it is crucial for companies operating in the CPG sector to adapt their marketing strategies and product offerings to remain competitive in the market.

2.2.1. Summary of Existing Research

The existing research on "Belgian Consumer Behavior regarding ECO Labels on Packaging" provides valuable insights into how consumers in Belgium approach eco-friendly products and sustainability labels.

One striking finding is the impact of environmental branding on long-term profitability and customer loyalty. The existing research, although focused in the US, suggests that brands that embrace sustainability do well financially and foster strong customer commitment. This reinforces the idea that economic success can go hand in hand with ecological responsibility in the CPG industry.

A significant aspect the research uncovers is the variation in consumer attitudes and behaviours across different countries. This highlights the influence of culture, economics, and societal factors on consumers' choices. It is a reminder that one-size-fits-all marketing approaches will not work. Instead, a tailored, location-specific strategy is vital to success.

Yet, a concerning gap emerges from the research: a lack of specific data and research on the topic within Belgium. This void underscores the need for new studies to gain deeper insights into how Belgian consumers perceive and interact with ECO labels on packaging.

The research findings indicate that price is a crucial factor in the purchasing behaviour of consumers. Although consumers favour eco-friendly products, the research suggests that high prices often discourage purchases. This underscores the significance of affordability in promoting sustainable products, and its relevance needs to be evaluated based on Belgian-specific consumer behaviour.

The study also shows that consumers are willing to pay more for products with ECO labels, mainly for meat and dairy products, and organic labels are particularly attractive to them. This emphasises the importance of trust and familiarity in shaping consumers' buying habits.

Another intriguing aspect is the influence of demographics on consumer behaviour. The existing research presents a bit of a puzzle, with some contradictory statements. This shows that understanding the role of demographics in Belgian consumer behaviour is more complex than it might seem, emphasising the need for further investigation.

The online shopping trend is another fascinating finding - consumers prioritise product features over brand names when purchasing. This shift underscores the importance of transparent ECO labels and sustainability information on packaging.

Lastly, the research emphasises the need for brands to stay innovative and adaptable to meet evolving consumer preferences. The influence of sustainability positioning is evident. Thus, the importance of sustainability claims on product packaging and the ability to quickly adapt to changing trends and consumer demands is essential to remain competitive.

The existing research offers a glimpse into the intricate world of consumer behaviour in Belgium concerning ECO labels and sustainability on the packaging. It underscores the importance of tailored strategies, affordability, and transparency in meeting consumer needs and taking advantage of the growing market for environmentally responsible products. The need for further research within Belgium itself becomes evident, filling the gaps in our understanding and guiding decision-making in the consumer packaged goods industry.

2.3.Extension of Literature Review

This section provides additional information structured by topics more out of scope but aligned with the thesis subject and aims to provide a broader understanding.

2.3.1. How does inflation impact concern about the environment and, in turn, buying behaviour regarding eco products?

Consumers are increasingly seeking environmentally responsible actions from the brands they support. According to GfK's Consumer Life Global report for 2022, 73% of consumers now consider it crucial for companies to prioritise the environment. Moreover, 36% are willing to switch brands if they align with a cause they believe in (GfK, 2022).

Environmental awareness has been a defining trend in recent years, with even the COVID-19 pandemic unable to dampen this shift. In fact, 52% of consumers noted that sustainability became even more important to them during the pandemic, strengthening their connection with nature (GfK, 2022).

Despite inflation taking centre stage as the top societal concern in various markets, particularly in North America and Western Europe, consumers' attitudes toward environmental issues remain steadfast. Climate change, for instance, consistently ranks among their top concerns, with 72% deeming it a severe issue, which shows it is not only younger consumers who show they are concerned (GfK, 2022). Environmental pollution is also a recurring worry, firmly entrenched in the global top five since 2018 (GfK, 2022).

Interestingly, more people are becoming concerned about climate change, with 73% of individuals over 60 considering it a serious issue. This is a significant increase since 2012 and highlights the growing momentum behind sustainability. Consumers expect companies to be responsible for the environment, but there is scepticism among six out of ten consumers who believe that companies prioritise profits over the planet. However, companies such as Patagonia have earned high trust levels due to their consistent sustainability efforts and recent move to entrust the company to a charitable trust for combating climate change. Government institutions are also pushing companies to adopt more sustainable practices, as seen with Haarlem's ban on public advertising for meat products. Haarlem is a city in the Netherlands. This underscores the collective push for environmental change.

Sustainability is rising in the realm of consumer packaged goods, with 27% of consumers aiming to make major sustainable purchases and 64% planning to opt for sustainable daily-use products (GfK, 2022). These numbers highlight a substantial market for eco-friendly and sustainable goods. While price certainly plays a role in shopping choices, shoppers increasingly prioritise natural and healthy ingredients, quality, provenance, waste reduction, and eco-packaging. Eco-conscious consumers are willing to pay more for natural, eco-packaged, and eco-produced products, underscoring their commitment to sustainability.

Even with inflation-grabbing headlines, consumer concern for the environment and their inclination to purchase eco-friendly products remain strong, highlighting the enduring importance of sustainability in shaping consumer choices.

2.3.2. Supermarket Sustainability Advocacy Online: A Belgian Perspective

Are Belgian supermarkets leveraging (their online platforms) to advocate for sustainable consumption?

Belgian supermarkets are making efforts to promote sustainable consumption online, but there is still room for improvement. The "Superlijst Milieu België 2022" report highlights their role in fostering sustainability but suggests that their contribution to promoting plant-based diets, sustainable food choices, and reduced food waste is limited. Although supermarkets have participated in environmental agreements and initiatives, they often place the responsibility of sustainable choices on customers. Public policy documents and supermarket websites lack comprehensive measures to encourage more sustainable diets. However, there are some emerging initiatives worth noting.

