



The Impact of Environmentally Friendly FMCG on Willingness to Pay and Brand Loyalty

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Dissertation submitted in partial fulfilment of requirements for the MSc in Management with Specialization in Strategic Marketing, at the Universidade Católica Portuguesa, 03. April 2024.

Abstract

This dissertation discusses the dynamics of environmentally friendly Fast-Moving Consumer Goods (FMCG) and their influence on consumer Willingness to Pay and brand loyalty. Positioned within the domain of strategic marketing, the research endeavours to uncover the ways in which environmentally friendly offerings shape consumer behaviour and purchasing decisions. With sustainability emerging as a pivotal determinant in contemporary consumer choice, this study sheds light on the strategic imperatives for firms operating in a fiercely competitive market landscape.

Employing a quantitative research approach, this study's data were gathered through an online survey. The survey instrument was designed to capture pertinent insights into consumer preferences and perceptions regarding environmentally friendly FMCG. By analysing this data, through descriptive statistics and hypothesis testing, the study sheds light on the intricate interplay between brand experience, Willingness to Pay and brand loyalty with environmentally friendly FMCG as a moderating impact.

Findings from the research highlight the significance of environmental considerations in shaping consumer preferences and purchasing behaviours, which are evaluated in the discussion. Overall, the thesis provides valuable insights for marketers aiming to align their marketing strategies with evolving consumer preferences towards sustainability and provides future research directions.

Keywords: Shopping Experience, Brand Experience, Brand Loyalty, Willingness To Pay, FCMG, Environmentally Friendly FMCG, Competitive Advantage, Sustainability

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Sumário

Esta dissertação investiga a intrincada dinâmica dos bens de grande consumo amigos do ambiente (FMCG) e a sua influência na disponibilidade do consumidor para pagar e na lealdade à marca. Posicionada no domínio do marketing estratégico, a investigação procura desvendar as formas matizadas como as ofertas amigas do ambiente moldam o comportamento do consumidor e as decisões de compra. Com a sustentabilidade a emergir como um determinante fundamental na escolha do consumidor contemporâneo, este estudo lança luz sobre os imperativos estratégicos para as empresas que operam num cenário de mercado ferozmente competitivo.

Empregando uma abordagem de investigação quantitativa, os dados deste estudo foram recolhidos através de um inquérito em linha. O instrumento de inquérito foi concebido para captar informações pertinentes sobre as preferências e percepções dos consumidores relativamente aos produtos de grande consumo amigos do ambiente. Ao analisar estes dados, através de estatísticas descritivas e testes de hipóteses, o estudo lança luz sobre a intrincada interação entre a experiência de marca, a vontade de pagar e a lealdade à marca, com os produtos de grande consumo amigos do ambiente como um impacto moderador.

Os resultados da investigação realçam a importância das considerações ambientais na formação das preferências e dos comportamentos de compra dos consumidores, que são avaliados na discussão. Em geral, a tese fornece informações valiosas para os profissionais de marketing que pretendem alinhar as suas estratégias de marketing com a evolução das preferências dos consumidores em relação à sustentabilidade e fornece direcções de investigação futuras.

Palavras-chave: Experiência de compra, Experiência de marca, Lealdade à marca, Disponibilidade para pagar, Produtos de grande consumo amigos do ambiente, Vantagem competitiva, Sustentabilidade

Título: O impacto dos produtos de grande consumo amigos do ambiente na vontade de pagar e na lealdade à marca

Acknowledgements

I would like to express my sincere gratitude to Professor Peter V. Rajsingh Ph.D. for his guidance, support, and invaluable feedback. His mentorship has been instrumental in creating this dissertation. His expertise and dedication have encouraged me throughout this journey, and I am truly grateful for his help.

I am deeply thankful to Universidade Católica Portuguesa for providing me with the necessary resources and environment to pursue my academic goals. This esteemed institution has offered me opportunities and challenges that have contributed significantly to my growth and development as a student and professional.

To my friends, especially the Outer Circle and Felix, thank you for your constant support and the unforgettable memories we share throughout this journey. I will always carry our shared time in Lisbon in my heart.

Finally, I want to express my sincere gratitude to my family. My brother Yannik for his unconditional support, Frau Lange for taking care of me and Herrmann for always being by my side.

Especially I would like to thank my mother, who has selflessly supported me throughout my entire life. I am deeply grateful for her unwavering support and for making it possible for me to experience this special time abroad in Portugal. Your sacrifices and belief in me have been the driving force behind my pursuit of success, and I will always be thankful for your love.

Thank you to everyone who has played a part in this journey. Your support and encouragement have been invaluable, and I am deeply grateful for your contributions to my academic, professional, and personal growth.

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List of Abbreviations

EF FMCG	Environmentally Friendly Fast-Moving Consumer Goods
FMCG	Fast-Moving Consumer Goods
WTP	Willingness To Pay

1 Introduction

The introduction of the Sustainable Development Goals through the UN in 2015 provided a shared blueprint for countries to implement sustainability in various areas (United Nations, 2015). This influence extends into political spheres, where policymakers have realigned their agendas and policies to incorporate sustainability principles (European Commission, 2023). Governmental authorities are increasingly advocating for businesses to diversify their product offerings towards sustainability in alignment with national sustainability agendas and targets. For instance, in Germany, Europe's largest consumer goods market, the government aims to increase the share of sustainable product alternatives from 10% to over 30% by 2030 (Statistisches Bundesamt, 2021).

Furthermore, recent studies highlight a shift in capital allocation towards more sustainable investment opportunities in the financial sector (Coleton et al., 2020). Concurrently, corporations have recognized the significance of integrating sustainability considerations into their operations, resulting in a paradigm shift in business practices (Forbes, 2022). Kim & Damhorst (1998) identified environmental concerns and access to environmental information as pivotal determinants shaping eco-friendly consumption behaviors (Kim & Damhorst, 1998).

Recent market analyses underscore the increasing popularity of sustainable products, with a significant rise in market share. Despite challenges such as high inflation in 2022, these products have maintained growth momentum, displaying resilience amidst economic fluctuations. Moreover, sustainable products have demonstrated impressive growth rates, outpacing their conventional counterparts (Kronthal-Sacco & Whelan, 2023). Some companies, like Oatly and Waterdrop, have successfully capitalized on this trend by offering sustainable product alternatives (Oatly, 2024; Waterdrop, 2023).

However, significant challenges persist within the consumer goods industry regarding sustainability. While notable advancements have occurred, many companies are still in the early stages of their sustainability journey. As a result of increased consumer awareness, interest in sustainable practices in the consumer goods industry has increased in recent years, pushing companies to take action to maintain their competitiveness (Achabou & Dekhili, 2013). Despite growing consumer demand for environmental products, there remains a gap between intention and action in the fast-moving consumer goods (FMCG) sector. Companies must prioritize sustainability as a core business imperative and translate commitments into meaningful, measurable actions to drive positive environmental impacts (BCG, 2023).

The observed discrepancy in sustainable product adoption can primarily be attributed to pricing considerations, as sustainable products often incur higher manufacturing costs (Kearney, 2020). Moreover, producers of FMCG face significant challenges due to the industry's nature, characterized by frequent purchases, low margins, and high volume (Rishi, 2013). This backdrop leads to the central research question of this thesis:

“What influence do environmental-friendly FMCG (EF FMCG) have on customers' Willingness to Pay (WTP) and brand loyalty?”

This study investigates how EF FMCG can influence WTP and brand loyalty and how this influence reacts. The research aims to elucidate how environmentally friendly offerings impact consumers' purchasing behaviour, with sustainability emerging as a crucial factor in consumer choice. Furthermore, it aims to provide insights into the strategic positioning of companies in today's competitive market by examining the relationship between environmental responsibility and consumer behaviour. It examines consumer preferences and brand loyalty in the context of EF FMCG and offers actionable recommendations for companies seeking to navigate the changing landscape of consumer demands.

2 Literature Review

This chapter examines the secondary literature pertaining to the thesis. Firstly, the shopping experience and brand experience will be discussed, followed by an overview of FMCG. Then management frameworks will be related to FMCG. The chapter ends with an explanation of hypothesis development and the conceptual framework.

2.1 Shopping Experience

In the context of retail, the shopping experience is defined as the interaction between the consumer and the provider. This includes touchpoints in the retailer's physical environment, interactions with employees, and policies and practices (Bustamante & Rubio, 2017). The importance of retail experiences for customer loyalty has led to a growing interest in their design and delivery (Bagdare & Jain, 2013).

