



The role of consumer reviews as a reducer of anticipatory guilt in hedonic consumption

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Abstract

Title: The role of consumer reviews as a reducer of anticipatory guilt in hedonic consumption

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Summary: Consumers are becoming increasingly complex in the way they approach their purchasing decisions. Regardless of whether they intend to consume more functional and practical products or more pleasurable and experimental ones, consumers dive into the online world in pursuit of information provided by other consumers to avoid a bad purchase decision. However, when a consumer intends to buy a hedonic product, the weight of a bad decision becomes even greater, since the consumer faces the dilemma between satisfying a need or satisfying a desire. As a result, a feeling of anticipatory guilt emerges, which can lead the consumer to withdraw from buying such products. The existing literature reports some strategies to reduce this negative feeling associated with hedonic consumption, however none addresses the online universe.

This research examines the effect of online reviews as a potential way to reduce anticipatory guilt in consumption.

Two studies were conducted, the first manipulating product type (hedonic, utilitarian) and the type of reviewer (consumer, expert, brand representative), and the second manipulating product type (hedonic, utilitarian) and social distance towards the reviewer (close, distant).

Online reviews were found to exert a greater guilt reduction effect on hedonic consumption than on utilitarian consumption. Furthermore, this effect was found to be stronger for a review by a consumer compared to a review by an expert or brand representative.

Keywords: hedonic consumption, utilitarian consumption, anticipatory guilt, ethics, online reviews

Sumário

Título: O papel dos reviews dos consumidores como redutores de culpa antecipada no consumo hedónico

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Sumário: A forma como os consumidores processam a sua decisão de compra está cada vez mais complexa. Quer pretendam consumir produtos mais funcionais e práticos ou produtos mais prazerosos e experimentais, os consumidores mergulham no mundo virtual em busca de informações deixadas por outros consumidores de modo a evitarem uma má decisão de compra. No entanto, quando um consumidor pretende comprar um produto hedónico, o peso de uma má decisão torna-se ainda maior, uma vez que o consumidor enfrenta o dilema entre satisfazer uma necessidade ou satisfazer um desejo. Emergindo desta forma, um sentimento de culpa antecipada, que pode levar o consumidor a desistir da compra deste tipo de produtos.

A literatura existente menciona algumas estratégias de redução deste sentimento negativo associado ao consumo hedónico, no entanto nenhuma delas explora o universo online.

A presente pesquisa investiga o potencial efeito dos online reviews na redução da culpa antecipada no consumo.

Foram conduzidos dois estudos, o primeiro manipulou o tipo de produto (hedónico, utilitário) e o tipo de reviewer (consumidor, expert, representante de marca), e o segundo o tipo de produto (hedónico, utilitário) e a distância social ao reviewer (perto, distante).

Verificou-se que reviews online exerciam um maior efeito de redução de culpa no consumo hedónico do que no consumo utilitário. E além disso, esse efeito mostrou-se mais acentuado para o review feito por um consumidor em comparação com um feito por o expert ou por o representante de marca.

Palavras-Chave: consumo hedónico, consumo utilitário, culpa antecipada, ética, online reviews

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List of Abbreviations

WOM: Word-of-Mouth

e-WOM: Electronic Word-of-Mouth

H: Hedonic Product

U: Utilitarian Product

BR: Brand Representative Reviewer

E: Expert Reviewer

C: Consumer Reviewer

CR: Closer Reviewer

DR: Distant Reviewer

Chapter 1 - Introduction

1.1. Topic presentation

Digital transformation, globalisation and other technological advances have generated significant changes in consumer behaviour. The way that consumers face the buying decision process is now more complex, with more "moments that matter" being present from the recognition of a need or desire to the stage of evaluation and sharing of the experience after it has been enjoyed. Before the moment of purchase, consumers look for the best products and services for themselves. Whether they are looking for functional and practical products or pleasant or experimental products, consumers dive into a virtual environment seeking references from other consumers to avoid a bad choice.

A study conducted by the Spiegel Research Center (2017) documented that 95% of consumers read reviews before making an online purchase decision. Another study conducted by Testimonial Engine (2017) reveals that 72% of the respondents admitted they don't take any purchasing action until they have read reviews from other consumers. This data, based on consumer surveys, thus reveals the great impact that reviews have as influencers of purchases (Park et al., 2007). Consumers prefer popular products, with many reviews, relying on Social Proof and tend to take the recommendations given by consumers even if anonymous, as they feel connected by often belonging to the same virtual communities, or simply by being geographically closer in the context of the decision (Cialdini, 2007; Kim et al., 2008).

Besides these effects, it is believed that reviews can exercise influence on the emotional level of the consumer. This influence can have a greater effect when consumers want to engage in hedonic consumption, which is characterized by greater emotional and multi-sensory involvement with products, often linked to the consumption of luxury products (Hirschman & Holbrook, 1982).

Nevertheless, the same study published by (Spiegel Research Center, 2017) concluded that when higher-priced items exhibit reviews, the conversion rate increases by 380%, as compared to a 190% conversion rate for less expensive products. This data strengthens the perception that reviews are of greater importance in hedonic consumption than in utilitarian consumption.

On the other hand, this higher emotional involvement of individuals in hedonic consumption leads in various situations to negative emotions as anticipatory guilt and lack of ethics (Kivetz & Simonson, 2002; Strahilevitz & Myers, 1998). Such negative emotion comes from the anxiety felt by the consumer in making an individual consumption decision which violates their moral or social patterns (Kazançoğlu & Özhan Dedeoğlu, 2012). When induced in individuals, these feelings drive many consumers to give up on buying this type of products, which generates pleasure and satisfaction, opting for more functional products (Zemack-Rugar et al., 2016).

The role of reviews as facilitators of the decision-making process has already been the subject of various scientific researches, however, neither has focused on the effects that they may have as influencers of consumers' emotions and consequently, the effect that the emotions triggered, such as anticipatory guilt and lack of ethics, may have on the purchase intention.

1.2. Managerial and academic relevance

Academically, understanding this phenomenon fits into the field of Marketing and Hedonic Experiences. Since the subject addressed, has not yet been explored, it may prove to be an important contributor to scientific research in this area, as well as encouraging future research.

Given the relevance in the corporate world, some statistical researches have provided important insights on the subject of reviews. According to a Broadly (2017) study, consumers are spending 31% more when the products or experiences have positive reviews. Moreover, 41% of consumers reveal that when brands reply to reviews, they are left feeling that the company cares about its customers, with 89% of consumers reading responses to reviews (Bright Local, 2020). These are only a few factors that companies should be concerned about in their daily management. Understanding the motivations and emotions associated with reviews is caring for consumers. Emotions that are influenced positively by companies, lead consumers to value more their products and are thus are willing to pay more for them.

1.3. Problem Statement definition

As concepts quite relevant today and needing to be further explored in literature, the present dissertation will examine the influence that reviews from other consumers have on the emotions involved in the purchasing process, as well as the comparative effect of positive valence reviews, between hedonic and utilitarian consumption.

The research question that will help to solve the problem stated can be formalized in the following terms:

RQ: *Do positive online consumer reviews reduce negative emotions as anticipatory guilt and lack of ethics in hedonic consumption?*

1.4. Dissertation Structure Overview

This dissertation is developed in five chapters. This first chapter refers to "Introduction" and briefly presents the contextualization and relevance of the topic of study, the research question and the structure of the thesis.

The second chapter "Literature Review" contains a compilation of the main concepts, theories and models developed by other authors in the past that support not only each variable of this research but also the relationships between them.

First, the existing literature on Consumer Decision-Making Process will be analysed, then a short distinction between Utilitarian Consumption and Hedonic Consumption, followed by an explanation of the Negative Emotions as anticipatory guilt and ethics in Hedonic Consumption. Afterwards, will be presented the role of Heuristics as facilitators of the consumer decision-making process, as well as the role of Consumer Reviews, will be further presented, and finally a summary with the main findings, and the hypotheses to be tested.

The third chapter "Methodology and Data Collection" describes the methodological procedures applied to studies, the development of data collection instruments and the characterization of the sample.

In chapter four "Results' Analysis," the results of the studies are presented, as well as its analysis, interpretation and validation of the formulated hypotheses.

The last chapter covers the Main Conclusions of the research and the Limitations of the studies, as well as Recommendations for future research.

Chapter 2 - Literature Review

2.1. Consumer Decision-Making Process

In the last years, the research on consumer behaviour and on how consumers process their purchasing decision has become a major theme for society and literature (Stankevich, 2017).

Buying-decision making can be defined as the process in which the consumer selects a product that fits its needs among multiple alternatives offered. However, understanding this process has proven to be somewhat complex.

One of the pioneers in studying buyer behaviour, Elmo Lewis in 1898, claimed that the purchasing decision-making process had a linear hierarchy and consisted of four steps: Attention, Interest, Desire and Action (AIDA), that pushed the consumer from a perspective of ignorance to the purchase (Barry & Howard, 1990). The AIDA model suggested that the purchasing process started when a brand or product caught the consumer's attention. Following the awareness phase, the consumers were interested in the advantages and benefits that this choice would offer them and developed their desire to enjoy the product. After the first three stages were completed, the consumer would proceed to action, which translated into the purchase of the product (Hassan et al., 2015). Years later, Townsend (1924) adapted this model and it applied to the AIDA-model the concept of funnel giving origin to the Traditional Funnel model. According to this model, the purchasing process starts with the awareness of some brands or products, subsequently marketing efforts helps to filter out some options and thus reduce the number of brands and products to be considered gradually until the consumer is left with only the option he or she wishes to buy (Stankevich, 2017).

Since the beginning of the 1900s, several marketers have been using the Funnel Model to depict the steps that consumers go through to reach the products choice and subsequent purchase.

While the various contact points have been understood for years through this funnel approach, several shifts in consumers' daily lives connected to the new era of technology have led to new shopping behaviours and left this model weakened (Stankevich, 2017).

Another major input for the study of buying decisions was provided in the late 1960s by Engel et al. (1968) in which it was suggested that the buying process is split into five stages: recognition of needs, research of information, assessment of alternatives, purchase and post-purchase behaviour. The Traditional Five-Step Consumer Decision-Making Model was for decades one of the most influential marketing models, but it has been subject to several criticisms during the last years (Stankevich, 2017).

One of the shortcomings is linked to the psychological side of the consumer as a trigger for decision-making (Yoon & Tran, 2011).

Belch & Belch (2009) researched the internal psychological processes that were relevant to each stage of the earlier model and sought to identify the "moments that matter" and their respective factors influencing them. The internal psychological activity which is associated with identifying the problem is motivation, later the consumer moves on to the perception by receiving, selecting and interpreting the information. Afterwards, it begins the process of attitude formation, integration and concludes with the learning phase (Belch & Belch, 2009).

Court et al. (2009) through a McKinsey & Company global study of the consumer's decision-making process, has also warned about the gaps that the Traditional Decision-Making model presents, specifically in capturing all the touch points and key factors in the purchasing process.

To incorporate these important changes, Court et al. (2009) presented a new approach "The consumer decision journey" that describes the purchasing decision as a circular and active process consisting of four distinct phases: initial consideration; active assessment or research of potential purchases; closure, when consumers buy brands; and post-purchase, when consumers try them out.

However, the almost unlimited supply of information and choice that the digital age has provided adds new points of interaction to the consumers' journey.

Therefore, based on common elements with other theories previously mentioned, the latest model that attempts to explain how consumers face the complexity of information and choice nowadays emerges.