Supermarkets are increasingly catering to the burgeoning demand for plant-based options. For instance, Carrefour's "Veggie Thursday" promotion provides a 20% discount on select plant-based products. However, this promotion has a limited time frame and may not be available at all branches. Colruyt has introduced vegetarian barbecue dishes, such as hotdogs and halloumi skewers, catering to consumers opting for plant-based choices, even on traditionally meat-centric occasions.

Aldi, Lidl, Carrefour, Colruyt, and Delhaize also embrace the digital age by offering online resources for vegetarian and vegan recipes, targeting customers actively seeking plant-based options. Lidl stands out for its transparent communication, disclosing the origin and certification of certain products, including fresh produce and seafood. Moreover, Lidl collaborates with independent audit firms to assess the environmental impact of its transporters and supports carbon farming practices among Belgian farmers. Supermarkets are becoming more aware of the need to accommodate customers with diverse dietary preferences, as evidenced by these measures. Previous research suggests that being an early adopter or innovator in the CPG sector is the best way to gain a strategic advantage by capitalising on this trend.

While supermarkets in Belgium are undoubtedly making strides toward sustainability, reports suggest there is room for improvement in accessibility to the public. This encompasses making their sustainability goals, performance indicators, and website reporting more user-friendly, especially concerning reducing food waste.

In sum, while Belgian supermarkets are leveraging their online platforms to promote sustainable consumption, there is a clear need for greater transparency, accessibility, and an expansion of sustainability initiatives. Further research is warranted to gauge the actual impact of these initiatives on consumer behaviour, as responses may vary (Winkel, Haan, & Engen, 2022).

2.3.3. Summary of Extended Research

One notable finding from this research extension is the resilience of consumer concern for the environment, even in the face of headline-grabbing inflation. Despite economic challenges, consumers in Belgium continue to prioritise eco-friendly products and sustainability. This resilience highlights the enduring importance of sustainability in shaping consumer choices, reinforcing the relevance of eco-labels and sustainable products in the market.

Belgian supermarkets are making strides in promoting sustainability, but there is room for improvement. The "Superlijst Milieu België 2022" report highlights their role in fostering sustainability but suggests that their contribution to promoting plant-based diets, sustainable food choices, and reduced food waste is limited. Supermarkets often place the responsibility for sustainable choices on customers. However, some emerging initiatives, such as "Veggie Thursday" promotions and the introduction of vegetarian barbecue dishes, demonstrate their efforts to cater to the demand for plant-based options. There is a clear need for greater transparency, accessibility, and an expansion of sustainability initiatives.

Extending the 'Existing Research' enriches our understanding of Belgian consumer behaviour regarding eco-labels and sustainable products. It underscores the enduring importance of sustainability, the significance of label credibility in promoting receptivity, and the need to overcome barriers to eco-purchasing for sustainable product adoption in Belgium. This research reinforces the relevance of eco-labels and sustainability in shaping consumer choices and highlights the need for increased transparency and accessibility in advocating sustainability.

3. Research Question

The literature review provides a comprehensive overview of existing research and identifies gaps for further study, leading to a refined research question.

Considering the marketing research thesis topic, "Research on Belgian Consumer Behaviour regarding ECO Labels on Packaging," and the literature review, this study seeks to answer the following main research question; "How can Belgian CPG businesses enhance the impact of ECO labels in high-awareness product categories, considering consumer behaviour in Belgium?"

The null hypothesis (H0) of this study suggests that purchase intent is not affected by consumer characteristics, attitudes, or preferences. In other words, any associations or correlations perceived between these independent variables and purchase intent are likely to result from chance or random variation.

The research question aims to provide valuable information which can be used in further research as insights for companies, retailers, policymakers, and other stakeholders to promote environmentally and socially responsible consumption and production practices in the Belgian CPG market.

However, after going through the literature, several unmet questions arise, which will also be elaborated by this research in addition to the main research question. The theory discussed provides insights into the impact of various sustainability practices, marketing tactics, and eco-labels on consumer behaviour. Studies have shown that adopting environmentally responsible strategies and products can enhance product sales and profitability. Additionally, research suggests that consumers exhibit a higher WTP for products with eco-labels, and organic labels hold more significant value. The theory discussed provides valuable insights into certain aspects of the initial research question. It addresses the impact of sustainability practices, marketing tactics, eco-labels, and demographic factors on consumer behaviour and preferences. It also highlights the significance of private labels and consumer willingness to pay for eco-friendly products. However, consumer behaviour regarding eco-products and their labels in Belgian supermarkets requires further investigation. This gives rise to the following sub-questions.

a. What are the opportunities and threats of the Consumer-Packaged Goods (CPG) and ESR industry?

b. Which product categories are Belgians most aware of ECO labels?

c. How does consumer behaviour toward ESR labelling impact the sales of CPG products in Belgian supermarkets?

4. Methodology

A comprehensive methodology encompassing various steps will be implemented to investigate the impact of consumer behaviour regarding Enomically- and Sustainably Responsible products and their lables.

4.1. Target Population and Sample Size

The target population for this study consists of general consumers in Belgium, representing various demographic backgrounds, including age, income, and location. Since the study aims to obtain insights into general consumer behaviour, the chosen sample must accurately represent these demographic factors. Therefore, respondents will be drawn from urban, suburban, and rural areas across the country to ensure a diverse sample.

To accurately represent the population in our analysis of ECO labels in Belgium's consumer packaged goods market, we must choose a scientifically suitable sample size and use statistical methods to ensure the survey results reflect the broader population's views. We can determine the optimal number of survey respondents by utilising methods such as Cochran's formula and considering factors like effect size and margin of error. The population size as of 2023 is 11.7 million (Belgium Population (2019) - Worldometers, 2019) and with a confidence level of 95% and a margin of error of 5%, a sample size of 400 respondents should provide reliable results while minimising sampling error. While this sample size is minimal, it is still statistically representative and produces an acceptable margin of error of 5% for social sciences research.