Nowadays, customers seek more than just the products they need while shopping. They desire an enjoyable experience that can even evoke pleasure (Bustamante & Rubio, 2017). This is because consumers now have a wider range of options when purchasing products, leading to a more complex decision-making process. Factors such as price and product benefits are no

longer the only considerations, as consumers also take into account the product's expected ability to satisfy their hedonistic needs. This is why stores of popular brands like Starbucks are successful. The motivation for visiting these stores is based on the desire for experiences and emotions that are evoked there (Garvin, 2009).

Four dimensions can be used to describe a consumer's shopping experience in a retail environment: enjoyment, mood, differentiation, and leisure (Bagdare & Jain, 2013). The enjoyment dimension is activated by elements that lead to consumer satisfaction and pleasure. Therefore, it is essential for retailers to create a special experience that fulfils these consumer expectations (Bagdare & Jain, 2013; Holbrook & Hirschman, 1982). The shopping experience should aim to positively influence consumer mood. Additionally, the leisure dimension, consisting of relaxing, refreshing, and enjoyable measures, should be considered. Consumers often use shopping as a means of escaping their stressful lives, making it crucial to provide a relaxing experience. The final dimension in shaping the shop image and creating a shopping experience is differentiation. Retailers must create a unique and memorable shopping experience through the assortment, atmosphere, staff, or technologies (Bagdare & Jain, 2013). This is consistent with Klein et al.'s findings that unique store concepts can positively influence the shopping experience (Klein et al., 2016). Schmitt (1999) also highlights that consumers now consider functional features, special product quality, and a positive brand image as standard, meaning that these elements alone no longer guarantee success. However, what surprises consumers are experiences that stimulate their senses and evoke emotions and the brand's success depends on its ability to meet customer expectations through shopping experiences.

2.2 Brand Experience

In recent years, companies have recognized the importance of brand experiences. Marketing professionals have realized that consumers seek out brands that offer distinctive and unforgettable experiences (Zarantonello & Schmitt, 2010). Currently, marketers utilize insights about brand experiences to develop new marketing strategies (Brakus et al., 2009).

The literature discusses various definitions of brand experience. The definition proposed by Brakus et al. (2009) defines brand experience as the subjective internal reaction of the consumer. Four dimensions can be used to measure the brand experience: the sensory dimension (visual, auditory, gustatory, and tactile stimuli), the affective dimension (feelings and emotions), the behavioural dimension (physical experiences and interactions), and the intellectual dimension (thinking) of the consumer (Brakus et al., 2009).

According to Brakus et al. (2009), a brand experience can be short-lived or long-lasting and perceived positively or negatively. The level of brand experience is determined by the extent to which the consumer's dimensions are addressed (Zarantonello & Schmitt, 2010).

Brand experience should be distinguished from evaluative, affective, and associative brand concepts, such as brand involvement or brand attitude (Brakus et al., 2009). Brand involvement is based on values, needs, and the consumer's interest in the brand. In contrast, brand experience can also occur when the consumer has no interest or personal connection to the brand (Brakus et al., 2009). In contrast to brand attitude, which is influenced by affective, automatic, or emotional reactions (Fishbein & Ajzen, 1975), brand experience does not involve making a general evaluative judgement about a brand. Instead, it describes the feelings, sensations, and behaviours of consumers when they come into contact with a brand (Brakus et al., 2009).

Consumers' individual perceptions shape brand experiences, which result from direct or indirect interactions with products or services (Şahin et al., 2017). A brand experience can influence customer satisfaction, brand loyalty, and the brand personality of a company (Brakus et al., 2009), as well as brand attitude and brand value (Dolbec & Chebat, 2013). Therefore, the multitude of companies strive to offer consumers appealing brand experiences.

2.3 FMCG

FMCG can be described as everyday consumer goods that are purchased frequently and regularly and are also known as consumer durables. These products are characterised by an established distribution channel and are in a highly competitive market between organised and unorganised segments. Generally, the cost of ownership for these products is low as they are manufactured and distributed in large quantities. Due to their daily use and high demand, they are widely used in the society (Mittal et al., 2008).

Brierley (2005) goes into further depth in describing FMCG, noting that they encompass a variety of products, including confectionery, toiletries such as toothpaste and shampoo, alcoholic and non-alcoholic beverages, cigarettes, newspapers and magazines. These products are characterized by regular demand and are usually purchased in retail shops and supermarkets. They are considered both consumable and purchasable goods. A convenience product, such as toilet paper, requires minimal decision-making on the part of the consumer and is often purchased in a routine manner. In contrast, a shopping product requires more

careful consideration and comparison of different brands in terms of price, quality and image, such as meat or vegetables.

Due to their close relationship with retailers, FMCG companies spend a significant part of their marketing budget on promotions such as competitions, discount coupons, and packaging and design aspects. As these products are purchased frequently and regularly, advertising is an integral part of maintaining a brand presence in the minds of consumers and encouraging repeat purchases. Some FMCG products are also often bought impulsively, so they are displayed prominently in shops to attract customers' attention (Brierley, 2005).

Understanding consumer behaviour is critical to the success of FMCG companies in a highly competitive market. Researchers have studied various factors that influence consumer decision-making processes, such as brand loyalty, product quality and pricing (Ansari & Riasi, 2016).

Moreover, the FMCG industry is under increasing pressure to adopt sustainable practices due to growing concerns about environmental issues and consumer demand for eco-friendly products. In recent years, sustainability has become a significant focus for FMCG companies. This is due to various factors such as regulatory requirements, cost-saving opportunities and the need to maintain a positive corporate image and brand reputation (Hami et al., 2015). Furthermore, the interest in sustainable practices in the consumer goods industry has increased due to consumer awareness, which is why companies in the industry are now required to act in order to remain competitive (Achabou & Dekhili, 2013).

2.4 Willingness to Pay (WTP)

Recently, there has been a growing interest in examining consumers' WTP. It refers to the highest amount a consumer is Willing to Pay to obtain a particular good or service. Estimating the WTP, including EF FMCG, is crucial for companies to make informed pricing decisions, predict demand, and evaluate the feasibility of introducing sustainable product lines (Breidert et al., 2006).

Jedidi and Zhang (2002) state that previous research has mainly focused on quantifying purchase intentions, attitudes, and values towards sustainability. To measure these dimensions, researchers often assess WTP, which is also commonly referred to as the “reservation price”.

Several factors can influence an individual's WTP. These factors affecting a person's WTP include the person's income, personal preferences and values, the perceived quality of the

product or service, social norms and expectations, advertising and marketing strategies, and current supply and demand in the market (Carmon & Simonson, 1998). In addition, the nature of the purchase context and the competitive environment can affect a person's WTP by changing their perception of the value of a product. Furthermore, psychological effects, such as anchoring and availability heuristics, can influence a person's perception and WTP (Wertenbroch & Skiera, 2002).

Furthermore, findings on WTP highlight several important managerial and methodological factors. To ensure a clear understanding of consumers' WTP for both the firm's offerings and those of competitors, it is crucial to consider the distribution of these prices. This information can inform strategic decisions related to product policies, potential cannibalization effects, market growth trajectories, and competitive positioning. Furthermore, understanding these concepts can guide the adoption of non-linear pricing models and optimal bundling strategies (Jedidi & Jagpal, 2009).

Finally, the importance of perceived price fairness in influencing WTP dynamics is addressed, which suggests that sustainable products must either perform better or offer additional value compared to non-sustainable alternatives to maintain a fair price-performance ratio (Habel et al., 2016).

2.5 Brand Loyalty

Globalization has resulted in a proliferation of product alternatives across almost all industries. This has posed challenges for many companies, including declining profits and growth rates. Many companies have adopted relationship marketing in response to these changing conditions, replacing the dominant transactional marketing approach. This shift highlights the significance of long-term customer retention in research and practice. Companies consider customer loyalty to their brand to be crucial for long-term success. Therefore, fostering brand loyalty is a central marketing objective. Therefore, they invest substantial amounts in market studies to examine the loyalty of their customers. Based on this foundation, they develop appropriate marketing activities (Homburg & Bruhn, 2017).

Oliver (1999) describes brand loyalty as a mental commitment on the part of the consumer to select a preferred product or service for future transactions, notwithstanding situational factors and marketing efforts that may present alternatives from competing brands.

Cheng (2011) and Iglesias et al. (2011) propose different frameworks for categorising brand loyalty. They distinguish between active/ correct brand loyalty, characterised by consumers making deliberate consumption choices based on a psychological connection, and passive/ affective brand loyalty, influenced by situational factors such as price or convenience.