The "Decoding Decisions model", which is the result of a partnership between Google and Behavioural Architects, is based on the assumption that people use cognitive biases deeply encoded in their psychology to deal with the complexity of product choice (Rennie et al., 2020).

At the centre of this model, among the twin poles of trigger and purchase, lies the messy environment - a complex space where consumers move between exploration, an expansive activity and the evaluation of available options, a reductive activity [see Appendix I]. Through such activities consumers seek information about products and brands in a category, drawing on a wide variety of online sources such as "search engines, media, aggregators, and review sites" (Rennie et al., 2020). Although research focuses only on online sources, offline sources of information should also be considered relevant, such as word-of-mouth and traditional media.

As consumers enter this exploration and assessment phase, they get lost in a messy environment and engage in an information search circuit where heuristics mould their behaviour and ultimately influence the final decision to buy the product (Rennie et al., 2020).

The analysis of the latter model shows that the journey of consumer purchasing has developed into an increasingly detailed and complex process. Reasons such as an unlimited supply of sources and information and the multiplicity of options of choice complicate decision making, as well as factors

such as the type of purchase, nature of the products, beliefs and values, may also increase the complexity of this process.

2.2. Two Types of Consumption

It is therefore relevant to have an understanding of the different purchasing guidelines that consumers tend to follow, namely hedonism and utilitarianism.

Ever since the 1950s, various researchers have sought to account for the various motivations for consumption, with the first studies focusing on the rational and cognitive aspect, thus creating the concept of utilitarian consumption (Babin et al., 1994).

This rational approach, however, had some shortcomings as it offered no argument capable of explaining all the present complexity in consumer buying behaviour. In this way, sensory dimensions such as emotion started to be considered as potential explanatory factors for consumer behaviour and decision-making (Fischer & Arnold, 1990). This concept paved the way for motivational studies and Hirschman & Holbrook (1982) introduced the hedonic consumption concept which refers to the emotional and multi-sensory aspects of product experiences.

To facilitate the understanding of these two types of consumption, the definition of both concepts as well as some distinctive variants between them will be presented individually in the following sections.

2.2.1. Utilitarian Consumption

Utilitarian consumption is the outcome of a cognitive process, instrumental and goal-oriented (Batra & Ahtola, 1991; Roy & Ng, 2012). It is tied to the acquisition of useful and practical goods, with functional features and is considerably associated with the fulfilment of a functional and economic need (Babin et al., 1994).

(Fischer & Arnold, 1990) have concluded that this consumption may represent the "dark side" of shopping for many customers, particularly for those who see it as a job rather than as an exciting activity (Hirschman & Holbrook, 1982).

In this instance, the "traditional consumer" benefits from this consumption only if the shopping task is carried out successfully and if it is carried out in a "fastidious" manner, such as being able to do all the shopping on the Christmas list previously drawn up (Fischer & Arnold, 1990).

2.2.2. Hedonic Consumption

In contrast, hedonic consumption is associated with an emotional experience of aesthetic pleasure, sensory, fantasy or fun (Dhar & Wertenbroch, 2000a; Hirschman & Holbrook, 1982). It is associated

with the expressive or emotional value of a given product, and the concern of these "modern consumers" is linked to the brand, design, appearance and packaging, neglecting attributes such as quality and price.

It is viewed as an exciting activity and can represent for many consumers "the fun side of shopping" and is the result of satisfying growing new consumer desires (Hirschman & Holbrook, 1982).

Such consumption is also linked to greater emotional engagement, with the products being acquired for their meaning and not to serve a practical and determined purpose (Dhar & Wertenbroch, 2000). Emotional involvement is also greater since it is associated with the consumption of luxury goods, with consumers spending more, leading them to feel the social and financial risks of making a bad decision (R. E. Anderson & Srinivasan, 2003).

2.3. Negative Emotions in Hedonic Consumption

As demonstrated above, both hedonic and utilitarian consumption provides benefits to the consumer (Lu et al., 2016).

Yet when consumers have to decide between satisfying their needs (utilitarian consumption) or their wants (hedonic consumption) they fall into a dilemma (Kivetz & Simonson, 2002).

This dilemma arises from a consumer's need to justify all his choices (Okada, 2005). Therefore, when consumers are confronted with engaging in a pleasurable or amusing choice at the expense of a functional and utilitarian choice, they find it difficult to justify themselves and quickly allow themselves to be enveloped in an anticipated sense of guilt (Kivetz & Simonson, 2002; Strahilevitz & Myers, 1998).

This sense of anticipated guilt in consumption is nothing less than a negative emotion, which arises whenever the consumer becomes aware that his behaviour is inconsistent with his patterns (Baumeister et al., 1995).

Thus, consumers' difficulty in justifying their consumption choices is related to concerns about moral standards or harm caused to others (Tangney & Dearing, 2002).

For this reason, anticipatory guilt is more likely to be induced by hedonic consumption than by utilitarian consumption, since hedonic consumption is associated with the satisfaction of individual desires, of luxuries (egoism) rather than practical needs. Engaging in hedonic consumption is thus embracing unethical consumption choices (Marks & Mayo, 1991).

This sense of guilt or lack of ethics has a strong impact on hedonic consumption since these negative emotions lead many consumers to give up enjoying hedonic consumption and opt for utilitarian products (ethically accepted). The higher the level of guilt or the higher the lack of ethics, the less likely consumers are to buy hedonic products (Zemack-Rugar et al., 2016).

However, there are some strategies adopted consciously or unconsciously by the consumer to reduce this negative feeling of guilt or lack of ethics and thus engage in hedonic consumption without moral concerns.

(Lu et al., 2016) showed that these negative emotions are mitigated when the consumer decides to buy a hedonic product not to fulfil a wish of their own, but to offer it to someone else. In such a situation the consumer can easily justify his purchase as a gift to someone else, enjoying the pleasure of the purchase and mitigating negative emotions such as guilt because he is not the one who will own the product.

Another effect responsible for reducing these negative emotions in hedonic consumption is related to promotions.

(Kivetz & Zheng, 2017) found that the promotions (not in quantity) positively affect hedonic shopping compared to utilitarian shopping. Consumers thus see price promotions as a good opportunity to justify buying hedonic products.

In short, negative emotions as anticipatory guilt or unethical feeling represents an important factor to be taken into account in the decision-making process, both about the type of product and about the context and how the choice occurs (Zeelenberg, 1999).

This dilemma which triggers negative emotion makes the decision-making process more complex and difficult. Consumers can sometimes more easily justify their choices and engage in hedonic consumption. However, it is not always simple, prompting the consumer to look for other strategies that facilitate the purchasing decision and that diminish these feelings such as anticipatory guilt and lack of ethics.

2.4. The heuristics as facilitators of the consumer decision-making process

The literature review in the preceding chapters provides greater assurance that the consumer's decision-making process is a daily challenge that is highly complex.

Factors that hamper this decision are diverse and may be related to external influences such as information overload and multiplicity of available options and internal influences such as consumption motivations, attitudes and emotions.

Recognizing this complexity and the limits of its cognitive capacity drive the consumer to employ mechanisms that ease the decision-making process, including the use of heuristics.

Rennie et al. (2020) attempted to substantiate their "Decoding Decisions model" by researching the literature on behavioural science and by testing the effectiveness of six biases to facilitate decision-making (see Appendix II).

One of the biases addresses Category Heuristics, which are "golden rules or shortcuts" that assist consumers to move into buying action in a faster and more satisfactory way within a given category (Rennie et al. 2020). When using heuristics, consumers base their choices, albeit unconsciously, upon one or more effort reduction principles such as analysis and account for less information, consideration of fewer alternatives and reliance on easily accessible sources of information (Shah & Oppenheimer, 2008). An example of this would be focusing on how many hours the battery has when purchasing Bluetooth earphones. Or choosing a cereal bar based on the number of calories, ignoring other aspects such as flavour or brand.

By reading a review, the consumer can focus their attention on just one feature and then make their purchase decision based on that information overlooking all others.

Another shortcut relates to the Authority Bias which tends to converge opinions and behaviours with the ones of a figure we consider to be an expert on the subject (Rennie et al., 2020). In a study that sought to analyse decision-making in the financial context, Engelmann et al. (2009) assessed how participants would choose between lotteries or secure winnings and concluded that by introducing an accredited expert economist, participants transferred their decision to this authority.

In insecure moments, individuals tend to follow the lead of credible experts and connoisseurs, thereby using the view of authority as a mental shortcut (Rennie et al., 2020).

Another of the most recurrent biases amongst consumers is the Social Proof that describes the tendency of people to adopt certain behaviours as being correct and beneficial only because they see other people performing them (Cialdini, 2007).

Nowadays several consumers in situations of uncertainty tend to copy other consumers' purchases and devote much of their journey to reading consumer reviews, thus relying on Social Proof to base their decisions. The process often occurs conscientiously, however, it can also happen unknowingly since aggregate reviews in the form of rating stars are often present on many websites alongside products, with four or five-star ratings influencing the consumer as they view products with these ratings as popular choices (Ledgerwood et al., 2010; Rennie et al., 2020).

Yet another important mental shortcut, although not mentioned in the "Decoding Decisions model" is psychological distance. (Kim et al., 2008) defined psychological distance as being the "subjective distance between an actor and an actor's psychological event". This psychological event can be distant through various dimensions such as social distance (e.g., within the group vs. outside the group), physical distance (e.g., here vs. in another country), temporal distance (e.g., in days vs. years), and hypothetical distance (e.g., certain vs. uncertain) (Kim et al., 2008; Trope & Liberman, 2003).

In moments of doubt about what decision to make, consumers unconsciously dive into these dimensions and engage in psychologically closer options. These various dimensions have a major

influence on consumer evaluation of products, brands and services and are therefore of great importance for marketing (Kim et al., 2008).

To make a better buying decision, several consumers go online to find out more information about the products. However, there is an immensity of information available and the decision process becomes more complex. Nevertheless, "online environments contain unique psychological distance signals that do not exist anywhere else" (Sungur et al., 2016). "User-generated content, geolocations and online reviews" provide psychological distance signals and are used, even though unconsciously, as cognitive heuristic strategies (Sungur et al., 2016).

Another important mental shortcut concerns social identity. Along with other heuristics studied in the psychological and economic literature, group identity can provide orientation in unknown situations and allow subjects to save on cognitive effort.

2.5. Online Reviews

The aforementioned literature makes various references to the Reviews as sources of information and emphasises their role as facilitators of decision-making. Therefore it is important to further investigate this concept, by understanding its origin and importance for today's decision making.

2.5.1. Origin of the Reviews

Reviews are a form of Word-of-Mouth (WOM) communication and represent exchanges of information between consumers on their experiences with particular products and services (Schindler & Bickart, 2005). Studies have highlighted the power of this type of communication, as it has been found that consumers trust WOM more than conventional marketing tools and base their purchasing decisions upon information gathered from other consumers (E. W. Anderson, 1998; Cheung et al., 2008). This happens because consumers realise that the message conveyed by WOM is not commercial, giving it greater credibility vis-à-vis commercial advertisements (E. W. Anderson, 1998).

Nevertheless, the creation and promotion of the Internet have ushered a new era of information sharing and has led to a shift in the concept of traditional WOM, thus giving rise to electronic Word-of-Mouth (e-WOM). Hennig-Thurau et al. (2004) defined e-WOM communication as "any positive or negative statement made by a potential, current, or former customers regarding a product or company, which is done available to a multitude of people and institutions via the Internet".