4.2. Design Survey Instrument

The survey instrument was designed to collect data on respondents' awareness, purchasing habits, and perceptions of ECO labels on Consumer Packaged Goods (CPG). It included targeted closed-ended questions focusing on the influence of personal values, beliefs, and eco-labels on purchasing decisions, as well as the impact of socio-demographic factors. The survey aimes to explore how Belgian CPG businesses can enhance the impact of ECO labels in high-awareness product categories, considering consumer behaviour in Belgium.

4.3. Data Collection and the Progress of Data Collection

We distributed the survey mainly through WhatsApp groups, and we allowed respondents to take their time to provide thoughtful and considered answers. To ensure data quality, we conducted regular reviews of the collected responses. We randomly checked completed surveys to identify potential issues such as demographic imbalances or inaccuracies in the data.

It is essential to acknowledge the limitations of the data collection. The sample size consisted of 49 respondents who were primarily students and may not fully represent the broader population. This limitation is particularly relevant to consider in the context of the Data Analysis section. Despite the constraints on the sample size, we adhered to rigorous ethical and confidentiality standards to ensure the highest quality of data collection.

4.4. Data Analysis and Interpretation

The analysis begins with data cleaning and preparation, ensuring data accuracy, and addressing missing values or outliers. Descriptive statistics, such as frequencies, means, and standard deviations, are calculated to summarise respondents' demographics, awareness levels, and purchasing behaviour related to ECO labels. These statistics provide an overview of the sample and highlight notable trends or patterns.

The analysis compares consumers' awareness and purchasing behaviour regarding ECO labels within. For example, by comparing responses from participants who show awareness to different eco-labels of products and show different demographics, any significant differences in their behaviour and preferences can be identified.

To better understand the findings, a comparison will be made against existing literature and relevant studies on consumer behaviour and ECO labelling. The relationships between ECO labels and consumer behaviour in Belgian supermarkets will be explored using quantitative techniques during the data analysis. By interpreting the findings within the context of existing research, valuable insights into the impact of ESR labelling dynamics on the sales of CPG can be gained, ultimately contributing to the understanding of Belgian consumer behaviour and informing sustainable marketing strategies. Any study limitations, such as potential biases or methodological constraints, will be explored to ensure a comprehensive understanding of all possible research implications.

5. Data Analysis and Results

5.1. Data

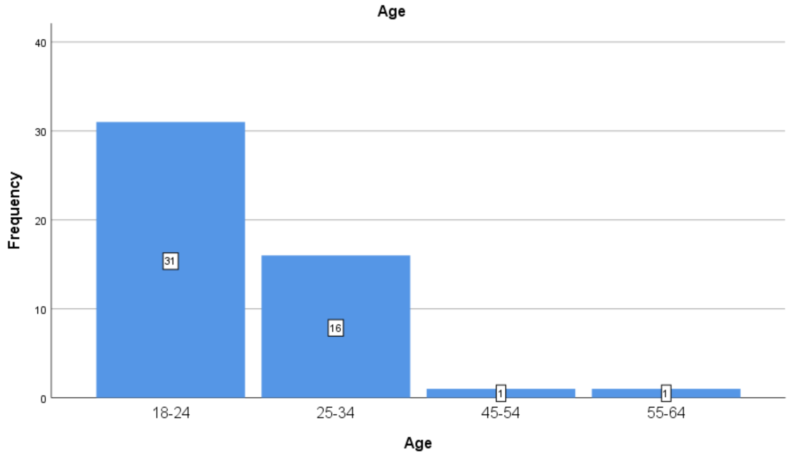
In this section, we will focus on the heart of our research, which aims to uncover the influence of eco-labels and sustainability attributes on the purchasing decisions of Belgian consumers in the Consumer Packaged Goods (CPG) industry. To help our investigation, we will explore sub-questions such as the level of awareness of ECO labels among Belgians and the impact of consumer behaviour on the sales of CPG products in Belgian supermarkets.

Descriptive Statistics

Figure 1 shows the age frequency of the sample respondents.

Figure 1

Age Frequency Visualisation

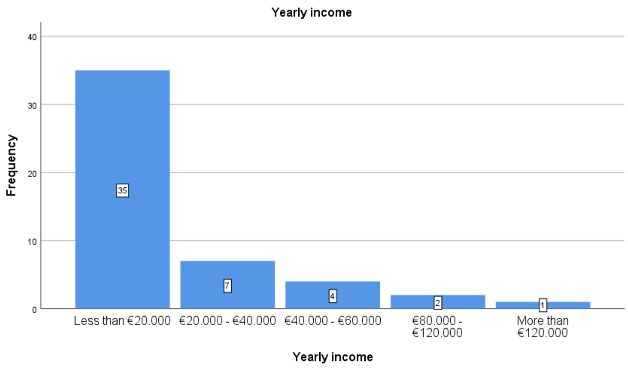


We can see that the majority of the participants are young adults between the ages of 18 and 24, followed by individuals in the age group of 25-34. The male respondents slightly outnumbered the female respondents. The low representation of the age groups 45-54 and 55-64 suggests that the survey sample may not entirely represent the general population. There is saturation of the age groups. The survey seems to have an overrepresentation of younger age groups, notably those aged 18-34. This age group's responses may overshadow the opinions of older individuals. The results might not adequately represent the entire age spectrum of Belgian consumers.Overall, the survey provides valuable insights into the characteristics of the respondents and their views on the topic under study.

Figure 2 shows different categories representing the respondents' yearly income levels.

Figure 2

Yearly Income Visual Descriptive



Most respondents, around 71.4%, have an income of less than €20,000. The second most common category is €20,000 - €40,000, with 14.3% of respondents falling within this range. Categories of €40,000 - €60,000, €80,000 - €120,000, and more than €120,000 account for 8.2%, 4.1%, and 2.0% of respondents, respectively.