Chaudhuri and Holbrook (2001) and Gecti and Zengin (2013) have extensively investigated the intricacies of these two dimensions. Drawing from their analyses, brand loyalty can be deconstructed into attitudinal and behavioural (purchase) loyalty. Attitudinal loyalty refers to a consumer's emotional connection with a brand, culminating in an inclination towards that brand. Satisfaction also influences attitudes and preferences based on brand experiences (Esch, 2005). Behavioural refers to a behavioural pattern characterised by repurchases. Additional purchases and recommendations also contribute to the behavioural aspect of brand loyalty (Esch, 2005). In this study, behavioural loyalty will primarily be examined through repurchases, additional purchases, and recommendations.

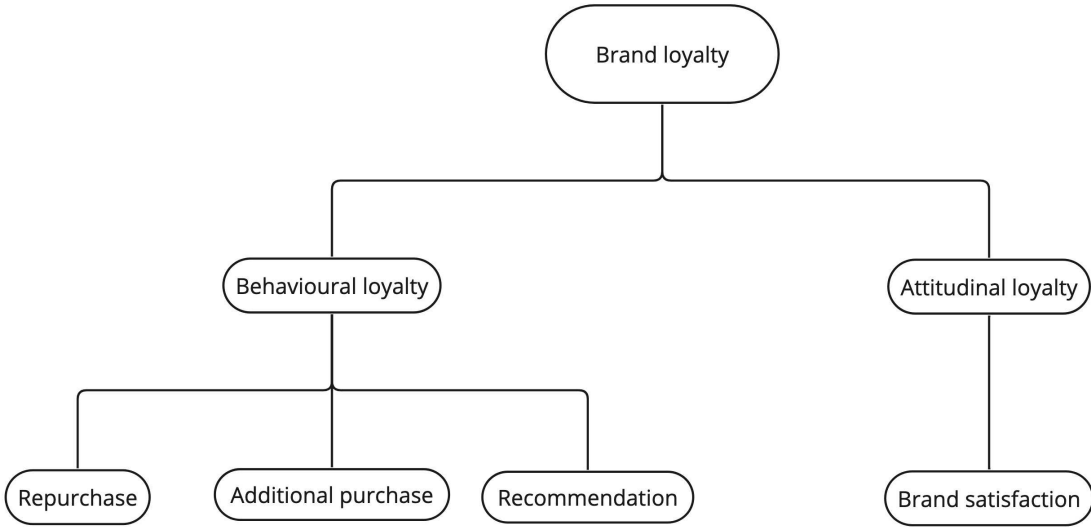


Figure 1: Conceptualisation of brand loyalty, own creation based on Esch (2005)

Furthermore, it is crucial to distinguish brand loyalty from other similar constructs. Specifically, it needs to be distinguished from brand impact, which refers to a brand's ability to elicit a positive emotional response from consumers (Chaudhuri & Holbrook, 2001). Additionally, brand loyalty should be distinguished from brand trust, which represents a

consumer's willingness to rely on the functional characteristics of a product. Recognising that brand loyalty is a unique concept that differs from other theoretical models is essential. It involves evaluating a brand's attributes (Delgado-Ballester & Munuera-Alemán, 2005).

Research indicates that retaining an existing customer is less expensive than acquiring a new one. Additionally, brand-loyal consumers tend to accept higher prices and are less sensitive to price changes (Mellens et al., 1996). Moreover, loyal customers tend to engage in positive word-of-mouth communication and frequently recommend the brand to potential new customers. This facilitates acquiring new customers for the company without requiring active intervention, thereby reducing marketing costs. Additionally, loyal customers exhibit lower demand for information about competing brands and demonstrate more excellent resistance to competitive offerings (Dick & Basu, 1994).

2.6 Management Frameworks and FMCG

The theory of disruptive innovation explains how initially inferior innovations, which established companies do not perceive as a threat and are used by niche early adopters, are continuously improved until they eventually displace established products and companies from the market (Christensen, 1997). An example from the FMCG industry is Waterdrop. Waterdrop's disruptive strategy is based on an innovative approach to healthy and sustainable water use. They achieved this through flavoured micro-drinks made from natural fruit and plant extracts. Waterdrop emphasized its commitment to health and transparency through continuous product innovation. Their model challenged traditional beverage industries and served as an inspiration for other FMCG companies to pursue disruptive innovation and sustainability (Forbes, 2023).

A company's core competencies are its unique strengths and capabilities that distinguish it from its competitors. They are crucial for the company's long-term success and competitiveness. Core competencies are typically profoundly ingrained in the company's structure and culture and can include areas such as technology, research and development, marketing, or customer service (Prahalad & Hamel, 1990). Companies in the FMCG sector that already offer sustainable products or are planning to do so can benefit from the concepts of core competence theory. Core competencies represent a company's unique strengths and capabilities that differentiate it from its competitors. By consciously utilizing these core competencies, companies can achieve long-term competitive advantages, particularly in the area of sustainability. This requires a clear identification and further development of the company's

strengths. These include, for example, the ability to produce, procure and market sustainably. By making targeted use of their core competencies, companies can not only increase their efficiency but also develop innovative solutions to strengthen their position in the market. Strategic thinking and innovative approaches are crucial in successfully asserting oneself in a constantly changing environment (Olutimehin et al., 2024).

Everett M. Rogers' diffusion theory provides a theoretical framework for analyzing the spread of new ideas in social systems. The theory explains that the acceptance of an innovation depends on various factors, including its perceived advantageousness, compatibility with existing practices, and observability. Rogers categorizes users into different groups based on their degree of innovation (Rogers, 2003). This theory can also be applied to promoting sustainable products in the FMCG industry. By applying these principles, FMCG companies can develop effective strategies to promote sustainable products and contribute to a more environmentally conscious consumer culture (Dearing, 2009).

Due to the nature of the industry, the FMCG industry faces significant challenges. It is known for its intense competition, rapid product turnovers, and changing consumer preferences (Rishi, 2013). Porter's Five Forces model provides valuable insights into this landscape and helps companies develop effective strategies (Porter, 1979). By analyzing these forces, companies can mitigate threats and capitalize on opportunities. For instance, building a solid brand identity and leveraging economies of scale can counteract new market entrants and buyer bargaining power. Vertical integration and product innovation can also help reduce the threat of substitute products and competition (Dobbs, 2014).

2.7 Hypotheses Development

The following chapter deals with the development of the hypotheses, which are intended to provide findings on the research question. There is background knowledge at the beginning of the chapter, which discusses the various impacts.

2.7.1 Background Knowledge

In order to develop hypotheses, the impact of shopping experience on brand experience will be discussed. After that, the impact of brand experience on brand loyalty and on WTP is then discussed.

The shopping experience refers to the points of contact between the consumer and the physical environment of the retailer (Bustamante & Rubio, 2017). This suggests a close relationship with the brand experience, as it can occur in a place where the sale or marketing of products takes

place and brand-related stimuli act on the organism. It has been found that a positive shopping experience, for example through positively perceived design elements (Garvin, 2009, p. 1), can have a positive influence on the brand experience (Jahn et al., 2018a). As brand experience can be determined based in the sensory dimension, the affective dimension, the behavioural dimension, and the intellectual dimension of the consumer (Brakus et al., 2009) (Figure 2), it should be noted that the intensity of the brand experience depends on how many of these four dimensions are addressed and how strong the resulting stimulation is (Zarantonello & Schmitt, 2010).

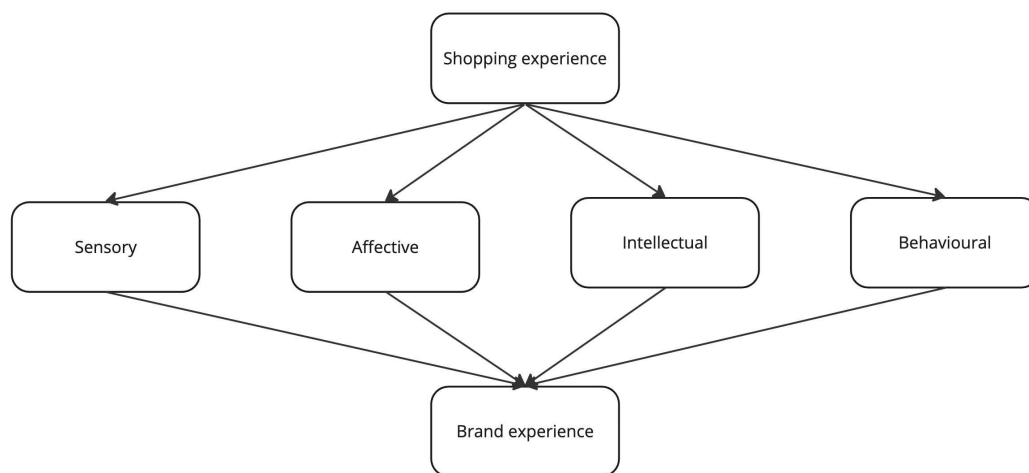


Figure 2: The Impact of Shopping Experience on Brand Experience, own creation based on Brakus et al. (2009)

After examining the impact of the shopping experience on brand experience, this section of the dissertation delves into analyzing the impact of brand experience on brand loyalty. Prior research has already scrutinized and validated the influence of brand experience on brand loyalty (Zarantonello & Schmitt, 2010).