Unlike traditional WOM communication that occurs in a restricted environment between friends and family, e-WOM is far-reaching, more lasting, as it is recorded in the virtual world and can occur among geographically scattered, unknown absolutes (Cheung & Thadani, 2010; Chu & Kim, 2011).

In this way, the Internet has become a powerful social intermediary, allowing people to access comments and reliable information left by other consumers about the products and services quality anytime and anywhere. Such online comments are typically found on electronic platforms such as social networks, blogs or forums and may take the form of recommendations, ratings or reviews (Chen et al., 2016; Cheung et al., 2008; Cheung & Thadani, 2010).

Park et al. (2007) shown that online reviews have a great impact on purchase intentions. By helping consumers to filter out alternative options, improving the overall product beliefs, increasing confidence in choice and contributing to faster purchasing decisions (Häubl & Trifts, 2000; Senecal & Nantel, 2004; Park et al., 2007).

This new form of interaction is revealing of its enormous potential and prompt some businesses to invest in the creation of their online review platforms, thereby developing a sharing community for their current and potential clients (McWilliam, 2000). However, this phenomenon has made consumers more alert to the distinction between content created by users and content created by vendors. By creating their platforms, many companies intend to control online information about their brands and products and therefore can more easily delete negative reviews and hire experts to publish positive reviews on them (Schindler & Bickart, 2005).

These business efforts are visible to consumers and hence they rely more heavily on information created by other consumers that is either objective or subjective, as opposed to information created by professionals that is solely objective, i.e. does not convey emotions or feelings (Elwalda & Lu, 2016; Park et al., 2007).

2.5.2. Reviews Attributes

In addition to the above, reviews have three main characteristics: volume, valence and dispersion, which all play an important role in decision-making.

Volume is related to the number of consumer reviews available online. The more reviews, the more likely it is to find relevant information about a given product or service, thereby attracting more consumers (Liu, 2006). A large number of reviews also indicates a high level of popularity among consumers, referring to the idea that the product or service in question was purchased by a large number of individuals (Elwalda & Lu, 2016; Park et al., 2007). This attribute is most evident for reviews of aggregate information, which is often available in the form of rating stars. However, reviews of aggregate information, which are usually characterised by broad and generalised information, are more important for long-term choices or decision-making, for instance, a purchase to be made next year (Ledgerwood et al., 2010). Meanwhile, specific information reviews are more

influential for close purchase decisions, as well as more persuasive and emotionally engaging, and are therefore more important in the context of hedonic consumption (Ledgerwood et al., 2010).

Valence is the characteristic that most affects consumers' decision-making and refers to the nature of the review, i.e. whether it is positive, negative or neutral (Elwalda & Lu, 2016). Persuasive influences on consumer attitude are considered, with positive reviews generating a positive attitude towards a product, service or brand, mitigating feelings of uncertainty regarding their purchase, whereas negative reviews can discourage consumers at the time of choice (Dellarocas et al., 2007; Sen & Lerman, 2007; Elwalda & Lu, 2016).

According to Forman et al. (2008) reviews with moderate (neutral) valence are deemed less useful than those expressing a positive or negative opinion. This occurs due to the ambiguity of neutral reviews. However, several studies reveal that negative reviews have a greater weight on intent than positive reviews (Sen & Lerman, 2007). One explanation is that negative information is considered to be more detailed (Bone, 1995). This preconception of negativity is stronger for hedonic products than for utilitarian products (Sen & Lerman, 2007).

Lastly, **dispersion** is the attribute that is linked to the degree to which the message is spread by its users (Chatterjee, 2001). Reviews with higher dispersion in the online consumer community are more likely to have a greater impact on the decision to purchase a given product (Dellarocas et al., 2007).

2.6. Hypothesis Development

Following investigation and review of scientific information to sustain the current study, some gaps in the literature have been identified regarding the subject matter, thereby giving rise to some hypotheses to be tested.

The various efforts of both researchers and large corporations to find an explanatory model of decision-making covering all the "moments that matter" along the consumer's buying journey has been evident. The latest model strengthens the complexity of this whole process and is based on the idea that consumers engage in biases and cognitive preconceptions to facilitate decision-making (Rennie et al., 2020).

Differing consumer orientations such as hedonism and utilitarianism are another factor that contributes to the complexity of the choice process. The different features of these types of consumption generate negative emotions as anticipatory guilt and lack of ethics, a result of engagement in hedonic consumption, compared to utilitarian consumption (Kivetz & Zheng, 2017; Lu et al., 2016).

The literature highlights some situations which contribute to the reduction of these negative emotions linked to hedonic consumption, such as purchases for others and purchases driven by promotions

(Kivetz & Zheng, 2017; Lu et al., 2016). The literature, however, ignores the effects that heuristics can have as modifiers of consumers' beliefs about a product and as a potential reducer of anticipated guilt associated with hedonic consumption. Based on the literature mentioned above, the conviction that online reviews of consumers with positive valence may present a significantly positive effect on the reduction of anticipated guilt and increased ethics associated with hedonic consumption compared to utilitarian consumption has been created.

Consumers base their purchasing decisions on information gathered from other consumers (Anderson, 1998; Cheung et al., 2008). Positive reviews are a major influence on the consumer's decision because they generate positive feelings towards a product, mitigating feelings of uncertainty (Dellarocas et al., 2007; Sen & Lerman, 2007; Elwalda & Lu, 2016). Furthermore, consumers manifest a greater emotional involvement with information generated by other consumers, because it is both objective and subjective, which transmits emotions and feelings, compared to only objective information, created by professionals (Elwalda & Lu, 2016; Park et al., 2007). It must be taken into consideration that information created by other consumers even if anonymous (consumer reviews), has no commercial nature (E. W. Anderson, 1998).

Therefore, it has also been created the conviction that because of greater involvement, online reviews, conducted by other consumers, can have a positive impact on the reduction of negative emotions associated with hedonic consumption, such as anticipatory guilt and lack of ethics, compared to online reviews conducted by experts or brand representatives.

Furthermore, according to the phenomenon of social proximity, online reviews carried out by consumers who are close to them socially are also likely to have a positive impact on the reduction of guilt associated with hedonic consumption.

Based on these premises, the following hypotheses have been developed and will be tested in this study:

H1: *Online reviews of positive valence have a greater impact on the reduction of anticipated guilt or lack of ethics in hedonic consumption compared to utilitarian consumption.*

H2: *Online reviews of positive valence by consumers have a greater impact on the reduction of anticipated guilt or lack of ethics in hedonic consumption than reviews by experts or brand representatives.*

H3: *Online reviews, of positive valence, conducted by socially close people have a greater impact on the reduction of anticipatory guilt or lack of ethics than reviews conducted by people who are socially distant.*

Chapter 3 - Methodology and Data Collection

To address the research questions, two experiments were conducted. An online survey was the method selected to collect the data needed. It was chosen because of its capacity to capture a wide variety of information and reach a large number of participants, which leads to a higher response rate (Malhotra et al., 2017).

The collected data was then compiled and statistically analysed, as will be explained further on.

3.1. PRE-TEST

Before conducting the first experiment, a pre-test was carried out to select the appropriate content to be considered in the official questionnaire.

The pre-test was distributed to a sample of 16 Portuguese students ($n=16$), equally distributed by gender, via an online survey delivered through the Qualtrics platform. These participants are also regular readers of online consumer reviews when looking for products to buy.

Each participant was requested to complete two tasks which aimed to assess the information provided according to their intuitions and beliefs (see Appendix III).

The first task included six pictures of similar products. The products chosen for assessment were earphones Bluetooth, a product with which the sample is familiar. Three of the images displayed represented utilitarian usage, as they contained an individual using the product in a professional environment, while the remaining three images represented a hedonic usage, containing an individual using the product in moments of pleasure or fun. The order of the images was randomized to reduce the likelihood of bias.

To make sure that the images were perceived differently according to the product type, participants were asked to assess how hedonic the product represented was and to assess how much guilt it would make them feel if they had to purchase the product, on a scale of 1 (Not at all) to 9 (Extremely).

Given this and to choose products that do not differ in their likability, participants were asked to assess how much they liked the product (through their degree of happiness with it and the likelihood of recommending the product to a friend) on a scale of 1 (Not at all) to 9 (Extremely).

To analyse the results, the SPSS was used to conduct the ANOVA with repeated measures test to compare the means of the dependent variable “type of product” against the six pictures observed (three utilitarian vs three hedonic).

The results showed a significant effect for the happiness with the pictures observed ($F(1,15) = 11.273, p = .004, \eta_p^2 = .429$), indicating that picture 1 ($M_1 = 5.93, SD_1 = 2.124$) and 2 ($M_2 = 5.56, SD_2 = 1.826$) provided more happiness to the participants than picture 3 ($M_3 = 4.56, SD_3 = 2.471$).

No other effects were found, except a marginal interaction ($F(1,15) = 3.344, p = .087, \eta_p^2 = .182$). However, a paired-sample t-test showed that this effect is significant only for picture 2, ($t(15) = 2.155, p = 0.048$) indicating that utilitarian picture 2 ($M_2 = 6.25, SD_2 = 1.528$) offered higher happiness than hedonic picture 2 ($M_2 = 4.88, SD_2 = 2.125$).

The results also showed a significant effect for the likability variable ($F(1,15) = 7.9278, p = .017, \eta_p^2 = .327$), indicating that picture 1 ($M_1 = 5.87, SD_1 = 2.979$) and 2 ($M_2 = 5.31, SD_2 = 2.626$) were more liked than picture 3 ($M_3 = 4.65, SD_3 = 2.736$). The interaction between product type and the likability variable was also significant ($F(1,15) = 4.706, p = .047, \eta_p^2 = .239$). A paired-sample t-test also showed that this effect is only significant for picture 2, ($t(15) = 2.512, p = 0.024$) indicating that utilitarian picture 2 ($M_2 = 6.25, SD_2 = 2.380$) offered higher happiness than hedonic picture 2 ($M_2 = 4.38, SD_2 = 2.872$).

In this way, picture 1 of each product type was selected, as it did not present statistically significant differences in terms of likability between product's type, whose average remained constant (see Figure 1 and 2).

Figure 1 - Estimated Marginal Means of Happiness

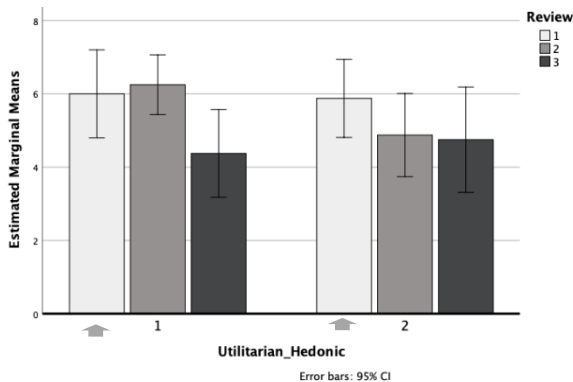
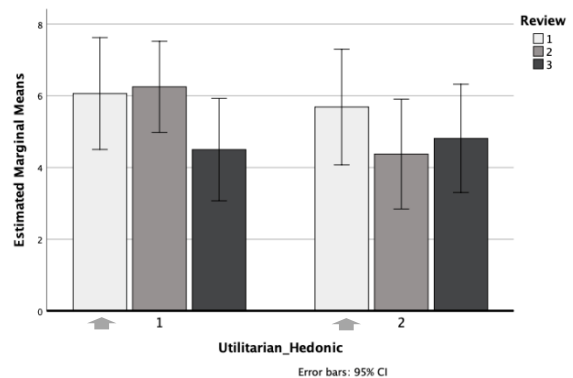


Figure 2 - Estimated Marginal Means of Likability



In the second task, six reviews were presented, inspired by real reviews left by consumers on the Amazon retailer's website for products that looked similar to those presented in the first task's pictures. As proven in a study by the Spiegel Research Center (2017) "the likelihood of purchase peaks at a star rating of 4.0 to 4.7, then decreases as the rating gets closer to 5.0". For this reason, all reviews were based on four-star ratings so that they are perceived as having positive valence, but away from the idea that they are the best products on the market (with a 5.0 stars rating).