Most conscious categories

Respondents are most conscious about sustainable packaging and environmentally sustainable categories, with 23 respondents choosing each. Together, they account for 46.9% of the total responses. Plant-based was chosen by 16 respondents, organic positioning by 21, and animal welfare by 18. Lastly, socially responsible was chosen by 12 respondents.

Table 2

Most Conscious Categories Frequencies

		Responses		Percent of Cases
		N	Percent	
most conscious categories[a]	Sustainable packaging	23	20.4%	46.9%
	Environmentally sustainable	23	20.4%	46.9%
	Plant-based	16	14.2%	32.7%
	Organic positioning	21	18.6%	42.9%
	Socially responsible	12	10.6%	24.5%
	Animal welfare	18	15.9%	36.7%
Total		113	100.0%	230.6%

a. Dichotomy group tabulated at value 1.

Types of products primarily purchased

The table provided displays the frequencies and percentages of respondents' choices for the types of products they primarily purchase at the supermarket. Respondents were asked to select one or more product categories from the list.

Table 3

The Frequency of Types of Products Primarily Purchased

		Responses		Percent of Cases
		N	Percent	
types of products primarily purchased	Meat	22	12.1%	44.9%
	Dairy	30	16.5%	61.2%
	Vegetables	43	23.6%	87.8%
	Organic packaged food	11	6.0%	22.4%
	Grain products	27	14.8%	55.1%
	Sweets	11	6.0%	22.4%
	Fruits	38	20.9%	77.6%
Total		182	100.0%	371.4%

a. Dichotomy group tabulated at value 1.

The most popular product categories are vegetables and fruits, accounting for 77.6% of primary purchases. *Dairy* is the second most popular category, followed by meat and grain products. Organic packaged food and sweets are less commonly selected.

Feelings and contact with nature

The table provided presents descriptive statistics for two variables, "Contact with nature" and "Feelings about nature."

Inferential Statistics

Regression Equation

This section conducts a linear regression equation on the purchase intent. The independent variables include the Price as a reason not to buy an eco product, Environmental Awareness and Concern, Personal Values and Beliefs Influence, Eco-Label Impact on Buying Choice, Recommendations to Friends/Family, Frequency of Discussion/Recommendation, and Belief that Eco-Labels Impact Purchases. Other control variables like age, yearly income, contact with nature, and feelings about nature were added to the model. The null hypothesis is that there is no relationship between the independent variables and the dependent variable (the purchase intent). The results are shown below;

Table 4

Regression Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.746[a]	.556	.439	.346

a. Predictors: (Constant), feelings about nature, Contact with nature, Age, Recommendations to Friends/Family, Belief that Eco-Labels Impact Purchases, Environmental Awareness and Concern, Yearly income, Importance of Product Quality and Price, Personal Values and Beliefs Influence

The model's coefficient of determination (R-squared) is 0.556, indicating that approximately 55.6% of the variance in Purchase Intent can be explained by the independent and control variables. The adjusted R-squared is 0.439, meaning that about 43.9% of the variance in Purchase Intent can be explained while considering the model's complexity.

Table 5

Anova of the Regression Model

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.094	9	.566	4.734	.000[b]
	Residual	4.065	34	.120		
	Total	9.159	43			

a. Dependent Variable: Purchase Intent

This analysis tests the model's significance in predicting Purchase Intent. The F-statistic is 4.734, with a p-value of 0.000, indicating that the model is statistically significant. This confirms that at least one independent variable in the model significantly affects Purchase Intent.

Table 6

Regression Model with Constant and Coefficients

Coefficients[a]

Model		Unstandardised Coefficients B	Unstandardised Coefficients Std. Error	Standardised Coefficients Beta	t	Sig.
1	(Constant)	1.015	.543		1.868	.070
	Reason [Price]	.258	.136	.236	1.895	.067
	Environmental Awareness and Concern	.003	.048	.010	.060	.953
	Personal Values and Beliefs	.166	.071	.405	2.324	.026
	Belief that Eco-Labels Impact Purchases	.217	.098	.293	2.218	.033
	Recommendations to Friends/Family	-.028	.066	-.054	-.420	.677
	Contact with nature	.010	.034	.036	.285	.777
	Age	.035	.110	.050	.320	.751
	Yearly income	-.139	.072	-.301	-1.934	.062

a. Dependent Variable: Purchase Intent

A detailed explanation of the numbers in the regression model can be find in Appendix B. The results of the model, however, are analysed and discussed below.

Based on the coefficients section analysis, we can conclude that personal values and beliefs, and belief that eco-labels impact purchases are positively related to Purchase Intent. On the other hand, price, environmental awareness and concern and recommendation to friends/family do not have a significant effect on Purchase Intent. However, those customers who strongly value eco-labels and believe they influence their purchases are more likely to have a higher purchase intent. It is worth noting that yearly income has a negative coefficient of -0.147, which is statistically significant. This means that as yearly income increases, purchase intent tends to decrease. This unexpected result highlights the importance of considering income levels when tailoring marketing and policy strategies to target specific consumer segments.

Moreover, the variables 'contact with nature,' 'age,' and 'feelings about nature' do not significantly predict purchase intent. Although 'contact with nature' has a slightly positive relationship, it is not statistically significant. Similarly, 'age' and 'feelings about nature' have minimal impacts on purchase intent and lack statistical significance.

Simply put, these insights suggest that marketers and policymakers should prioritise personal values, beliefs, and the perceived impact of eco-labels when devising strategies to enhance purchase intent.

Demographic variables

Correlational analysis

The correlation analysis between demographic variables (Age, Gender, Yearly Income) and Environmental Awareness and Concern provides insights into how demographics may be linked to awareness.