Furthermore, the brand experience model proposed by Brakus et al. (2009) is referenced to provide a useful overview. According to this model, brand experience exerts both direct and indirect impacts on brand loyalty. The indirect impact of shopping experience on brand experience is facilitated through brand personality and consumer satisfaction. Additionally,

“affective commitment”, alongside the aforementioned elements, also contributes to indirect impacts on brand loyalty (Iglesias et al., 2011). (See chart for visualization).

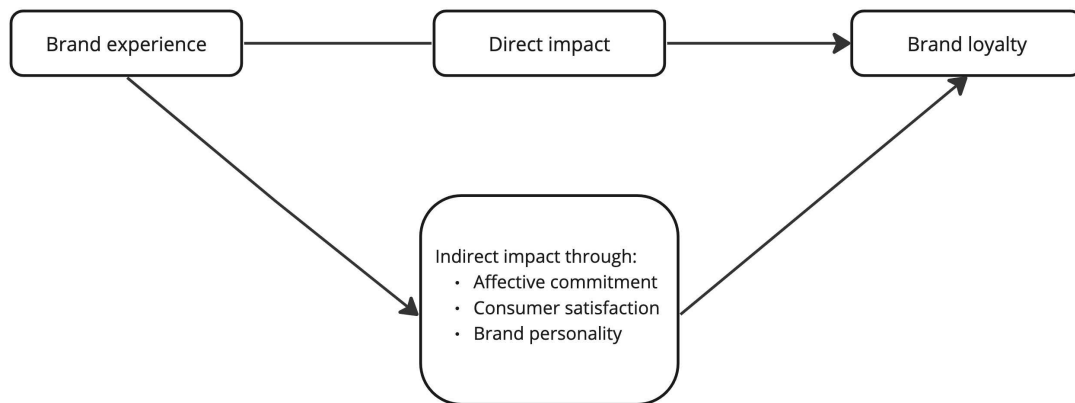


Figure 3: The Impact of Brand Experience on Brand Loyalty, own creation based on Brakus et al.(2009)

Brand experience is fundamental to shaping consumer behaviour and decision making, particularly in terms of WTP. It encompasses a range of interactions between consumers and brands, including sensory, affective, behavioural, and intellectual dimensions. As consumers increasingly seek emotional connections and meaningful interactions with brands, the brand experience has become a significant determinant of their perceived value (Brakus et al., 2009). These interactions influence consumers' perceptions, emotions, and attitudes towards brands, impacting their purchase intentions and WTP (Moreira et al., 2017). By creating compelling and memorable brand experiences, companies can foster stronger emotional bonds with consumers, which in turn increases perceived value and justifies premium pricing strategies (Khan & Fatma, 2017).

Additionally, unique brand experiences can create a halo effect, where consumers associate superior quality and value with the brand's products, resulting in increased WTP (Chiu et al., 2012). In highly competitive markets, brand experience can serve as a significant differentiator, enabling brands to command higher prices (Hagtvedt & Patrick, 2008). By providing extraordinary experiences, brands can establish a competitive advantage and create perceptions

of exclusivity and prestige among consumers, thereby enhancing WTP (Yeoman & McMahon-Beattie, 2006).

However, it is important to acknowledge that the impact of brand experiences on WTP is not universally consistent and may be influenced by various factors such as consumer involvement, product category and individual differences (Schmitt et al., 2015).

2.7.2 Environmentally Friendly FMCG and WTP

In chapter 2.4 it was stated, that there has been a growing interest in the study of consumers' WTP. Estimating WTP is crucial for companies, especially for EF FMCG as it helps in making informed pricing decisions, predicting demand, and evaluating the feasibility of introducing sustainable product lines (Breidert et al., 2006). Furthermore, previous research has mainly focused on quantifying purchase intentions, attitudes, and values related to sustainability (Jedidi & Zhang, 2002).

The FMCG industry has experienced a surge in demand for eco-friendly products due to consumers' growing environmental consciousness and concern for sustainability. Research has shown that consumers are willing to pay more for goods that are perceived as environmentally sustainable (Majumdar & Sinha, 2019).

Several studies have explored the factors that affect consumers' WTP for environmentally friendly products. For instance, Vlosky et al. (1999) found that consumers' attitudes towards the environment, their perception of the environmental impact, and their perception of product quality have a significant impact on their WTP for eco-friendly wood products. Kanchanapibul et al. (2014) examined the WTP of consumers aged 18-30 years for environmentally sustainable products and identified product performance, environmental awareness, and price as key determinants.

Although there is a growing body of research, the understanding of the influence of EF FMCG on the impact of brand experience on WTP still contains gaps and inconsistencies.

Therefore, the following hypothesis will be tested:

H1: Participants are willing to pay more for environmentally friendly FMCG products.

2.7.3 Environmentally Friendly FMCG and Brand Loyalty

Behavioural loyalty is crucial element of brand loyalty as Esch (2005) notes that additional purchases, repurchases and recommendations serve as behavioural indicators of brand loyalty

(Esch, 2005). Therefore, in this study, brand loyalty will primarily be examined through the elements of repurchase, additional purchase, and recommendation.

As consumer awareness of environmental issues continues to grow, the demand for environmentally friendly products has increased, including in the FMCG sector (Achabou & Dekhili, 2013). This shift in consumer preferences has implications for brand loyalty, particularly behavioural loyalty, which refers to the repurchase, additional purchase and recommendation of a product and reflects a consumer's commitment to a brand (Esch, 2005).

Several studies have examined the potential influence of green products on behavioural loyalty. Hartmann and Apaolaza-Ibáñez (2012) suggest that environmentally friendly products can foster brand loyalty by tapping into consumers' desire for self-expressive benefits. By purchasing and using these products, consumers can express their environmental values and personal identity, leading to a stronger emotional bond with the brand. This emotional connection, combined with the functional benefits of the product, can reinforce repurchase behaviour and contribute to long-term brand loyalty.

However, while these studies provide valuable insights, there is a notable research gap in empirically examining the relationship between EF FMCG and brand loyalty. Most existing studies have focused on durable goods or specific product categories, referring to brand attitude, which is distinct from brand loyalty (Chekima et al., 2016; Olsen et al., 2014). The unique characteristics of FMCG, such as frequent transactions, narrow profit margins, and substantial sales volume (Rishi, 2013), may lead to different consumer behaviours and loyalty patterns compared to other product categories.

In order to fill this research gap and investigate the influence of EF FMCG on the impact of brand experiences on brand loyalty, the following hypotheses were tested:

H2: Participants are more willing to make an additional purchase for environmentally friendly FMCG products.

H3: Participants are more willing to recommend environmentally friendly FMCG products to others.

H4: Participants are more willing to buy environmentally friendly FMCG products again.

2.8 Conceptual Framework

The conceptual framework explains the research's focus. The shopping experience impacts the brand experience, which in turn impacts brand loyalty and WTP. EF FMCG sees itself as a moderator of the impact of brand experience on WTP and brand experience on brand loyalty.

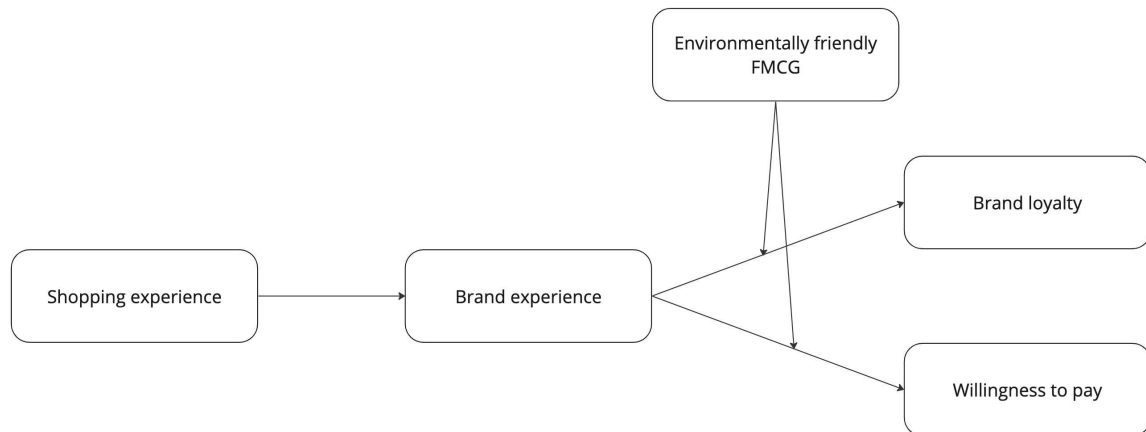


Figure 4: Conceptual Framework of The Dissertation, own creation

3 Methodology

The following chapter clarifies the methodology used in this dissertation.