Participants were then asked to rate the valence of the reviews presented and also to rate the product mentioned on the reviews on a five stars scale.

Thus, it was pre-tested if the information was perceived as intended and therefore two reviews were selected which ensured an equally positive impression of the product to be used in both experiments.

The same method as previously was used to determine the outcomes, and the ANOVA test proved that no main effect exists between the reviews ($F(1,15) = 0.717, p = .411, \eta_p^2 = .046$).

The reviews that had similar mean scores were analyzed and the reviews 1 ($M_1 = 6.00, SD_1 = 1.713$) and 3 ($M_3 = 5.94, SD_3 = 1.692$) were selected to form part of the main study, as they are perceived equally among the participants (see Figure 3 and 4).

Figure 3 - Estimated Marginal Means of Review's Valence

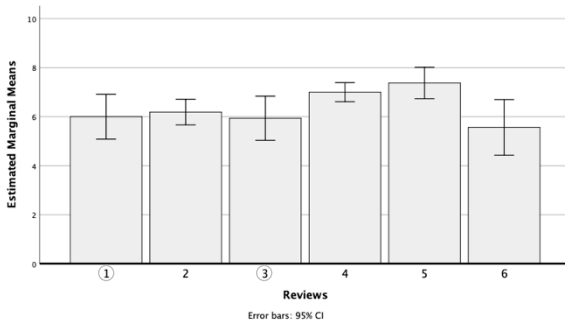
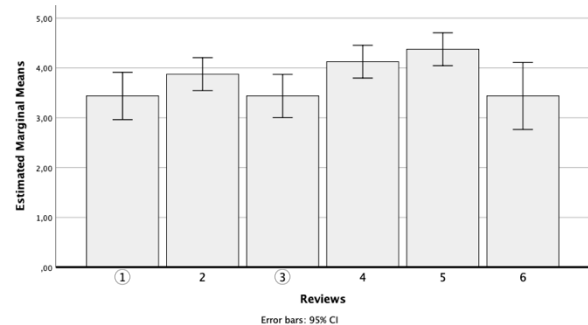


Figure 4 - Estimated Marginal Means of Product's Evaluation through Reviews



This ensured that any differences observed in experiment 1 should be attributed to the manipulations of the reviewer and the type of product.

3.2. STUDY 1

To test hypothesis *H1* (online reviews of positive valence have a greater impact on the reduction of anticipated guilt or lack of ethics in hedonic consumption compared to utilitarian consumption) and *H2* (online reviews of positive valence by consumers have a greater impact on the reduction of anticipated guilt or lack of ethics in hedonic consumption than reviews by experts or brand representatives) an experimental study was conducted.

3.2.1. Participants

The study was directed at the millennial generation. There were 195 voluntary participants, but only 152 answered the survey in its entirety, yielding an approximate response rate of 78%. After data processing, 140 valid answers were obtained.

Following the characteristics of this target, the sample presented an average age of 24 years and the majority were students (49%) and workers (44%).

The survey was mostly filled in by females, and then by males.

Both Portuguese and English languages were available, with Portuguese being the most used language (69%).

3.2.2. Materials

In order to test the hypothesis H1 and H2, the variable product type was defined and divided into two conditions.

The first condition is the utilitarian product, where visual stimuli are presented as a picture of the product and an individual using the product, together with a text describing the product as a utilitarian, highlighting some usage situations and its price (see Appendix IV).

The second condition refers to the hedonic product, with the same stimuli being presented as in the previous condition but applied to a hedonic usage of the product.

To test whether the participants perceived the products differently, the participants were asked to assess on a scale of 1 (Not at all) to 9 (Extremely) how much pleasure the product presented would give them (expecting a higher average value in the hedonic condition) and how functional the product presented would be (expecting a higher average value in the utilitarian condition).

Within each condition, the likability of each product type was also measured, and each participant was asked to evaluate on a scale of 1 (Not at all) to 9 (Extremely) several statements regarding satisfaction with the product and with some product dimensions as price.

The variable reviewer was also defined and divided into three conditions, the condition expert reviewer, brand representative reviewer and consumer reviewer. On each condition, elements such as the picture of the product received, the written review for each product type, the price of the product and the 4-star rating (on a scale of 1 to 5 stars) were presented.

Within each of these conditions, it was also intended to evaluate the variable anticipatory guilt and ethics, asking participants to evaluate a consumption emotion set (Westbrook & Oliver, 1991), on a Likert scale of 1 (Nothing) and 7 (Extremely).

3.2.3. Procedure

Similar to the pre-test, the data was collected through an online questionnaire distributed through Qualtrics, a provider of online surveys software.

The survey was spread through social media platforms such as Facebook, Whatsapp and Instagram. The convenience sampling method was used, as the direct connection to the link was shared in several Facebook groups dedicated to filling out surveys. The snowball sampling method was also used, where participants were approached by private message to respond to the survey and then encouraged to share the link with other individuals.

The survey was available in two languages (Portuguese and English) and the estimated time for completing it was approximately 5 minutes.

In the first section, a brief introduction to the survey was made available as well as some information such as the completion time and the enquirer's contact details to clarify any questions. Afterwards, some additional information was given about the task that participants have to perform.

After they were randomly assigned to a product type condition (hedonic or utilitarian) and allocated to a description and picture of the product. Taking into account the type of product resulting from the randomisation, the participant was asked to evaluate a set of statements based on their intuitions.

After evaluation of the first product, the participants were again randomised to one of three conditions. The first condition relates to the presentation of a review written by an expert accompanied by an image with the price and a 4-star rating. The second and the third conditions are conceptually identical, varying only that the reviewer is a consumer and a brand representative.

In the next section, respondents were again asked about the product features but this time they were allocated to the random option that hadn't been assigned before.

In the third section, a review by a brand representative, an expert or a consumer was presented again (a review conceptually identical to the one that had appeared in section 2) and a further request was made for the valence of the review as perceived.

Finally, in the last section, some demographic questions were asked, including age, gender, nationality and occupation. The respondent is thanked and the survey is completed.

3.2.4. Design

The experiment followed a 2 (product type: utilitarian; hedonic) x 3 (reviewer: brand representative; expert; consumer) mixed design approach, where the product type variable was manipulated within-subjects design while the reviewer variable was manipulated between-subjects design (see Table 1). A mixed experimental design was adopted since it combines the advantages of both within-subjects factors (higher statistical power) and between-subjects factors (lower risk of participants discovering the hypothesis to be tested).

Table 1 - Distribution of the participants per condition

Reviewer	Product Type	
	Hedonic	Utilitarian
Brand Representative	43	43
Expert	52	52
Consumer	45	45

3.3. STUDY 2

To reinforce and complement the results obtained in the first study, a new experiment was conducted covering the three hypotheses defined in this project. This approach was adopted to infer conclusions with greater statistical robustness and to test a new conviction, defined in *H3* (online reviews, of positive valence, conducted by socially close people have a greater impact on the reduction of anticipatory guilt or lack of ethics than reviews conducted by people who are socially distant).

3.3.1. Participants

Like the previous study, this experiment targeted the millennial generation. A response rate of 70% was obtained, with 61 valid responses.

The sample was composed mostly of female participants (56%) and male participants (41%), averaging 24 years old. Most of the participants were students (41%), workers (31%) and student-workers (21%). All the sample resided in Portugal.

3.3.2. Materials

To test the hypothesis *H1*, *H2* and *H3*, three independent variables were defined: product type, review display and social distance.

The "product type" variable was divided into two conditions: hedonic condition, where the visual stimulus was presented with a chocolate bar and a description appealing to feelings such as pleasure and emotion, as well as nutritional information about the product, including calories, fat and sugars, aiming to induce an anticipated feeling of guilt in the participant; as well as a utilitarian condition, with the same stimulus but with a cereal bar and a description emphasizing the practical and utilitarian properties of the product (see Appendix V).

The "review display" variable was also divided into two conditions: the first condition, pre-review, corresponds to a multi-item rating scale before any review was presented to the participant; the post-review condition, as the name indicates, corresponds to the same rating scale after the product review was revealed to the participant.

The final independent variable "social distance" was divided into two conditions: the closer reviewer condition, where a product review by a Portuguese consumer was presented; and the distant reviewer condition, where the review was from an Austrian consumer.

To measure the effects on these variables, participants were asked to evaluate the following dependent variables: "general satisfaction"; "perception of the consumption experience" (pleasurable vs. utilitarian); "feeling of anticipated guilt"; "feeling of ethics"; and "feeling of closeness to the reviewer" all on a scale ranging from 1 to 9.

3.3.3. Procedure

In terms of procedure, the study followed the same guidelines as the previous one, using the same methods for data collection.

The participants received a link where they voluntarily press and were informed about the study subject. Subsequently, they were given instructions on the first task, in which the respondents were asked to imagine that they were experiencing the consumption situation presented. The participants were randomly assigned to either the hedonic or utilitarian conditions, and after receiving the stimulus for each condition, they were asked to measure their overall satisfaction with the product, feelings of guilt and ethics, and perceptions of the shopping experience (pleasant vs. functional), using a scale of 1 to 9 points. Afterwards, the participants have presented a review by a Portuguese consumer (socially close) or by an Austrian consumer (socially distant). After the review was presented, the participants had to answer the same questions as before: general satisfaction with the product, feelings of guilt and ethics; and thus went through both conditions (pre and post-review).

Afterwards, they had to fill out a multi-item scale about the social distance perceived to the reviewer, and had to answer an attention control question, indicating the nationality of the reviewer.

After going through all the conditions, demographic data was collected, and at the end, an acknowledgement of participation was presented.

3.3.4. Design

Unlike the approach previously adopted, this study followed a 2 (product type: hedonic; utilitarian) x 2 (review display: pre-review; post review) x 2 (reviewer distance: close; distant) within-subjects manipulated experimental design, where all participants were exposed to each condition.

This design was chosen since it does not require a large number of participants and can help in reducing potential errors associated with perceived individual differences between groups.

Chapter 4 - Results' Analysis

The following chapter will be presented the results of both studies conducted, as well as the analysis and interpretation of the results.

4.1. STUDY 1 - Results' Analysis

After experimenting, the data were analysed to draw conclusions about the *H1* and *H2* hypotheses.

4.1.1. Basic Demographics

The study had a total of 140 valid contributions ($n = 140$), 63% of participants were females, 36% males and the remaining 1% belonged to the categories (non-binary and I do not identify myself with gender labels). The average age of the sample was $M_{age} = 24$ years old, and approximately 49% were students, 44% workers, 4% unskilled workers and the remaining 3% working students. The survey was filled mostly (76%) by residents in Portugal, 3% by residents in Germany and the remaining 21% by residents spread over several countries around the globe.

4.1.2. Data Reliability

Before proceeding to the manipulation analysis, Cronbach's alpha was measured to verify the reliability and internal consistency of the multi-item scales applied in the questionnaire.