Table 7

Correlation Between Environmental Awareness and Concern and Age, Gender, And Income

Correlations				
		Age	Gender	Yearly income
Environmental Awareness and Concern	Pearson Correlation	-0.112	0.252	-0.011
	Sig. (2-tailed)	0.444	0.080	0.942

The results suggest that gender may play a role in predicting environmental awareness. Women tend to be more environmentally aware and concerned than men. This is consistent with general trends in environmental consciousness, as studies often show that women tend to be more eco-minded.

While there is a weak negative correlation between age and environmental awareness, it is not statistically significant. This means that age alone is not a strong predictor of environmental awareness. However, younger individuals may have a slightly higher level of environmental awareness.

The correlation between yearly income and environmental awareness is negligible and not statistically significant. This suggests that income levels do not strongly influence environmental awareness and concern.

In Table 9, we can see the descriptive statistics for consumers' awareness of eco-labels on supermarket products.

Table 8

Descriptive Statistics for Consumer's Awareness of Eco-Labels on Supermarket Products

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Notice eco-labels on products in supermarkets	49	1	4	2.469	0.767

The descriptive statistics show that, on average, consumers in the sample have a moderate level of awareness when it comes to noticing eco-labels on supermarket products. While there is some variability in the responses, most respondents fall within this moderate range of awareness. Hence, product brands are essential.

Table 9

Reasons Respondents Don't Buy an Eco-Labelled Product

		Price	Trust in the eco promises	Don't know the brand	Quality (compared to non-eco alternative)	Taste (compared to eco-alternative	Packaging design	Availability in preferred stores
Reason	No	2	14	14	22	11	20	7
	Yes	42	1	17	10	21	10	28

The data reveals that price is a prominent factor in people's decisions not to buy eco-labeled products. Several factors could explain the apparent contradiction between the regression analysis and the observed significance of the price in consumers' decisions not to purchase eco-labelled products. These factors include sample size, the complex nature of consumer behaviour, potential non-linear relationships, the perceived importance of price, psychological factors, and market conditions. To address this discrepancy, further research and a more comprehensive analysis of consumer behaviour in the Belgian market are necessary. Qualitative methods could provide deeper insights into the underlying reasons for consumers' choices regarding price and eco-labels.

Trust in the eco promises is not an issue. Quality and packaging design have similar response rates and are a reason for some not to buy the eco alternative. However, the quality and packaging are not a reason for most not to buy the eco alternative. Taste is a reason for most respondents not to buy the eco alternative. Another prominent factor is the availability of preferred stores. Most respondents do not buy eco alternatives because of a lack of availability in their preferred stores.

For the following analysis of the data, descriptive tables will not be provided anymore. These tables are not necessary to explain the insights the data provides.

The 18-24 age group tends to rate "Plant-based" and "Organic Positioning" as more important, while the 25-34 age group places a higher importance on "Socially Responsible" products. "Animal Welfare" seems equally essential to both age groups.

Plant-based, Socially Responsible, and Animal Welfare are rated as more important by Males compared to Females, while the importance ratings for "Organic Positioning" are relatively similar between the two demographic groups. This suggests that there are gender-based differences in the importance assigned to certain aspects of consumer products, with Males showing a higher level of importance for these specific attributes.

5.2. Eco Awareness & Impact of Consumer Behaviour on Sales of CPG

Based on the data provided, our research can provide insights into two sub-questions. The first question is - "Which product categories do Belgians show the most awareness of ECO labels?"

The data analysis and results indicate that Belgians have the highest awareness of ECO labels in specific product categories such as "Vegetables and Fruits," followed by "Dairy," "Meat," and "Grain Products." These categories are where respondents primarily purchase products at supermarkets, suggesting that consumers are more attentive to ECO labels in these food-related categories.

This heightened awareness may be due to the health and sustainability concerns associated with food products, leading consumers to prioritise eco-friendly options when shopping.

The data analysis also revealed significant differences in the importance assigned to specific attributes of consumer products by different age and gender groups. The 18-24 age group tends to prioritise "Plant-based" and "Organic Positioning," while the 25-34 age group values "Socially Responsible" products more. Males show a higher level of importance for "Plant-based," "Socially Responsible," and "Animal Welfare" attributes compared to females. In contrast, the importance ratings for "Organic Positioning" are relatively similar between the two genders. Furthermore, most individuals in the sample consider product quality and price significant when making purchasing decisions. A smaller proportion expressed a neutral stance. These insights can be helpful for businesses to tailor their marketing strategies according to the preferences of different demographic groups and to enhance their product offerings to meet the needs of their target consumers.

The other subquestion is: "How does consumer behaviour toward ESR labelling impact the sales of CPG products in Belgian supermarkets?". The labelling of products provides valuable insights into its impact on the sale of Consumer Packaged Goods (CPG) in Belgian supermarkets. Firstly, personal values and beliefs play a significant role in influencing purchase intent. Consumers who attach importance to ECO labels and believe in their impact are likelier to exhibit a higher purchase intent for ECO-labeled products. This suggests that strong personal convictions related to sustainability have a positive impact on sales. Secondly, the influence of the "price" factor is revealed. Respondents cite "price" as a reason for not buying ECO-labeled products. This finding suggests that the price point of ECO-labeled products can affect consumer behaviour and potentially impact sales. Price-conscious consumers may be deterred from purchasing ECO-labeled items if they perceive them as more expensive than non-labeled alternatives.

Additionally, the influence of "recommendation to friends/family" was not statistically significant, indicating that word-of-mouth and personal recommendations may not have a substantial impact on ECO-labeled product sales in Belgian supermarkets. Moreover, the variable "yearly income" has a statistically significant, albeit unexpected, impact on purchase intent. It reveals a negative relationship, indicating that as yearly income increases, purchase intent tends to decrease. This counterintuitive result suggests that higher-income consumers may not prioritise ECO-labeled products, potentially due to cost considerations or other factors. Finally, age and feelings about nature were not statistically significant predictors of purchase intent. Their limited impact on consumer behaviour implies that these factors may not significantly influence the sales of CPG products with ECO labels in Belgian supermarkets.