3.1 Quantitative Data Collection

An online survey was selected as the method for quantitative data collection. Online surveys are popular and effective in various research areas due to their cost-effectiveness, easy access to a diverse pool of participants, and efficiency in collecting large amounts of data, as emphasized by Regmi et al. (2016).

Additionally, the cost-saving potential of online surveys over traditional data collection methods, such as paper-based surveys or face-to-face interviews, is significant. Lefever et al. (2007) and Bethlehem (2010) point out that online surveys negate the need for expenditures related to printing, distribution, and the manual entry and transcription of data.

Moreover, the high degree of standardization inherent in online surveys is noteworthy. Wright (2005) highlights that presenting questions and response options uniformly to all participants ensures the consistency and reliability of the collected data. This uniformity not only maintains data quality but also simplifies quantitative analysis, as responses can be evaluated using statistical software (Regmi et al., 2016).

3.2 Questionnaire Design

As part of the quantitative research, an online survey was conducted using Qualtrics to answer the research question and hypotheses. The questionnaire was structured into five distinct blocks. This strategic segmentation was designed to scrutinize the four hypotheses related to consumer behaviours towards EF FMCG.

The first block (H1) stated that participants would be willing to pay more for FMCG that are considered environmentally friendly. This part of the survey investigates whether and how much more participants are willing to pay EF FMCG. The second block (H2) aimed to investigate whether participants would be more inclined to make additional purchases of EF FMCG. This hypothesis suggests that the environmental attributes of FMCG could influence not just the initial purchase decision but also encourage subsequent purchasing behaviours. The survey's third block (H3) examined whether participants are more likely to recommend EF FMCG products to others. This hypothesis is based on the idea that environmental considerations could encourage consumer brand advocacy. The fourth block tested the H4 to determine whether participants are more likely to repurchase EF FMCG products, indicating sustained consumer loyalty towards EF FMCG products. The survey concluded with collecting socio-demographic data from the participants in the fifth block. This block was included to provide contextual insights into the collected data, enabling the performance of more nuanced analyses.

The online survey was structured in this way to investigate the influence of EF FMCG on the impact of brand experience on WTP and brand experience brand loyalty. As brand loyalty can be expressed in the form of additional purchase, repurchase and recommendation, blocks 2-4 were divided according to these elements. The careful segmentation of the survey into five blocks thus facilitated the targeted investigation of the hypotheses, while the socio-demographic data collection enriched the analysis (Appendix A).

3.3 Statistical Analysis

The following section details the strategy for data analysis in relation to hypothesis testing, described step by step.

Initially, the data from the survey software was exported to SPSS Statistics version 29.0. Ensuring the dataset's completeness, accuracy, and plausibility was paramount, leading to the removal of any unused variables.

The analysis then began with the calculation of descriptive statistics such as means (M), standard deviations (SD) and Bravais-Pearson correlation analysis. The latter was carried out in order to visualise correlations in the data so that they could be taken into account in the subsequent hypothesis testing and interpretation (Field, 2013).

The next step was to test the hypotheses. A t-test was used for each hypothesis (Field, 2013). The aim was to test whether the mean score was significantly above the threshold of 3. The rating scale presented ranged from 1 to 5, with scores of 1 to 3 indicating rejection, so the highest score of 3 was chosen as the cut-off for rejecting the hypothesis.

When using t-tests, Lakens (2013) recommends evaluating the effect size according to Cohen's *d*. The size of the effect was assessed according to the recommendations of Cohen (1992). Finally, a conventional significance level of 5% was used to reject a statistical null hypothesis (Kwak, 2023).

4 Results

In a time of growing environmental awareness, this chapter analyses how consumers perceive FMCG, particularly with regard to environmental friendliness. Descriptive statistics and correlation analyses are used to examine data on age, gender, income and specific purchasing behaviour trends. The aim is to uncover patterns and correlations that shed light on consumer preferences and provide the basis for detailed hypothesis testing. This should provide a deeper understanding of purchasing behaviour in the context of EF FMCG products.

4.1 Socio-Demographic Analysis

The sample for the study consisted of 55 male participants, accounting for 53.4% of the total, and 46 female participants, accounting for 44.7%. The majority of the participants were German, comprising 70.9% (n=73), followed by Portuguese participants at 10.7% (n=11). The remaining 18.4% (n=19) were from various countries, including Italy, France, Spain, India, and

Brazil. In terms of age distribution, 20.4% (n=21) of the participants were aged between 18-24, while 63.1% (n=65) belonged to the 25-34 age group. With regards to employment status, 44.7% (n=46) of the participants reported full-time employment, with 22.3% (n=23) identifying as working students. Analysis of annual income in Euros revealed that 23.3% (n=24) earned between 10,000 and 24,999 Euros, 19.4% (n=20) earned between 25,000 and 49,999 Euros, and notably, 27.2% (n=28) earned between 50,000 and 74,999 Euros. Regarding educational attainment, 49 participants (47.6%) held a Bachelor's degree, while 32 (31.1%) possessed a Master's degree. In addition, 61 participants (59.2%) reported being single, and 88 (85.4%) did not have children.

4.2 Descriptive statistics

The descriptive statistics, such as measures of position and dispersion and correlation analyses, are used to describe differences and correlations in the available data. This approach is intended to provide a comprehensive understanding and overview of the data so that anomalies can be taken into account when calculating the hypothesis test and subsequently interpreting the hypothesis-related findings.

Table 1 shows a correlation matrix showing the relationships between the gender and age of the test subjects and their purchasing behaviour for EF FMCG.

Table 1: Intercorrelation Matrix

	1	2	3	4	5	6	7	8
1 Gender								
2 Age	-.09							
3 Annual income	.10	.35**						
4 Willingness to pay higher price	-.04	-.01	.24*					
5 Environmental impact of a FMCG product before purchase	.02	.14	.14	.53**				
6 Additional purchase	-.08	.04	.08	.27**	.35**			
7 Recommendation	-.12	-.11	.02	.61**	.53**	.33**		
8 Repurchase	-.10	-.10	.06	.68**	.55**	.26**	.58**	

Note. N = 101, ** $p < .01$, * $p < .05$.

Initially, no gender-related difference in the age structure of the survey participants could be observed in the data. It was also not possible to establish a correlation between gender and annual income or the variables relating to the purchasing behaviour of EF FMCG. In the case of age, a positive correlation was observed, which was significant. In this case, this means that a higher age of the test subjects was associated with a tendency towards higher income. Beyond this, however, no relationship between age and purchasing behaviour could be identified.

Next, annual income and the WTP a higher price for EF FMCG were positively correlated. This means that people with a higher average income also showed an increased average WTP more. With regard to the aspects of purchasing behaviour, the following correlations were observed: The WTP more was significantly positively linked to the influence of EF FMCG before the next purchase, the recommendation of EF FMCG to friends and family, additional purchases and repurchase in the future. A higher WTP was therefore accompanied on average by a higher rating on the other aspects of purchasing behaviour. These correlations could also be observed between the other aspects of purchasing behaviour.

It was also investigated whether there were any correlations with the aspects of purchasing behaviour and the highest level of education reported by the individuals. Initially, a weak but significant correlation was observed with the WTP more ($r = .28, p = .004$). The influence of EF FMCG on a next purchase was also higher the higher the stated level of education ($r = .40, p < .001$). This type of correlation was also observed for the evaluation of the willingness to recommend EF FMCG to friends and family ($r = .36, p < .001$). This means that a higher willingness to recommend was also associated with a higher average level of education. Finally, the higher the level of education, the more likely it was that EF FMCG that had already been purchased in the past would be purchased again ($r = .30, p = .003$). Contrary to the results described above, however, no correlation was observed between educational attainment and additional purchases of EF FMCG that were not previously planned ($r = .05, p = .597$) (Appendix B).