The overall product satisfaction scale, measured by the items "Satisfied" and "Happy" (on a scale from 1 to 9 points) revealed a good level of internal consistency, since ($0.7 \geq \alpha \geq 0.9$) (see Appendix VI).

4.1.3. Manipulation Check

To test the results of the product type manipulation (hedonic vs utilitarian), the Two-Way Repeated-Measures ANOVA test was performed.

Initially, the overall satisfaction towards the product was analyzed, and as previously tested, no statistically significant effect was found ($F(1,137) = 0.377$, $p = 0.540$, $\eta_p^2 = .003$) between the satisfaction of the hedonic product ($M_H = 5.83$, $SD_H = 1.624$) and the utilitarian product ($M_U = 5.75$, $SD_U = 1.512$). Thus, any significant effect detected throughout the study will be due to the manipulation of the reviewer and will not be influenced by the likability of the product.

To test this belief, the participants' perception of the product consumption experience was analyzed (functional vs. pleasant). On average, a higher perception of functionality was expected for the utilitarian product ($M_U = 6.85$, $SD_U = 1.749$) compared to the hedonic product ($M_H = 6.50$, $SD_H =$

1.777), which turned to be true ($F(1,137) = 4.083, p = .045, \eta_p^2 = .029$). In contrast it was expected a higher average perception of pleasure for the hedonic product ($M_H = 6.11, SD_H = 1.989$) compared to the utilitarian product ($M_U = 5.95, SD_U = 1.928$). Although in the predicted direction this difference was non-significant ($F(1,137) = 0.991, p = .321, \eta_p^2 = .007$).

Therefore, the results obtained suggest that the manipulation of the independent variable (product type) was partly successful.

4.1.4. Controls

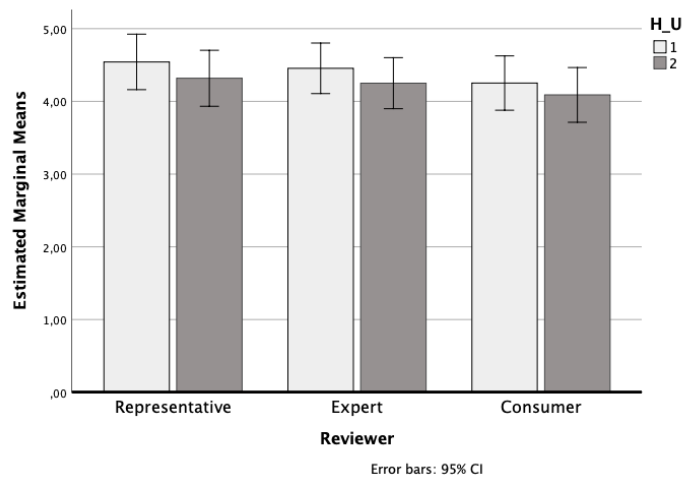
As previously stated, the independent variable “reviewer” was broken down into three distinct groups: brand representative reviewer, expert reviewer and consumer reviewer. After applying a Two-Way Repeated-Measures ANOVA test, there was no interaction effect found between the type of consumption and reviewer (see Table 2) for the measure of overall satisfaction towards the product ($F(2,137) = 1.550, p = .216, \eta_p^2 = .022$), contrary to what was expected.

Table 2 – Means and Standard Deviations (SD) of Overall Satisfaction

Measure	Reviewer	Product Type	Mean (SD)
Overall Satisfaction	Brand Representative	Hedonic	6.23 (1.619)
		Utilitarian	5.83 (1.459)
	Expert	Hedonic	5.78 (1.383)
		Utilitarian	5.83 (1.557)
	Consumer	Hedonic	5.49 (1.827)
		Utilitarian	5.57 (1.526)

Nevertheless, after revealing the review to the consumer, there was a marginal trend toward a more positive attitude toward the hedonic product compared to the utilitarian product (see Figure 5), thus, there was a marginal main effect on the product type.

Figure 5 - Estimated Marginal Means of Overall Satisfaction



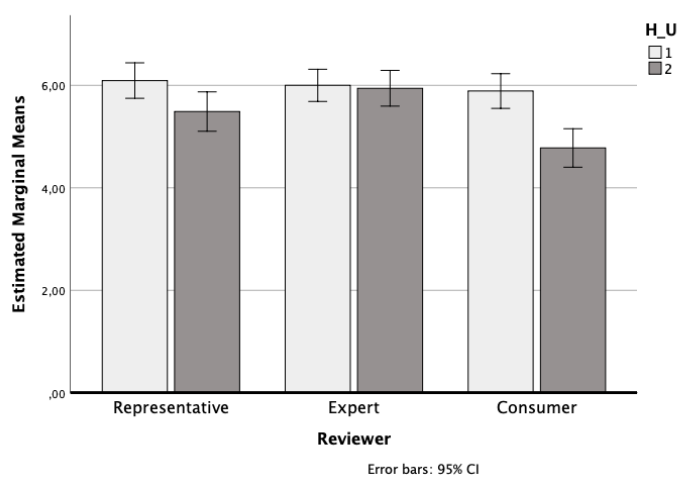
4.1.5. Main Dependent Variables

Valence

To investigate the consumers' perception of the reviews' valence, the Two-Way Repeated-Measures ANOVA was again performed.

The results revealed the existence of a main effect for the product type ($F(1,137) = 23.484, p = .000, \eta_p^2 = .146$), suggesting that consumers tend to view hedonic product reviews as having a more positive valence ($M_H = 5.992, SD_H = 1.141$) compared to utilitarian product reviews ($M_U = 5.43, SD_U = 1.353$). A statistically significant interaction was also verified ($F(2,137) = 6.718, p = .002, \eta_p^2 = .087$) between product type and reviewer (see Figure 6).

Figure 6 - Estimated Marginal Means of Review's Valence



To explore this relationship, a paired sample t-test was conducted and a statistically significant difference was found to exist which reveals that these differences between reviewers refer to utilitarian products (see Table 3).

The results further indicated that within utilitarian products, both brand representative reviews and expert reviews are significantly more positive when compared to consumer reviews (see Table 3).

It is also noticeable that the reviews left by experts are marginally more positive compared to the reviews left by brand representatives.

Table 3 - Valence, Standard Deviation (SD) and Test's Results of Review's Valence

Measure	Reviewer	Product Type	Mean (SD)	Statistical Values
Valence	Brand Representative	Hedonic	6.09 (0,996)	t (42) = 2.592 , p = 0.013 , CI95 [0.134 ; 1.075]
		Utilitarian	5.49 (1,502)	
	Expert	Hedonic	6.00 (1.299)	t (51) = 0.285 , p = 0.777 , CI95 [-0.349 ; 0.464]
		Utilitarian	5.94 (1.074)	
	Consumer	Hedonic	5.89 (1.092)	t (44) = 5.655 , p = 0.000 , CI95 [0.715 ; 1.507]
		Utilitarian	4.78 (1.241)	

Guilt

Once again, the Two-Way Repeated-Measures ANOVA test was conducted to conclude the existence of an effect of anticipatory guilt on the product type.

However, contrary to expectations, no main effect of product type was observed ($F(1,137) = 0.093$, $p = .761$, $\eta_p^2 = .001$) (hedonic product type ($M_H = 3.49$, $SD_H = 2.093$); utilitarian ($M_U = 3.44$, $SD_U = 1.994$) on the variable guilt.

The same result was true for the interaction between product type and reviewer ($F(0,137) = 0.071$, $p = .932$, $\eta_p^2 = .001$), with no effect of the independents variables (see Table 4).

Table 4 - Means and Standard Deviations (SD) of Guilt

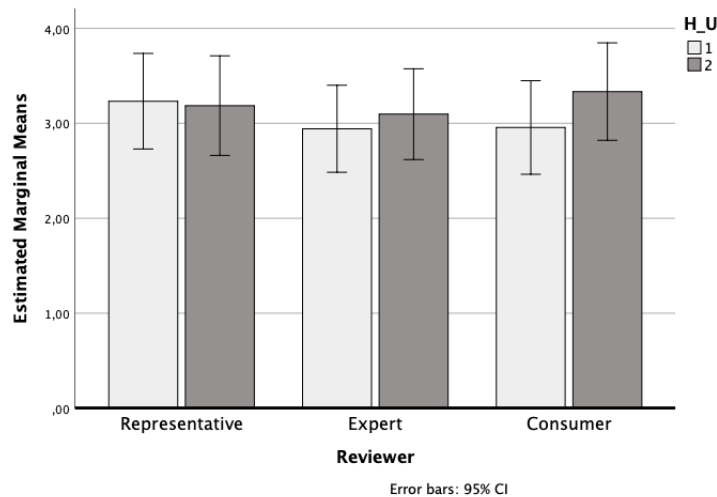
Measure	Reviewer	Product Type	Mean (SD)
Guilt	Brand Representative	Hedonic	3.49 (2.141)
		Utilitarian	3.40 (1.978)
	Expert	Hedonic	3.35 (2.113)
		Utilitarian	3.23 (2.001)
	Consumer	Hedonic	3.71 (2.052)
		Utilitarian	3.73 (2.016)

Ethics

However, to complement the previous analysis, the same test was conducted to infer the existence of an effect of the feeling of ethics on the independent variables.

The results revealed the existence of a marginal effect on product type ($F(1.137) = 3.015$, $p = .085$, $\eta_p^2 = .022$) (see Figure 7) which means that the utilitarian product makes the consumer feel marginally more ethical ($M_U = 3.20$, $SD_U = 1.731$) when comparing with the hedonic product ($M_H = 3.04$, $SD_H = 1.664$). However, no other effects were found and also no significant effect was found for the interaction between product type and reviewer ($F(2.137) = 1.645$, $p = .197$, $\eta_p^2 = .023$).

Figure 7 - Estimated Marginal Means of Ethics



Although the interaction was not statistically significant, a paired-sample t-test was conducted for each reviewer condition to further explore the differences between product type and the reviewer (see Table 5).

Table 5 - Valence, Standard Deviation (SD) and Test's Results of Ethics

Measure	Reviewer	Product Type	Mean (SD)	Statistical Values
Ethics	Brand Representative	Hedonic	3.23 (1,702)	t (42) = 0.280 , p = 0.781 , CI95 [-0,282 ; 0.382]
		Utilitarian	3.19 (1,708)	
	Expert	Hedonic	2.94 (1.564)	t (51) = -1.071 , p = 0.289 , CI95 [-0.442 ; 0.135]
		Utilitarian	3.09 (1.763)	
	Consumer	Hedonic	2.96 (1.758)	t (44) = -2.160 , p = 0.036 , CI95 [-0.730 ; -0.025]
		Utilitarian	3.33 (1.745)	

The test results showed a statistically significant interaction ($t(44) = -2.160, p = 0.036$), suggesting that reading a review about a utilitarian product ($M_U = 3.33, SD_U = 1.745$) causes the participant to feel more ethical when compared to reading a review about a hedonic product ($M_H = 2.96, SD_H = 1.758$), but only when reviewed by another consumer. This difference is not statistically significant when the review is done by a brand representative or by an expert.

4.2. STUDY 2 - Results' Analysis

To explore in greater detail the results obtained in the previous study, a new experiment was conducted to test the hypothesis *H1*, *H2* and *H3*.

4.2.1. Basic Demographics

As mentioned before, this experiment was composed of a sample of 61 participants ($N=61$), whose interval is between 18 and 40 years old ($M_{age}=24$ years old).

Regarding gender distribution, (55%) belonged to the female gender (41%) to the male gender, (2%) to non-binary gender and (2%) opted not to define themselves with gender labels.