5.3. What are the opportunities and threats of the consumer-packaged goods and ESR industry?

Opportunities

Fragmented Niches of Growth

As the population ages and disposable income decreases, companies can cater to smaller but profitable consumer segments. Consumers seek products that align with their values, such as healthy and environmentally friendly options. One-third of European consumers are willing to pay more for health and wellness benefits products. Companies that innovate and adapt their product portfolios to serve these niche markets effectively will find opportunities for profitable growth, as reported by McKinsey (Kopka et al., 2020) &(Krings et al.; A., 2016).

Small Brand Growth Strategies

According to McKinsey (Kopka et al., 2020), the growth of small brands presents an exciting opportunity for CPG companies. In recent years, small brands acquired by large CPGs have demonstrated faster growth. However, acquiring suitable challenger brands can be challenging, requiring identifying brands with longevity, breadth, and momentum. Acquirers can guide and support small brands to scale effectively by maintaining the brand's core proposition while expanding strategically into adjacent categories, channels, geographies, or needs. It is important not to dilute the unique value propositions that make small brands successful during scaling.

Cost Leadership & Digitalisation

According to a report by McKinsey (Krings et al.; A., 2016), CPG companies face pressure from activist investors to modernise their operations and become cost leaders. By improving efficiency and reducing costs, these companies can gain a competitive edge and implement aggressive pricing strategies to increase their market share. Additionally, cost leaders can position themselves for strategic acquisitions to further strengthen their market dominance.

McKinsey also suggests that embracing digital technologies can significantly benefit CPG companies. Digitally advanced companies can reach consumers in even the smallest market segments and tap into growth markets more rapidly. Additionally, fully digitised factories have shown cost savings of up to 30 per cent, making operations more efficient and agile. By investing in digital transformation, companies can enhance their responsiveness to consumer demands and optimise operational efficiency.

Evolving the Operational Model

The McKinsey report (Kopka et al., 2020) suggests that Consumer Packaged Goods (CPG) companies should adopt a new operating model prioritising proximity to local consumers and productivity. Investing in local talent and decision-making in priority growth markets is essential, which can serve as lead markets for understanding regional customers and channels. The model should leverage technology and digitisation, automating HR, finance, and IT tasks to streamline operations. Cross-functional teams should be formed quickly to address local market innovation needs, fast-tracking product development and marketability. These insights align with the earlier-mentioned importance of being an early adaptor or innovator. Companies can also benefit from agile budgeting and resource allocation to reallocate resources for priority initiatives, removing unproductive costs and channelling funds where they are most needed.

E-Grocery

E-grocery is gaining momentum in European markets and is expected to grow significantly by 2030. Based on projections, online grocery shopping has the potential to capture 15% of the market in some European countries. However, as of 2022, the current market share is only 7.2% of total groceries, as reported by Van Rompaey (2022). This share is expected to increase to 15% by 2030, comparable to trends in Asia, where online grocery shopping is already more widespread. Unlike traditional retail, online grocery shoppers purchase the same items regularly. Hence, CPG brands must secure a place on consumers' digital shopping lists. As highlighted in the existing research, consumers prioritise product features over brand names. However, sustainable features are increasingly becoming more significant, as per the research. This shift in consumer behaviour offers opportunities for CPG companies to enhance their online presence, optimise e-commerce platforms, and engage with consumers digitally, as reported by McKinsey (Krings et al.; A., 2016).

Cross-Channel Shopping

In Western Europe, shoppers no longer limit themselves to just one type of store. They are now purchasing from various retail banners, formats, and channels. This shift in buying behaviour presents a chance for CPG companies to consider producing private-label products, as consumers are more open to trying out different brands. By entering the private-label market, businesses can form collaborations with retailers and provide customised products to suit the diverse preferences of consumers (Krings et al.; A., 2016).

Threats

Comtetitive Pressure

There is a lot of pressure on consumer packaged goods (CPG) companies to cut costs and become more competitive. Activist investors, hedge funds, and private equity firms are pushing for cost leadership, which could lead to pricing wars and lower profits for many companies. As a result, many companies are consolidating to improve efficiency and gain market share through acquisitions (Kopka et al., 2020) & (Krings et al.; A., 2016).

Tighter Regulations

In addition, European and national governments are introducing new regulations to protect consumers and promote sustainability. Compliance with these regulations is becoming more expensive for CPG companies due to rising social and environmental standards, new laws, and stricter sanctions. By using the results of this thesis research, companies can cater to consumer demands and adhere to new sustainability regulations. These companies can create more effective eco-labelling communications and use consumer's higher WTP for sustainable products. However, companies that take a proactive approach to sustainability and regulation can turn these challenges into opportunities.

Changing Labour Norms

Flexible working arrangements are becoming more popular and can significantly impact organisational structures and workforce management. Companies that fail to adapt to these changes may struggle to attract and retain talent in the evolving employment landscape. The workforce of the future, including Generation Y and younger, will demand more personal freedoms and flexible working arrangements, which pose a challenge to traditional models of employment, as outlined in McKinsey's 2020 report (Krings et al.; A., 2016).

To sum up, the Consumer Packaged Goods (CPG) industry faces both opportunities and threats regarding sustainability. This means that industry players must be flexible and creative to succeed. There are many chances for growth, such as catering to smaller but more profitable consumer segments, focusing on small brand growth strategies, achieving cost leadership through digitalisation, and evolving the operational model for sustainable growth. Additionally, the rise of e-grocery and cross-channel shopping opens up new possibilities for CPG companies to engage with consumers in a digitally evolving retail environment.