4.3 Hypothesis Testing

In the following chapter, the findings of the hypothesis-testing analysis are presented and described. The organisation of the chapter is based on the structure of the hypotheses put forward.

Starting with the first hypothesis (H1), which postulates that people are more willing to pay more when it comes to EF FMCG, was tested using a t-test for a random sample. The rating scale from 1 to 3 shows a reluctance to pay more, while 4 and 5 suggest an increased WTP more. It was tested whether the mean evaluation of the WTP more by the participants was significantly above the threshold value of 3. The result of the analysis was a mean rating of 3.80 scale units ($SD = 0.92$). The t -test showed that this rating was significantly above the threshold ($t = 8.76, p < .001$). According to Cohen (1992), the difference corresponded to a large effect ($d = .86, 95\% \text{ CI } [.64, 1.09]$). Thus, the hypothesis could be provisionally substantiated (Appendix C).

In addition, the extent of the WTP more was analysed. The test subjects were asked to rate the amount of the additional payment on a scale from 0 to 200%. A mean of 48.2% ($SD = 38.8\%$) was calculated here. Half of the people stated a maximum of 35%. In addition to this analysis, it was also investigated which aspects of purchasing behaviour influenced the WTP more. In the course of this, WTP more was placed in relation to the prioritisation of EF FMCG over conventional products, the perceived influence of the environmental friendliness of FMCG on a purchase decision, the alignment between EF FMCG and one's own values and the consideration of the influence of FMCG products on the environment. The analysis was carried out using regression analysis. Assuming linear relationships, the multiple regression model was able to explain around 49% of the variance in the WTP more ($F_{(4, 98)} = 23.19, p < .001$).

In detail, it was shown that the environmental friendliness of FMCG had a positive and the strongest influence on the WTP more ($b = .33, p = .005$). This was followed in terms of influence strength by the fact that a higher personal prioritisation of EF FMCG was also associated with a higher WTP more for EF FMCG ($b = .32, p = .002$). In contrast, the importance of EF FMCG products matching one's own environmental values and concerns about the environmental impact of purchasing EF FMCG showed no significant effects on the WTP more when purchasing EF FMCG products compared to conventional variants. The results of the analysis are summarised again in Table 2.

Table 2: Regression analysis – Hypothesis 1

	<i>b</i>	<i>SE</i>	β	<i>p</i>	VIF
How likely are you to prioritize purchasing environmentally friendly FMCG products over cheaper, conventional alternatives?	.32	.10	.32	.002	1.99
To what extent does the environmental friendliness of a FMCG product influence your purchasing decisions?	.33	.14	.34	.005	2.55
How important is it to you that the FMCG products you buy align with your environmental values?	.03	.11	.03	.807	2.21
How often do you consider the environmental impact of a FMCG product before making a purchase?	.11	.09	.12	.242	1.92
$R^2 = .49$ $F_{(4, 98)} = 23.19, p < .001$					

Note. $N = 102$.

The next hypothesis (H2) postulated that people are more willing to make an additional purchase when it comes to EF FMCG. The hypothesis was tested in the same way as hypothesis 1, with the mean rating being tested against the threshold value of 3. This and lower values describe a negative tendency to make an additional purchase. The analysis resulted in an average rating of 2.68 scale units ($SD = 1.02$). The result thus proved to be contrary to the expectations of the hypothesis. The *t*-test showed that the mean rating was even significantly below the threshold value ($t = -3.18, p < .001$). According to Cohen (1992), the difference corresponded to a small effect ($d = -.31, 95\% \text{ CI } [-.51, -.12]$). Thus, the hypothesis could not initially be supported (Appendix D).

In a subsequent analysis, it was again investigated how the evaluation for an additional purchase was influenced by the availability of EF FMCG for impulse purchases and the tendency to purchase EF FMCG products that are offered as complementary products. Based on a multiple linear regression model, around 34% of the variance in the evaluation of an additional purchase could be explained ($F_{(2, 100)} = 25.26, p < .001$). In detail, both a higher availability of EF FMCG ($b = .31, p = .002$) and an increased tendency to purchase EF FMCG when they are offered as complementary ($b = .30, p = .004$) showed significantly positive effects on the evaluation of an additional purchase. The results of the analysis are summarised again in Table 3.

Table 3: Regression analysis – Hypothesis 2

	<i>b</i>	<i>SE</i>	β	<i>p</i>	VIF
To what extent does the availability of environmentally friendly options influence your impulse purchases?	.31	.10	.33	.002	1.65
How inclined are you to buy additional environmentally friendly FMCG products when they are suggested as complementary products?	.30	.10	.31	.004	1.65
$R^2 = .34$		$F_{(2, 100)} = 25.26, p < .001$			

Note. $N = 102$.

The third hypothesis (H3) postulated that people are more likely to recommend EF FMCG to friends, acquaintances and family members than conventional products. The hypothesis was also tested using a *t*-test against the scale limit value of 3, which corresponds to a disagreement with the recommendation. On average, an agreement to recommend EF FMCG of 3.58 scale units ($SD = 0.99$) was observed. Based on the *t*-test, the mean rating could be categorised as significantly above the threshold value of 3 ($t = 6.00, p < .001$). According to Cohen (1992), the difference corresponded to a moderate to strong effect ($d = .59, 95\% \text{ CI } [.38, .80]$). Thus, the hypothesis was initially supported (Appendix E).

A further subsequent study was to investigate the influence of other aspects of purchasing behaviour on the recommendation of EF FMCG. To this end, the subjectively stated recommendation rating was analysed in relation to the ratings of the fit of EF FMCG with one's own environmental expectations, the recommendation of such products to other people, the frequency with which the corresponding products are communicated with others and the resulting influence on the environment, as well as the rating of how one is influenced to buy by the recommendations of others. The multiple regression model set up in this way was able to explain around 64% of the variance in the evaluation of the recommendation of EF FMCG products ($F_{(5, 93)} = 33.19, p < .001$). In detail, it was shown that the strongest influence on one's own recommendation was a high fit between the EF FMCG and one's own environmental ideas and standards ($b = .45, p < .001$). This was followed by the fact that frequently discussing EF FMCG in conversations with others also favoured the recommendation of such EF FMCG ($b = .23, p = .002$). In addition, no significant effects could be determined through past recommendations, the belief in a positive influence on the environment through these same recommendations and one's own ability to be influenced by recommendations from others. Table 4 summarises the results.

Table 4: Regression analysis – Hypothesis 3

	<i>b</i>	<i>SE</i>	β	<i>p</i>	VIF
When you find a FMCG product that aligns with your environmental values, how likely are you to tell others about it?	.45	.08	.47	< .001	1.78
Have you ever recommended an environmentally friendly FMCG product to others?	.11	.17	.05	.530	1.66
How often do you share information about environmentally friendly FMCG products with others?	.23	.07	.29	.002	2.16
To what extent do you believe that recommending environmentally friendly FMCG products can positively impact the environment?	.05	.07	.05	.494	1.57
How influential are recommendations from friends or family in your decision to try environmentally friendly FMCG products?	.08	.09	.09	.342	2.24
$R^2 = .64$ $F_{(5, 93)} = 33.19, p < .001$					

Note. $N = 98$.

The final hypothesis (H4) postulated a higher willingness to make repurchases if the product is an EF FMCG compared to conventional products. The hypothesis was again tested using a *t*-test. In this case, it was also tested whether the mean rating by the test subjects was significantly above the threshold value of 3. The scale range of 1 to 3 again suggested a rejection of repurchase. The result of the analysis showed that, on average, people were more inclined to buy EF FMCG repeatedly in the future than conventional products ($M = 3.98, SD = 0.86$). This tendency proved to be significant on the basis of the *t*-test ($t = 11.53, p < .001$). According to Cohen (1992), the difference thus identified corresponded to a large effect ($d = 1.14, 95\% CI [.89, 1.38]$). Accordingly, the final fourth hypothesis was initially substantiated by the findings described (Appendix F).

In addition, it was of interest how the rating for repeated purchases in the future was influenced. For this purpose, the same evaluation was made dependent on the evaluation of previous purchasing experiences of EF FMCG, the evaluation of the reliability of such products, the frequency of purchases of environmentally friendly brands and the personal prioritisation of buying products from brands that only offer EF FMCG. The multiple regression model set up in this way was able to explain around 57% of the variance in the willingness to make a repeat purchase ($F_{(4, 98)} = 32.01, p < .001$). In detail, it was shown that previous experience of buying EF FMCG contributes most strongly to a repurchase ($b = .27, p = .010$). This was followed at a similarly strong level by the favourable effect of the perceived higher reliability of EF FMCG ($b = .25, p = .013$). In addition, a repurchase was more likely if a person had often switched back from conventional products to environmentally friendly products in the past ($b = .17, p =$

.027). Prioritising brands that consistently offer environmentally friendly products, on the other hand, had no significant influence on a future purchase. Table 5 summarises the results.