All participants were Portuguese, and the occupations were (41%) student, (31%) employee, (21%) working student, and (7%) were unemployed.

4.2.2. Data Reliability

Before proceeding to the manipulation analysis, Cronbach's alpha was measured to verify the reliability and internal consistency of the multi-item scales applied in the questionnaire.

The overall product satisfaction scale, measured by the items "Satisfied" and "Happy" (on a scale from 1 to 9 points) revealed an excellent level of internal consistency, since ($\alpha \geq 0.9$) (see Appendix VII). The scale of the control variable of social distance towards the reviewer, measured through the items "I feel psychologically close to this consumer", "I identify with this consumer" and "I feel distant from this consumer" measured on the same point scale (1 to 9), also displayed a good level of reliability and internal consistency (see Appendix VIII).

Since the value of alpha was greater than 0.7, all items are eligible to remain in the analysis.

4.2.3. Manipulation Check

To check the success of the manipulation of the product type condition, the two-way Repeated-Measures ANOVA test was conducted for the variables measuring the perception of the consumption experience as a pleasurable experience and as a functional experience. According to the results, a main effect of the product type on both the pleasurable experience variable ($F(1.60) = 5.409, p = .023, \eta_p^2 = .083$) and the functional ($F(1.60) = 25.110, p = .000, \eta_p^2 = .295$) was found.

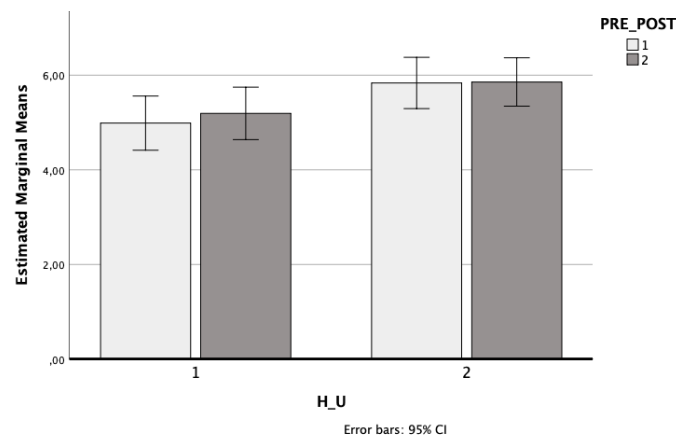
As expected, there was a higher perception of a pleasurable experience for the hedonic product ($M_H = 5.37, SD_H = 0.289$) in comparison to the utilitarian product ($M_U = 4.56, SD_U = 0.277$). The opposite was also expected for the functional experience variable, which also proved to be the case as the perception of functional experience was higher for the utilitarian product ($M_U = 5.71, SD_U = 0.285$) concerning the hedonic product ($M_H = 4.29, SD_H = 0.262$).

Therefore, the product type manipulation has proven to be effective.

To explore the result of the review display manipulation, the repeated measures ANOVA test was conducted and the general satisfaction variable was measured.

The results did not reveal the existence of a main effect of expected satisfaction pre and post reading a review ($F(1.60) = 2.798, p = .100, \eta_p^2 = .045$) (pre-review manipulation ($M_{PRE} = 5.41, SD_{PRE} = 0.201$) and post-review ($M_{POST} = 5.53, SD_{POST} = 0.200$)).

Figure 8 - Estimated Marginal Means of General Satisfaction



After exploring this relationship through a paired sample t-test, a marginally significant effect was observed, but exclusively for the hedonic type product ($t(60) = -1.834, p = 0.072$). This marginal effect exhibited a marginal improvement in overall satisfaction with the hedonic product after being presented with the product review (see Table 6). However, no effect was found for the utilitarian product ($t(60) = -0.199, p = 0.843$).

Table 6 - Valence, Standard Deviation (SD) and Test's Results of General Satisfaction

Measure	Product Type	Review Display	Mean (SD)	Statistical Values
General Satisfaction	Hedonic	Pre-review	4.98 (2.235)	$t(60) = -1.834, p = 0.072,$ CI95 [-0.428 ; 0.018]
		Post-review	5.19 (2.161)	
	Utilitarian	Pre-review	5.83 (2.113)	$t(60) = -0.199, p = 0.843,$ CI95 [-0.226 ; 0.185]
		Post-review	5.86 (1.993)	

The results of the social distance manipulation were also checked and the control items of perceived distance towards the reviewer were aggregated into a single variable. A 2x2 repeated measures ANOVA test was conducted with the condition product type and reviewer distance and it was found that the social distance manipulation did not work. The results did not revealed a significant effect ($F(1,60) = 2.557, p = .115, \eta_p^2 = .041$) of the distance variable in the product type, hedonic ($M_H = 4.72, SD_H = 0.222$) and utilitarian ($M_U = 5.15, SD_U = 0.235$).

The same was verified for the reviewer distance condition, ($F(1.60) = 0.716$, $p = .401$, $\eta_p^2 = .012$), not existing any main effect between the condition close reviewer ($M_{CR} = 5.03$, $SD_{CR} = 0.206$) and distant reviewer ($M_{DR} = 4.84$, $SD_{DR} = 0.219$).

Thus, there was no significant effect verified in the interaction of these conditions $F(1.60) = 0.416$, $p = .521$, $\eta_p^2 = .007$).

These results proved that the manipulation of the social distance condition did not work, therefore future analyses will be done ignoring the outputs of this condition. Nevertheless, the results can be seen in the appendix (see Appendix IX).

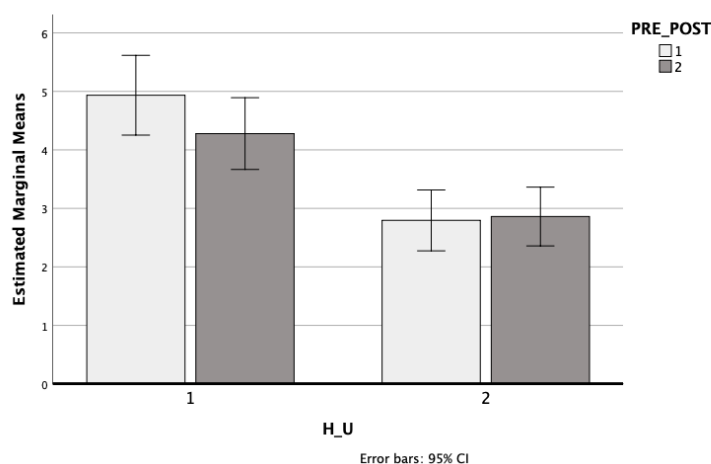
4.2.4. Main Dependent Variables

Guilt

A two-way ANOVA (product type: hedonic; utilitarian) x 2 (review display: pre-review; post-review) x 2 (reviewer distance: closer; distant) was conducted and verified the existence of a main effect of the independent variable product type $F(1.60) = 22.833$, $p = .000$, $\eta_p^2 = .276$) in guilt, indicating that the hedonic product generates a higher level of guilt ($M_H = 4.61$, $SD_H = 0.305$) in comparison to the utilitarian product ($M_U = 2.83$, $SD_U = 0.247$).

The same test also revealed a main effect of the independent variable review display $F(1.60) = 5.814$, $p = .019$, $\eta_p^2 = .088$) indicating a higher level of guilt prior to the presentation of the review ($M_{PRE} = 3.87$, $SD_{PRE} = 0.219$) and a consequent decrease after the review is shown ($M_{POST} = 3.57$, $SD_{POST} = 0.212$) (see Figure 9).

Figure 9 - Estimated Marginal Means of Guilt



A significant interaction was also found between product type and review display $F(1.60) = 15.869$, $p = .007$, $\eta_p^2 = .114$). The analysis was decomposed using a paired sample t-test and it was found that there is a statistically significant effect in the review display condition, but when the product is

hedonic ($t(60) = 3.031, p = 0.004$). The results reveal that after the product review is presented, the guilt associated with hedonic consumption ($M_{PRE} = 4.93, SD_{PRE} = 2.659$) is reduced ($M_{POST} = 4.28, SD_{POST} = 2.395$). When it comes to utilitarian product, the effect is not significant (see Table 7).

These results suggest that reviews from other consumers play a role in hedonic consumption as reducers of guilt.

Table 7 - Valence, Standard Deviation (SD) and Test's Results of Guilt

Measure	Product Type	Review Display	Mean (SD)	Statistical Values
Guilt	Hedonic	Pre-review	4.93 (2.659)	$t(60) = 3.031, p = 0.004$, CI95 [-0.325 ; 0.194]
		Post-review	4.28 (2.395)	
	Utilitarian	Pre-review	2.80 (2.032)	$t(60) = -0.505, p = 0.615$, CI95 [-0.325 ; 0.194]
		Post-review	2.86 (1.960)	

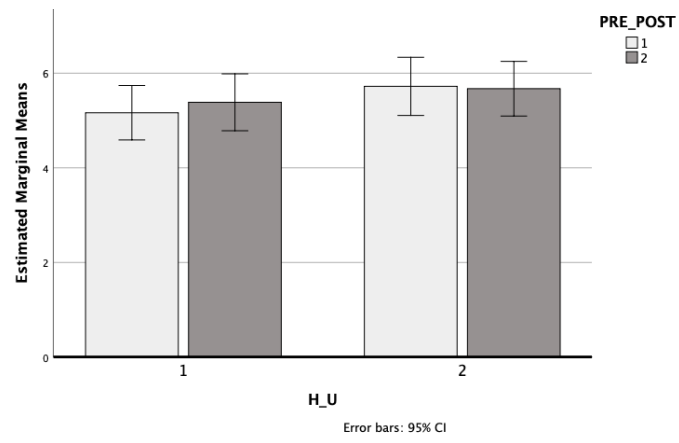
Ethics

To complete the previous analysis, a 2-Way ANOVA (product type: hedonic; utilitarian) x 2 (review display: pre-review; post-review) x 2 (reviewer distance: closer; distant) was conducted for the dependent variable ethics and a marginal effect caused by the product type variable was found $F(1,60) = 2.959, p = .091, \eta_p^2 = .047$, hedonic ($M_H = 5.27, SD_H = 0.281$) and utilitarian ($M_U = 5.76, SD_U = 0.288$), and no other main effects were found.

However, when analyzing this interaction in more detail using a paired sample t-test, a marginal effect on product type was also found ($t(60) = -1.886, p = 0.064$), pointing to a greater sense of ethics for the utilitarian product ($M_U = 5.72, SD_U = 2.402$) compared to the hedonic product ($M_H = 5.16, SD_H = 2.248$), just as it was expected.

However, no main effect was found to be caused by the review display condition $F(1,60) = 0.016, p = .899, \eta_p^2 = .000$ in the variable ethics (see Figure 10). There was also no significant interaction between product type and review display $F(1,60) = 1.103, p = .298, \eta_p^2 = .018$ in ethics was verified.

Figure 10 - Estimated Marginal Means of Ethics



Chapter 5: Main Conclusions, Limitations and Future Research

5.1. Discussion and Main Conclusions

The main purpose of this study was to explore the effect that online positive reviews could have on reducing negative emotions, in particular reducing anticipatory guilt in consumption (*RQ*).

Considering the existing literature, the conviction was that the impact of guilt reduction would be more accentuated for hedonic consumption than for utilitarian consumption (*HI*). This conviction was confirmed by the two tests conducted.

In the first study, the hedonic/utilitarian condition was manipulated using similar product attributes and the reviews presented in each variant were pre-tested as both conceptually identical and having the same valence. Therefore, the results from this manipulation have shown the existence of the main effect and have proven that consumers tend to perceive reviews of hedonic products as more positive compared to reviews of utilitarian products.