However, if industry players fail to adapt to these opportunities, they may face threats in the form of competitive pressures and pricing wars that could result in diminished profitability. Tighter regulations may also raise compliance costs, and supply chain disruptions and changing labour norms pose additional challenges that require proactive strategies for mitigation.

To succeed in this evolving landscape, adaptability and innovation are vital. By embracing sustainability, leveraging digitalisation, and staying attuned to consumer preferences, CPG companies can navigate this complex terrain and secure a prosperous future while contributing to a more sustainable world. If industry players do not adapt, it creates threats for them and opportunities for innovators.

6. Conclusion

Consumer behaviour is complex, and eco-labels play a crucial role in shaping it. This research provides profound insights that intersect with demographic characteristics, eco-label prominence, and the changing landscapes of the consumer packaged goods industry.

The study highlights the importance of consumer familiarity and trust in organic certification labels, which hold more sway in shaping consumer perceptions and purchase decisions than other sustainability labels, as shown by the fact that consumers are more aware of eco-labels in food products than others. Consumers are highly willing to pay (WTP) for eco-labelled food products, particularly in the meat and dairy sectors.

Demographic attributes are also important. Women and those with lower educational backgrounds are more likely to prefer eco-labelled foods. This aligns with broader trends indicating that women, on average, exhibit greater environmental awareness and engage more in eco-friendly actions. A generational divide also surfaces, with individuals under 40 showing greater receptivity to ecological labels.

However, when adopting fair-trade products, elderly, well-educated, and affluent consumers emerge as the primary adopters, challenging established marketing paradigms.

The changing landscape of consumer packaged goods (CPG) mirrors the evolving consumer mindset. Private-label CPG sales now claim a substantial market share, marking a transition where consumers prioritise product attributes over brand names. This shift offers an avenue for products with desirable attributes to secure prominence in search results, empowering retailers and producers to align more effectively with consumer preferences.

Innovation is increasingly important in consumer packaged goods (CPG). CPG manufacturers must be nimble and able to respond quickly to changing consumer demands to develop new products that can gain market share. Companies must adapt to emerging trends and cater to changing preferences to remain competitive.

Consumer values and beliefs play a crucial role in driving the marketplace. Many consumers switch brands when they feel connected to a cause they believe in. This trend highlights the importance of personal values and beliefs, as well as the perceived impact of eco-labels, in shaping strategies to increase purchase intent.

One puzzling aspect of consumer behaviour is the role of price. While regression analysis may suggest that price has a negligible impact, empirical data shows that price remains a significant factor influencing consumers' decisions not to purchase eco-labelled products. This contradiction underscores the multifaceted and intricate nature of consumer behaviour, which non-linear relationships, psychological factors, and market conditions can influence.

Digitisation has been a significant factor in addressing the latest insights. Companies that have advanced digitally have a better chance of tapping into a specific market and reducing costs, thus meeting consumer demands more efficiently.

Additionally, due to the dynamic consumer landscape, governments have introduced new regulations to enhance consumer protection and promote sustainability. Compliance has now become an increasingly costly endeavour for CPG companies. By leveraging insights from research studies, businesses can navigate these challenges and turn compliance into an opportunity by providing effective eco-labelling communications and tapping into consumers' higher willingness to pay for sustainable products.

In essence, this research provides a comprehensive perspective on consumer behaviour, highlighting eco-label dynamics, demographic shifts, CPG industry transformations, and digitisation. By aligning with these insights, marketers, policymakers, and CPG companies can develop strategies that resonate with changing consumer preferences, leading to a more sustainable and conscientious world.

For future research, it is recommended to have a representative sample size. Furthermore, studies such as this could yield more valuable insights by utilizing sales data and conjoint analysis to determine the eco-labels that are the most effective for different products, brands, and categories. Showcasing the intricate dynamics of eco-labels and their effect on sales can provide easy-to-use and implement data for producers and retailers alike.

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Appendix A

Survey

Dear Respondents,

Thank you for participating in our survey on eco-labels and sustainable consumer behaviour. Your insights are invaluable in helping us understand the preferences and choices of consumers like you in the Belgian market.

About This Survey

This survey explores various aspects of consumer behaviour, preferences, and awareness regarding eco-labels on Consumer Packaged Goods (CPG) in Belgian supermarkets. Your honest responses will contribute to our ongoing research and help us better understand the factors that influence purchasing decisions.

Your Privacy Matters

Rest assured that all your responses will remain confidential, and your personal information will not be shared or used for any other purpose. We are interested in your opinions and experiences, not your personal identity.

Survey Instructions

Please take a moment to answer the following questions to the best of your knowledge and experience. There are no right or wrong answers, and we appreciate your candid responses.

Survey Duration

This survey should take approximately 3 minutes to complete. Your time is valuable, and we appreciate your dedication to contributing to this research.

Getting Started

To get started, please fill out the demographic information in the first section, followed by your responses to the following questions.

Thank you for your participation. Your insights will help shape a more sustainable future in Belgian supermarkets. Let's begin!

Sincerely,

Gilles Van Eekhout

Demographics

Age:

- ☐ 18-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65+

Location (Provinces + Urban or rural)

Income:

- ☐ Less than €20.000
- ☐ €20.000 - €40.000
- ☐ €40.000 - €60.000
- ☐ €60.000 - €80.000
- ☐ €80.000 - €120.000
- ☐ More than €120.000

Job Sector:

- ☐ Healthcare/Medical
- ☐ Technology/IT

- ☐ Education/Teaching
- ☐ Finance/Banking
- ☐ Government/Public Sector
- ☐ Manufacturing/Engineering
- ☐ Retail/Sales
- ☐ Arts/Entertainment
- ☐ Agriculture/Farming
- ☐ Environmental/Sustainability
- ☐ Entrepreneur/Small Business Owner
- ☐ Other (please specify)

Hobbies:

- ☐ Sports
- ☐ Music
- ☐ Reading
- ☐ Cooking/Food Enthusiast
- ☐ Traveling/Exploring
- ☐ Gardening
- ☐ DIY/Crafts
- ☐ Photography
- ☐ Gaming/Video Games
- ☐ Yoga/Meditation
- ☐ Film/Watching Movies
- ☐ Volunteering
- ☐ Fashion/Shopping
- ☐ Other (please specify)

Contact with Nature (never, monthly, weekly, few times a week, daily) (Scale?)