Table 5: Regression analysis – Hypothesis 4

	<i>b</i>	<i>SE</i>	β	<i>p</i>	VIF
How much does your previous positive experience with environmentally friendly FMCG products influence your decision to buy them again?	.27	.10	.27	.010	2.38
To what extent does the reliability of environmentally friendly FMCG products impact your likelihood of repurchasing them?	.25	.10	.26	.013	2.41
How often do you find yourself returning to purchase from brands that offer environmentally friendly options?	.17	.07	.20	.027	1.73
How likely are you to prioritize purchasing from a brand that consistently provides environmentally friendly FMCG products?	.16	.09	.17	.072	1.95

$R^2 = .57$ $F_{(4, 98)} = 32.01, p < .001$

Note. $N = 102$.

5 Main Findings and Discussion

The research explored consumers' attitudes towards FMCG, with a focus on the environmental friendliness of these products, in an era characterised by increasing environmental awareness (Achabou & Dekhili, 2013).

The investigation employed a comprehensive approach, including descriptive statistics and correlation analysis, to unravel the intricate web of factors that influence purchasing decisions within the realm of EF FMCG. On the focus are the factors age, gender, income, and education level.

There were no significant gender differences in age distribution, annual income and purchasing behavior for EF FMCG. This suggests that gender does not play a pivotal role in determining these specific aspects of consumer behaviour. However, the data did reveal a positive correlation between age and income, indicating that older participants typically reported higher earnings. Furthermore, the demographic information is crucial because it can be used to define a target group.

A strong positive correlation existed between income levels and WTP more for environmentally friendly products. This suggests that higher-income individuals are more likely to invest in environmentally sustainable goods, highlighting financial capability as a critical factor in making such choices.

The research explored the influence of educational attainment on environmentally friendly purchasing behaviour. It revealed a clear trend: higher levels of education were consistently associated with a greater WTP more for EF FMCG products, as well as a higher likelihood of both repurchasing and recommending such items to others. This suggests that education informs individuals about the importance of environmental sustainability and motivates them to act on this knowledge. However, it is interesting to note that this correlation does not extend to unplanned additional purchases of EF FMCG, hinting that spontaneous buying decisions may be influenced by other factors beyond one's educational background.

The hypothesis testing section of the research provided further insight into consumer behaviour:

Prior to the study, research had already shown that consumers are willing to pay more for goods that are perceived as environmentally friendly (Majumdar & Sinha, 2019). Nevertheless, the study intended to investigate EF FMCG's influence on the impact of brand experience on WTP (H1). The analysis showed that participants were significantly willing to pay more for EF FMCG, with a mean rating well above the threshold. This suggests that the brand experience associated with EF FMCG positively affects consumers' WTP, implying that consumers not only appreciate the sustainable aspects of these products but are also likely to translate this appreciation into a higher monetary value when making purchasing decisions. It affirms that the sustainability attributes of FMCG are essential to consumers and that these attributes can potentially enhance the perceived value of a brand, leading to greater financial investment from customers.

In contrast, the willingness to make additional purchases of EF FMCG products did not match initial expectations, with mean ratings below the anticipated threshold (H2). This indicates a certain hesitance among consumers to buy more EF FMCG products than initially planned or needed. It could point to a complex consumer decision-making process where the value placed on environmental benefits may need to be more robust to trigger further spending. It highlights a potential gap between consumer intentions regarding sustainable consumption and their actual purchasing behaviour, possibly due to budget constraints or the perceived value of the additional items.

The inclination to recommend EF FMCG products was notably high, well above the threshold, indicating a strong willingness on the part of consumers to advocate these products within their social circles (H3). This strong willingness to suggest EF FMCG products to friends and family

reflects a positive attitude toward the products. It suggests that consumers accept the environmental benefits of EF FMCG products and are enthusiastic about sharing their positive perceptions with their peers. This level of advocacy can be a powerful form of endorsement for EF FMCG products and can contribute to increasing brand loyalty and consumer-driven organic marketing. Furthermore, it confirmed the statements by Dick & Basu (1994) that loyal customers tend to generate positive word-of-mouth advertising and often recommend the brand to potential new customers.

Similarly, the inclination to repurchase EF FMCG products in the future was markedly strong, significantly above the threshold, indicating a strong preference among consumers to maintain environmentally conscious purchasing behaviour over time (H4). This finding shows a sustained commitment to environmental awareness in purchasing patterns, suggesting that these values are deeply embedded in consumer decision making and are likely to influence long-term loyalty to EF FMCG brands.

In summary, the main findings uncovered that financial capability and educational attainment significantly influence eco-conscious purchasing decisions. Notably, a robust intent to recommend and a significant inclination to repurchase EF FMCG indicate that consumers' environmental commitments will likely drive sustained brand loyalty. The trend towards environmentally responsible consumption signals a positive shift in societal values and emphasises consumers' critical role in driving the FMCG market towards greater sustainability.

6 Conclusion

The conclusion answers the research question while also highlighting the limitations of the dissertation and potential directions for future research.

6.1 Conclusion

In summary, this study has shown that consumers are willing to pay more for EF FMCG, indicating a positive shift towards sustainability in consumer behaviour. However, the research also revealed a reluctance to make additional purchases of such products, suggesting a complex landscape of consumer engagement with eco-friendly brands. Nevertheless, the high levels of brand loyalty, as expressed by the willingness to recommend and repurchase EF FMCG, indicate a significant trend towards environmental responsibility among consumers.

The findings support the hypothesis that individuals are willing to invest more in EF FMCG, reflecting an increased awareness and commitment to environmental issues. The difference between WTP and additional purchases highlights the need for brands to create strategies that promote initial purchases and ongoing consumer engagement with EF FMCG. The inclination towards recommendation and repurchase offers a promising avenue for brands to foster deeper brand loyalty by aligning with the values of environmentally conscious consumers. In particular, taking into account that it was previously established that brand-loyal consumers tend to accept higher prices (Mellens et al., 1996).

Therefore, in response to the research question, it can be concluded that EF FMCG significantly influences the impact of brand experience on brand loyalty and brand experience on WTP. Consumers clearly prefer eco-friendly FMCG, which translates into financial support and brand advocacy. This trend reflects a broader shift towards environmentally conscious consumerism and emphasises the importance of sustainability in building brand loyalty within the FMCG industry.

6.2 Limitations

The survey, conducted with a comprehensive approach, aimed to investigate consumer behaviours towards sustainable FMCG. It encompassed the entire FMCG sector without differentiating between product groups. This methodology, while providing a general overview of consumer behaviour and sustainability in FMCG, did not distinguish between the different types of products that make up the sector, such as food, personal care and household goods. Each of these product groups may have different influences on the impact of brand experience on brand loyalty and brand experience on WTP and may elicit different consumer responses.

Moreover, the author published the survey through social networks and messenger services, expediting the data collection process. However, this approach also introduced limitations: the sample may only partially reflect the broader population due to potential homogeneity in demographics and viewpoints resulting from the reliance on the author's social circles. Furthermore, using social media for survey distribution could bias the sample towards more engaged individuals, potentially overlooking those less active on these platforms. In addition, potential limitations, such as sampling bias and self-selection issues, must be acknowledged, as online surveys may not reach specific population segments with limited internet access (Bethlehem, 2010; Wright, 2005).

Finally, the online survey involved 103 participants, who were surveyed to gain insight into consumer behaviours. Although the sample size was manageable and focused on analysis, it cannot be considered representative of the broader population.

6.3 Further Research

Future research could investigate product categories individually. This method may reveal different levels of WTP a premium for EF FMCG, providing detailed insights into brand loyalty and engagement strategies tailored to each category. By examining consumer attitudes and behaviours within specific FMCG categories, researchers can provide targeted recommendations for businesses aiming to improve their sustainability credentials and consumer appeal.

Furthermore, consumer attitudes towards EF FMCG can vary widely across geographical and cultural landscapes. Therefore, further research could adopt a comparative approach, analysing consumer behaviours in diverse regions or countries. Studies can reveal how cultural norms and societal values affect consumer preferences and purchasing decisions for sustainable FMCG. This understanding is crucial for FMCG brands seeking to adapt their marketing strategies to different markets effectively. Additionally, this research could provide insight into the global challenges and opportunities for promoting sustainable consumption practices.