A similar analysis was conducted to test the effect on guilt reduction, and contrary to what was expected, there were no differences between the hedonic/utilitarian variants. However, when analyzing the behaviour of the variable ethics, a marginal effect was detected, suggesting that reviews of utilitarian products cause consumers to feel more ethical, as compared to reviews of hedonic products.

As assessed in the literature review, anticipatory consumer guilt is nothing less than a negative emotion that occurs whenever consumers become aware that their behaviour is inconsistent with their moral standards (Baumeister et al., 1995). That is, the feeling of anticipatory guilt in consumption arises when the consumer feels morally uncomfortable, i.e., unethical about his/her decision making. In summary, the first study evidenced that consumers placed more value on reviews directed towards hedonic products. These reviews, however, only made consumers feel more ethical/less guilty when the reviews were directed towards utilitarian products, albeit marginally so.

A second study was conducted due to the lack of results robustness and some limitations detected in terms of methodology, such as the manipulation of the product type was too subtly.

The second study revealed stronger results and gave strength to the hypothesis previously tested (*HI*). In addition to manipulating the hedonic/expert condition, the perception of consumers was measured both before and after the review was displayed. The results indicate that the anticipated guilt level felt by the customers before they saw the review was higher for the hedonic product than for the utilitarian product. After the review was presented, it was found that the feeling of anticipatory guilt decreased for both products, with this decrease being more pronounced for the hedonic product. These

results asserted that the insights established through the literature review, and the suspicions gained through the analysis of the data from study 1 were correct. Therefore *H1* was verified.

Also deriving from the existing literature the intuition (*H2*) that this reduction in guilt would be more pronounced for reviews left by other consumers than for reviews left by experts or brand representatives was generated.

The results of study 1, showed the main effect of the reviewer on the valence of the review variable, exclusively for the utilitarian product condition.

Consumers did not distinguish any differences between the various reviewers when the reviews were of hedonic products. However, when the reviews were of utilitarian products by experts or brand representatives, consumers perceived a positive bias in their evaluation.

This positive bias stems from the fact that consumers identify commercial nature in reviews made by experts and brand representatives (E. W. Anderson, 1998). This generates distrust in the opinion of these reviewers and hence the perception of hedonic product reviews as "overly" positive.

In this way, consumers rely more on the opinion of other consumers, since information created by other consumers even if anonymous, has no commercial nature (E. W. Anderson, 1998). Furthermore, consumers manifest a greater emotional involvement with information generated by other consumers, because transmits emotions and feelings, compared to only objective information, created by professionals (Elwalda & Lu, 2016; Park et al., 2007).

When the same analysis was done for the guilt/ethics variables, no main effect was found for anticipated guilt, however a statistically significant effect was found, revealing that consumers felt more ethical when they had seen the utilitarian product review, but only when this review was done by other consumers.

This data permits the inference that consumers only feel more or less ethical when involved in social contexts. That is, considering hedonic or utilitarian consumption is irrelevant for the consumer's feeling of ethics when the review is conducted by an expert or a brand representative, as these reviewers are linked to commercial nature (E. W. Anderson, 1998). Thus, when consumers read a review by an expert or brand representative they focus only on the commercial dimension, which distances them emotionally from these reviewers and therefore are not affected at the guilt/ethical feeling level.

On the other hand, when the review is done by another consumer, participants feel emotionally closer to that person, and consider themselves to be in the same social context as that person (E. W. Anderson, 1998b; Cheung et al., 2008; Cialdini, 2007). Thus, reading reviews done by other consumers make the consumer feel more ethical, compared to a review of a hedonic product. Thus, it was concluded that the test of *H2* was successful.

To further strengthen the results obtained previously, we also tried, in study 2, to test hypothesis *H3*, which suggested that this feeling of guilt could be more easily reduced by people who were socially close than by people who were socially distant. However, this manipulation did not work, making it impossible to test the veracity of *H3*.

5.2. Academic and Managerial Implications

This research has originated, at the academic level, important conclusions that enrich scientific knowledge in the area of Marketing and Hedonic Experiences.

In addition to revealing that online consumer reviews with positive valence can play a role in reducing anticipatory guilt and boosting a sense of ethics in consumption, this research will also encourage other investigators in the scientific community to explore this topic.

Furthermore, the current findings assume a huge relevance for the corporate world, since the data collection points out the importance that companies should give to organic content management, as well as to e-WOM management and the creation of strategies such as the development of their website where customers can give feedback on products and services, inspiring buying confidence to other consumers. Particularly companies where their business is characterized by hedonic products and services.

5.3. Limitations and Future Research

One of the main limitations of both studies relates to the sample size, study 1 ($n = 140$) and study 2 ($n = 61$), which was relatively small. Well-consolidated sample size would have provided stronger external validity to the studies.

Another important limitation is linked to methodological problems. One of these problems was identified in study 1, as the stimuli used were too subtle. The choice of earphones as the stimulus for the product-type manipulation was not successful. Although the presentation of the product was accompanied by a suggestive text about the type of consumption experience (hedonic or utilitarian) in each condition, consumers often see this technological product as utilitarian, due to the functionality and practicality it offers. Thus, it is believed that the manipulation of this condition was subtle, which made it difficult to find statistically significant differences with small sample size. Study 2 was replicated considering this limitation, however, to enhance the results, a replication but with more sets of products from different categories to evaluate would make the test result more robust.

Besides this, another methodological problem was identified in study 1, namely in the choice of moderators for manipulating the independent variable reviewer. It was chosen expert reviewer and

brand representative to moderate the effect against the consumer reviewer condition. However, these moderators represent an authority bias, since they are associated with holders of in-depth and technical knowledge about the product. Thus, authority is contrasted with social proximity (consumers like me) and a negative bias in the consumer reviewer condition was found.

Thus, study 1 should be redone, contemplating a set of different products in the manipulation of the product type condition, such as chocolate bar versus cereal bar; fruit juice versus flavoured water; branded versus a non-branded t-shirt, among others. And also accompanied by appropriate moderators or only with consumer reviews and manipulating the review display condition, analyzing the effect before the review and after the review.

Study 2 also detected a methodological problem in terms of social distance manipulation. When analyzing the control question, it was perceived that the manipulation did not work because the participants did not feel any distance between the Portuguese reviewer and the Austrian reviewer.

One of the factors responsible for the failure of this manipulation may be related to the fact that both consumer reviewers were online, and the manipulation of the social distance condition was focused on the location of the reviewers. When consumers enter the online universe, they perceive that all other consumers, regardless of the country they belong to, are all at the same distance, i.e., one click away. Thus, the use of spatial distance did not work, thus leaving room for future studies using other dimensions of social distance. One dimension that could work would be in-group versus out-group manipulation. Stimuli such as football clubs could be used, for example, a review left by a consumer who is a fan of my team versus a review left by a consumer who is a fan of the rival club); or even, a review left by a friend versus a review left by a stranger.

Besides the replication of the same studies taking into account the correction of the limitations presented, it could also be interesting as a suggestion for future research to explore the effect that negative reviews may have in terms of increased guilt and decreased ethics, not only for hedonic products but also for utilitarian products.

Appendix

Appendix I – Decoding Decision Model



Source: Rennie et al., 2020.

Appendix II – Summary of the six biases that influence the messy middle in Decoding Decision Model

Biases		Description
1	Category heuristics	Are shortcuts or rules of thumb that aid us in making a quick and satisfactory decision within a given category.
2	Authority bias	Describes the tendency to alter our opinions or behaviours to match those of someone we consider to be an authority on a subject.
3	Social proof	Describes the tendency to copy the behaviour and actions of other people in situations of ambiguity or uncertainty.
4	Power of now	Describes the fact that we tend to want things now rather than later.
5	Scarcity bias	Is based on the economic principle that rare or limited resources are more desirable.
6	Power of free	Describes the fact that there is something special about the price of zero. The demand for a product or service is significantly greater at a price of exactly zero compared to a price even slightly greater than zero.

Source: Rennie et al., 2020.

Appendix III – Pre-test Questionnaire

Task 1: In the following section you will be presented with several products. Your task will be to evaluate each product according to your intuitions and beliefs.

Remember that there are no right or wrong answers, we are simply interested in understanding how people think and decide in different consumer contexts.

[The following images were presented individually and randomly assigned to the participants with the questions listed below]

Picture 1



Picture 2



Picture 3



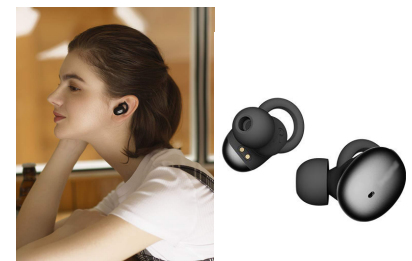
Picture 4



Picture 5



Picture 6



Q1: Overall, how happy are you with this product?

1 – Not happy at all 2 3 4 5 6 7 8 9 – Extremely happy

Q2: How likely is it that you would recommend this product to a friend or a colleague?

1 – Not at all likely 2 3 4 5 6 7 8 9 10 – Extremely likely

Q3: How would you describe your anticipated pleasure with this product?

1 – Not pleased at all	2	3	4	5	6	7	8	9 – Extremely pleased
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q4: Imagine you bought this product. Please rate how guilty this product would make you feel.

1 – Not guilty at all	2	3	4	5	6	7	8	9 – Extremely guilty
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Task 2: Imagine now that you are going to buy a product of this category and have at your disposal several reviews.

Your task will be to evaluate each review according to your intuitions and beliefs.

[The following reviews were presented individually and randomly assigned to the participants with the questions listed below]

Review 1 The sound quality is really good. The earphones are surprisingly comfortable and with good finishes.

The noise cancelling isn't the best. But it's good for earphones. If you are expecting to use them in an extremely loud environment you will probably overhear some noise.

Review 2 I wanted something I could use while riding a bike, and because it protrudes from the ear they catch some wind noise when listening to music. This also reflects when trying to talk. In addition to this aspect, these earphones have a fantastic sound, are super comfortable and have good battery life.

Review 3 Good value for money! Earphones with great sound quality, very elegant design and robust material.

The only thing that disappointed me surprisingly was the fact that there is no physical volume control, all adjustments should be made from any device you are listening to.

Review 4 I have to say that the sound quality on these is pretty amazing.

The fit is good. You get an app with them and it makes it super convenient. One thing that bothers me is the fact that they are only available in one colour which makes them too basic for their superior category.

Review 5 Great earphones! These block out any background noise and amplify what the other person is saying on the phone call. I also enjoy listening to music with these when I am doing my workouts, they never fall or slip from my ear and I am confident in running with them. I have not had any issues with them disconnecting from my device. But I do however wish that the battery lasted longer. I typically have to charge them every 2 days for a full workday. It is the only negative aspect.

Review 6 They're small, lightweight, and compact. I can wear them for hours without my ears hurting. The sound is excellent. An hour's charge brings them to nearly 100%. However, the right earpiece discharges faster than the left earpiece (2-hour difference). I don't know why the producer didn't give a bigger battery capacity to the right earpiece to compensate the power consumption. But in general, they are a great option.

Q5: How positive do you consider the review presented above?

1 – Not positive at all	2	3	4	5	6	7	8	9 – Extremely positive
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q6: According to the review presented, how would you evaluate the product?

Stars 

Appendix IV – Study 1 Questionnaire

Welcome Page:

Dear Participant! Thank you for agreeing to participate in this survey.