On a scale of 1 to 10, how often do you come in contact with nature. Where 1 equals "never" and 10 equals "daily".

How close do you feel to nature?

On a scale of 1 to 10, how close do you feel to nature? Where 1 equals "not at all" and 10 equals "very".

In the following six categories, which ones are you most conscious about when doing groceries at a supermarket?

1. Sustainable packaging a. Biodegradable b. Plastic-free	2. Environmentally sustainable a. Compostable b. Eco-friendly
3. Plant-based a. Vegan b. Plant-based	4. Socially responsible a. Fairtrade/wage b. Ethical
5. Animal welfare a. Cruelty-free b. Not tested on animals	6. Organic positioning a. BIO b. GMO

- ☐ Sustainable packaging
- ☐ Environmentally sustainable
- ☐ Plant based
- ☐ Socially responsible
- ☐ Animal welfare

☐ Organic positioning

☐ None of the above

Eco-label Visibility

How often do you notice eco-labels on products in supermarkets?

☐ Frequently

☐ Occasionally

☐ Rarely

☐ Never

☐ Type of Product

What types of products do you primarily purchase at the supermarket? (Select all that apply)

☐ Agricultural

☐ Dairy

☐ Energy

☐ Water and Wastewater

☐ Others (please specify)

☐ Packaging Materials Used

Do you pay attention to the packaging materials used for products when shopping? (Select all that apply)

☐ Plastic

☐ Paper

☐ Bio-degradable materials

☐ Other (please specify)

- ☐ Product Quality and Price

When shopping for groceries, how important are product quality and price to you?

- ☐ Very Important
- ☐ Somewhat Important
- ☐ Neutral
- ☐ Not Very Important
- ☐ Not Important at All
- ☐ Environmental Awareness and Concern

On a scale of 1 to 10, how environmentally aware and concerned are you? (1: Not at all, 10: Very)

Personal Values and Beliefs

To what extent do your personal values and beliefs influence your shopping choices for eco-labeled products?

- ☐ Strongly Influence
- ☐ Somewhat Influence
- ☐ Neutral
- ☐ Do Not Influence

Would you like to buy products with eco-labels that fit in one of the six categories mentioned above?

- ☐ Yes
- ☐ No
- ☐ Some times

If yes, is there a reason why you don't buy that product even though you expressed that you would like to buy it? (should i use scales here?)

- ☐ Price
- ☐ Trust in the eco promises
- ☐ Don't know the brand
- ☐ Quality (compared to a non eco labelled alternative)
- ☐ Taste (compared to a non eco labelled alternative)
- ☐ Packaging design
- ☐ Availability in your preferred stores

Impact on CPG Sales

How much do eco-labels affect your choice to buy eco-labeled products over non-eco-labeled ones when you shop for groceries?

- ☐ A lot
- ☐ Somewhat
- ☐ A little
- ☐ Not at all

Have you ever recommended eco-labeled products to friends or family based on their eco-labels?

- ☐ Yes
- ☐ No
- ☐ I don't remember

How often do you discuss or promote eco-labeled products to others due to their eco-labels?

- ☐ Frequently
- ☐ Occasionally

☐ Rarely

☐ Never

Do you think eco-labels on products make you more likely to buy eco-labeled products and possibly increase their sales?

☐ Strongly Agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly Disagree

Appendix B

In depth discussion of the regression model

The coefficients section provides information about the individual predictors (independent and control variables) and their relationships with the dependent variable (Purchase Intent). The constant or intercept value '1.740' represents the expected Purchase Intent value when all independent variables are zero. The variable 'Price' has a coefficient of 0.258, indicating a positive effect on 'Purchase Intent'. 'Environmental Awareness and Concern' had a minimal coefficient (0.003) and were not statistically significant, indicating that they do not have a significant effect on 'Purchase Intent'.

'Personal Values and Beliefs Influence' has a coefficient of 0.210, which has a significant positive effect on 'Purchase Intent' (p-value = 0.004). Similarly, the 'belief that eco-labels impact purchases' had a coefficient of 0.273 and was statistically significant (p-value = 0.015), showing a positive effect on 'Purchase Intent'.

The 'recommendation to Friends/Family' variable had a coefficient of -0.023 and was not statistically significant (p-value = 0.709), indicating that it does not have a significant effect on Purchase Intent. Lastly, the control variable with a statistically significant effect on purchase intent was 'yearly income' (r= -0.147, p= 0.039). However, 'contact with nature' (r= 0.012, p= 0.702), 'age' (r= 0.026, p= 0.807), and 'feelings about nature' (r=-0.005, p= 0.232) were not statistically significant.

The coefficient for yearly income indicates a negative relationship with purchase intent. The p-value ($p = 0.039$) suggests that yearly income is a statistically significant predictor of purchase intent. A negative coefficient implies that as yearly income increases, purchase intent tends to decrease.

The Beta coefficient (0.140) is positive, indicating a weak positive relationship, but the p-value ($p = 0.232$) is higher than 0.05. Hence, feelings about nature are not statistically significant in predicting purchase intent.

The Beta coefficient (0.035) of age has a limited impact on purchase intent. In this case, the p-value ($p = 0.807$) suggests that age is not a statistically significant predictor of purchase intent.