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Appendices

Appendix A: Qualtrics Survey

Introduction:

Thank you for participating in this survey, which is part of my Master's thesis at the Católica Lisbon School of Business and Economics. Please answer the questions honestly. The survey should take approximately 4 minutes to complete. All responses are anonymous and will only be used for research purposes. There are no correct or incorrect answers. Participation in this study is voluntary. Please feel free to end it at any time by closing the website.

If you have any questions or concerns regarding this study, feel free to contact me: [s-
bsama@ucp.pt](mailto:bsama@ucp.pt)

Thanks a lot for your support!

This survey uses the abbreviation 'FMCG', which stands for 'Fast Moving Consumer Goods'. These are everyday goods that are sold quickly and in large quantities, often at comparatively low prices. Examples of FMCG products include food, beverages, household products, cosmetics, and hygiene products. You can find FMCG products in supermarkets, grocery shops, and drugstores.

Block 1 - H1: Participants are willing to pay more for environmentally friendly FMCG products.

Would you be willing to pay a higher price for FMCG products that are environmentally friendly compared to similar non-environmentally friendly products? (1 = Very unlikely, 2 = Unlikely, 3 = Neutral, 4 = Likely, 5 = Very likely)

How many percentage more would you be willing to pay for a FMCG product labeled as environmentally friendly compared to a conventional product? (1%-200%)

How likely are you to prioritize purchasing environmentally friendly FMCG products over cheaper, conventional alternatives? (1 = Very unlikely, 2 = Unlikely, 3 = Neutral, 4 = Likely, 5 = Very likely)

To what extent does the environmental friendliness of a FMCG product influence your purchasing decisions? (1 = Not influential, 2= Slightly influential, 3= Neutral, 4= Influential, 5 = Very influential)

How important is it to you that the FMCG products you buy align with your environmental values (1 = Not important, 2= Slightly important, 3= Neutral, 4= Important, 5 = Very important)

How often do you consider the environmental impact of a FMCG product before making a purchase? (1 = Never, 2= Rarely, 3 = Neutral, 4 = Sometimes, 5 = Always)

Block 2 - H2: Participants are more willing to make an additional purchase for environmentally friendly FMCG products.

How often do you find yourself purchasing more FMCG products than originally planned because they are environmentally friendly? (1 = Never, 2= Rarely, 3 = Neutral, 4 = Sometimes, 5 = Always)

To what extent does the availability of environmentally friendly options influence your impulse purchases? (1 = Not influential, 2= Slightly influential, 3= Neutral, 4= Somehow influential, 5 = Very influential)

How inclined are you to buy additional environmentally friendly FMCG products when they are suggested as complementary products? (1= Not Inclined, 2 = Slightly Inclined, 3 = Neutral, 4 = Inclined, 5 = Very Inclined)

Block 3 - H3: Participants are more willing to recommend environmentally friendly FMCG products to others.

How likely are you to recommend environmentally friendly FMCG products to your friends or family? (1 = Very unlikely, 2 = Unlikely, 3 = Neutral, 4 = Likely, 5 = Very likely)

When you find a FMCG product that aligns with your environmental values, how likely are you to tell others about it? (1 = Very unlikely, 2 = Unlikely, 3 = Neutral, 4 = Likely, 5 = Very likely)

Have you ever recommended an environmentally friendly FMCG product to others? (Yes/No)

How often do you share information about environmentally friendly FMCG products with others? (1 = Never, 2= Rarely, 3 = Neutral, 4 = Sometimes, 5 = Always)

To what extent do you believe that recommending environmentally friendly FMCG products can positively impact the environment? (1 = Not at All, 2 = Slightly, 3 = Neutral, 4 = Quite a Bit, 5 = A Great Deal)

How influential are recommendations from friends or family in your decision to try environmentally friendly FMCG products? (1 = Not influential, 2= Slightly influential, 3= Neutral, 4= Somehow influential, 5 = Very influential)

Block 4 - H4: Participants are more willing to buy environmentally friendly FMCG products again.

How likely are you to repurchase an environmentally friendly FMCG product you've bought before? (1 = Very unlikely, 2 = Unlikely, 3 = Neutral, 4 = Likely, 5 = Very likely)

How much does your previous positive experience with environmentally friendly FMCG products influence your decision to buy them again? (1 = Not at All, 2 = Slightly, 3 = Neutral, 4 = Quite a Bit, 5 = A Great Deal)

To what extent does the reliability of environmentally friendly FMCG products impact your likelihood of repurchasing them? (1 = Not at All, 2 = Slightly, 3 = Neutral, 4 = Quite a Bit, 5 = A lot)

How often do you find yourself returning to purchase from brands that offer environmentally friendly options? (1 = Never, 2 = Rarely, 3 = Neutral, 4 = Sometimes, 5 = Always)

How likely are you to prioritize purchasing from a brand that consistently provides environmentally friendly FMCG products? (1 = Very unlikely, 2 = Unlikely, 3 = Neutral, 4 = Likely, 5 = Very likely)

Block 4 – Demographics

How do you describe yourself?

Male

Female

Non-binary / third gender

Prefer not to say

How old are you?

Under 18 (1)

18 - 24 years old

25 - 34 years old

35 - 44 years old

45 - 54 years old

55 - 64 years old

65 + years old

Please indicate your country of origin?

Germany

Portugal

Italy

France

Spain

Indian

Brazilian

PALOP

Other: _____

What best describes your employment status

Working full-time

Working part-time

Internship

Working student

Freelancer

Retired

Unemployed

Parental leave

Other: _____

Which of the following describes your annual income?

Less than €10,000

€10,000 - €24,999

€25,000 - €49,999

€50,000 - €74,999

€75,000 - €99,999

€100,000 - €149,999

€150,000€+

Prefer not to answer

What is your highest level of education?

Less than middle school

Middle school

High school

Bachelor's Degree

Master's Degree

Doctorate or higher

Other: _____

What is your marital status?

Single

Married

High school

Bachelor's Degree

Master's Degree

Doctorate or higher

Do you have children?

Yes

No

Is there anything else you would like to share about your attitudes or behaviors towards environmentally friendly products? (Open-ended)

Conclusion:

Thank you for participating in this survey. Your input is valuable in understanding consumer preferences towards environmentally friendly products. If you have any further comments or questions, please feel free to share them below. Your responses will remain confidential and will only be used for research purposes.

Appendix B: Correlation Education – Descriptives

	1	2	3	4	5	6
1 Education	--					
2 Would you be willing to pay a higher price for products that are environmentally friendly compared to similar non-environmentally friendly products?	.28**					
3 To what extent does the environmental friendliness of a FMCG product influence your purchasing decisions?	.40**	.63**				
4 How likely are you to recommend environmentally friendly FMCG products to your friends or family?	.36**	.61**	.59**			
5 How likely are you to repurchase an environmentally friendly FMCG product you've bought before?	.30**	.68**	.58**	.58**		
6 How often do you find yourself purchasing more FMCG products than originally planned because they are environmentally friendly?	.05	.27**	.45**	.33**	.26**	

Note. $N = 101$, ** $p < .01$, $p < .05$.

Appendix C: *t*-Test – Hypothesis 1

	<i>M</i>	<i>SD</i>	<i>t</i> (<i>df</i>)	<i>p</i>	<i>d</i>	<i>d</i> 95% CI
Would you be willing to pay a higher price for products that are environmentally friendly compared to similar non-environmentally friendly products?	3.80	0.92	8.76 (102)	< .001	0.86	[0.64, 1.09]

Appendix D: *t*-Test – Hypothesis 2

	<i>M</i>	<i>SD</i>	<i>t</i> (<i>df</i>)	<i>p</i>	<i>d</i>	<i>d</i> 95% CI
How often do you find yourself purchasing more FMCG products than originally planned because they are environmentally friendly?	2.68	1.02	-3.18 (102)	< .001	-0.41	[-0.51, -0.12]

Appendix E: *t*-Test – Hypothesis 3

	<i>M</i>	<i>SD</i>	<i>t</i> (<i>df</i>)	<i>p</i>	<i>d</i>	<i>d</i> 95% CI
How likely are you to recommend environmentally friendly FMCG products to your friends or family?	3.58	0.99	6.00 (102)	< .001	0.59	[0.38, 0.80]

Appendix F: *t*-Test – Hypothesis 4

	<i>M</i>	<i>SD</i>	<i>t</i> (<i>df</i>)	<i>p</i>	<i>d</i>	<i>d</i> 95% CI
How likely are you to repurchase an environmentally friendly FMCG product you've bought before?	3.98	0.86	11.53 (102)	< .001	1.14	[0.89, 1.38]