The present survey is integrated into a research project on hedonic consumption designed to contribute to the conclusion of the Master's Thesis of the researcher.

All answers are strictly confidential and anonymous and will be used for the purpose of this research only. There are no right or wrong answers, so please answer as truthfully as possible.

The estimated time for completing the survey is 5 minutes.

If you have any questions regarding participation, please contact: 152119096@alunos.lisboa.ucp.pt.

Thank you for your cooperation!

Juliana Pereira da Silva

MSc in Management with specialization in Strategic Marketing, Católica Lisbon SBE

Task description: The following section seeks to understand the decision making process for buying products in everyday life. You will be presented with one pair of products. Your task will be to evaluate each product according to your personal intuitions and beliefs. Remember that there are no right or wrong answers, we are simply interested in understanding how people think and decide in different consumer contexts.

Please move forward to start the study. Thank you.

[The variable Product Type was divided into two conditions (Utilitarian product vs Hedonic product). The order of the conditions was randomised and participants went through both conditions by answering the same set of questions.]

CONDITION 1: Utilitarian Product

Imagine that you want to buy an audio device. You have the following option: In-ear earphones. These earphones were created to **improve your work experience**. Through its viscoelastic composition it allows each earpiece to fit your ear perfectly. They also have a tactile interface that allows you to receive and turn off your calls. In addition, it has an integrated microphone that allows you to be clearly heard in your meetings with clients and co-workers. Through these features you will **save time and experience improvements in your productivity at work**.

Only for 300€.



CONDITION 2: Hedonic Product

Imagine that you want to buy an audio device. You have the following option: In-ear earphones. These earphones are designed to **give you moments of pure pleasure and fun**. The sound has been optimized to ensure that you can listen to all nuances of your favorite **music** and its tactile interface allows you to quickly change tracks. At the same time, its maximum comfort and luxurious design offers everything you need to accompany your **movies and TV shows** in a great way. If you are a fan of **video games** these earphones have an incorporated microphone that allows you to discuss the best game strategies with your friends.

Only for 300€.



[Set of questions presented below the figure under both conditions.]

Q3.1: How much **would you like** to have this product?

Please rate on a scale of 1-9, where 1 means "Not at all" and 9 means "Totally".

1 – Not at all	2	3	4	5	6	7	8	9 – Totally
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q3.2: How would you describe your **satisfaction** with the **features** of the product presented?

Please rate your satisfaction on a scale of 1-9, where 1 means "Not Satisfied at all" and 9 means "Extremely Satisfied".

1 – Not satisfied at all	2	3	4	5	6	7	8	9 – Extremely satisfied
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q3.3: How would you describe your **satisfaction** with the **price** of the product presented?

Please rate your satisfaction on a scale of 1-9, where 1 means "Not Satisfied at all" and 9 means "Extremely Satisfied".

1 – Not satisfied at all	2	3	4	5	6	7	8	9 – Extremely satisfied
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q3.4: How would you describe your anticipated **pleasure** with the product presented?

Please rate how pleasurable you expect this product to be on a scale from 1-9, where 1 means "Not Pleasurable at all" and 9 means "Extremely Pleasurable".

1 – Not pleasurable at all	2	3	4	5	6	7	8	9 – Extremely pleasurable
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q3.5: How would you describe your satisfaction with the perceived **functionality** of the product presented?

Please rate how functional you expect this product to be on a scale from 1-9, where 1 means "Not Functional at all" and 9 means "Extremely Functional".

1 – Not functional at all	2	3	4	5	6	7	8	9 – Extremely functional
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q3.6: How would you describe your satisfaction with the **overall perceived quality** of the product presented?

Please rate your satisfaction on a scale of 1-9, where 1 means "Not Satisfied at all" and 9 means "Extremely Satisfied".

1 – Not satisfied at all	2	3	4	5	6	7	8	9 – Extremely satisfied
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q3.7: How satisfied would you be **if you had** this product?

Please rate your satisfaction on a scale of 1-9, where 1 means "Not Satisfied at all" and 9 means "Extremely Satisfied".

1 – Not satisfied at all	2	3	4	5	6	7	8	9 – Extremely satisfied
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[The variable Reviewer was divided into three conditions (expert reviewer, consumer reviewer, brand representative reviewer). The participants were randomised to respond to one of the conditions and the same set of questions.]

CONDITION 3 – Reviewer [Expert reviewer / consumer reviewer / brand representative reviewer]

Utilitarian Product

This product has already some **online reviews** left by some **experts / consumer / brand representatives**.

Following is one of these reviews:



Review

EARPHONES

The sound quality is really good. The earphones are surprisingly comfortable. The noise cancelling isn't the best. But it's good for earphones. If you are expecting to use them in an extremely loud environment you will probably overhear some noise.

Hedonic Product

This product has already some **online reviews** left by some **experts / consumers / brand representatives**.

Following is one of these reviews:



Review

EARPHONES

Good value for money! Earphones with great sound quality, very elegant design and robust material.

The only thing that disappointed me surprisingly was the fact that there is no physical volume control, all adjustments should be made from any device you are listening to.

[Set of questions presented below each review.]

Q4: How **positive** do you consider the **review** presented above?

Please rate on a scale of 1-7, where 1 means "Not Positive at all" and 7 means "Extremely Positive".

1 – Not positive at all	2	3	4	5	6	7 – Extremely positive
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q5: Imagine you decided to purchase this product.

Please think of how purchasing this product would make you feel, and rate how much you would feel on a scale of 1 (Not at all) to 7 (Extremely).

	1 – Not positive at all	2	3	4	5	6	7 – Extremely positive
Satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guilty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intelligent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shallow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ethical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Demographics:

We are almost done.

Before we finish, please answer a few demographic questions.

What is your age?

0 _____ (slider option) _____ 90

What is your gender?

- Male
- Female
- Transgender
- Non-binary
- I rather not define my gender

In which country do you currently reside?

Label: List of countries

What is your occupation?

Student
Employed
Unemployed
Retired
Other

Appendix V – Study 2 Questionnaire

[This survey targeted the portuguese millennial population. For this reason it was distributed in portuguese language. Below follows the original version.]

Welcome Page:

Obrigada por concordar em participar neste questionário.

O presente questionário está integrado num projecto de investigação sobre o consumo hedónico concebido para contribuir para a conclusão da tese de mestrado do investigador.

Todas as respostas são tratadas de forma confidencial e anónima e apenas serão usadas para efeitos deste estudo. Não existem respostas corretas ou erradas, por isso, responda da forma mais sincera possível. O tempo estimado para completar este inquérito é de 5 minutos.

Caso surja alguma dúvida, por favor contacte: jupesilva@ucp.pt.

Obrigada pela sua colaboração!

Juliana Pereira da Silva

MSc in Management with specialization in Strategic Marketing, Católica Lisbon SBE

Task Description:

A secção seguinte procura compreender o processo da tomada de decisão para a compra de produtos na vida quotidiana.

Ser-lhe-á apresentada uma **situação de consumo**. A sua tarefa será imaginar que é o **protagonista dessa situação** e avaliar as suas compras de acordo com as suas intuições e crenças pessoais. Lembre-se que não existem respostas certas ou erradas, estamos simplesmente interessados em compreender como as pessoas pensam e decidem em diferentes contextos de consumo.

Por favor, avance para iniciar o estudo.

Obrigada.

Consumption Situation:

Imagine que estava às **compras para o seu lanche**:

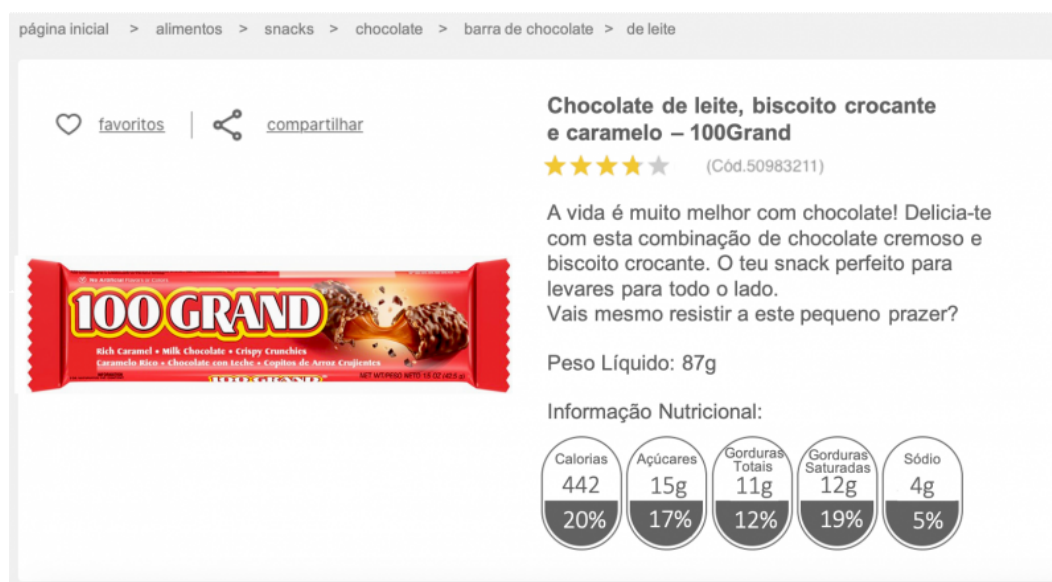
Parou no corredor dos snacks e pegou em **dois chocolates** e **duas barras de cereais** e adicionou-os ao seu carrinho.

Quando chegou a casa percebeu que na hora da compra não tinha refletido muito sobre as suas escolhas e por isso, foi **pesquisar** sobre as diferentes marcas e produtos **que tinha comprado**.

CONDITION 1: Hedonic 1 (Pre-review; Close Reviewer)

Resultado da pesquisa: "Chocolate 100Grand"

(por favor, analise a informação apresentada)



página inicial > alimentos > snacks > chocolate > barra de chocolate > de leite

favoritos | compartilhar

Chocolate de leite, biscoito crocante e caramelo – 100Grand

★★★★☆ (Cód.50983211)

A vida é muito melhor com chocolate! Delicia-te com esta combinação de chocolate cremoso e biscoito crocante. O teu snack perfeito para levares para todo o lado. Vais mesmo resistir a este pequeno prazer?

Peso Líquido: 87g

Informação Nutricional:

Calorias	Açúcares	Gorduras Totais	Gorduras Saturadas	Sódio
442	15g	11g	12g	4g
20%	17%	12%	19%	5%

CONDITION 2: Hedonic 2 (Pre-review; Distant Reviewer)

Resultado da pesquisa: "Chocolate Baby Ruth"

(por favor, analise a informação apresentada)

página inicial > alimentos > snacks > chocolate > barra de chocolate > amendoim

[favoritos](#) | [compartilhar](#)

Chocolate cremoso, amendoim, caramelo e biscoito – Baby Ruth


★★★★★ (Cód.50983211)

Delicia-te com esta pequena maravilha! Barra de chocolate repleta de amendoins, rica em caramelo e com biscoito crocante. Perfeita para transformares as tuas pausas em momentos de puro prazer e diversão.

Peso Líquido: 87g

Informação Nutricional:

Calorias	Açúcares	Gorduras Totais	Gorduras Saturadas	Sódio
442	15g	11g	12g	4g
20%	17%	12%	19%	5%



CONDITION 3: Utilitarian 1 (Pre-review; Close Reviewer)

Resultado da pesquisa: "Barra de Cereais Gold Nutrition"

(por favor, analise a informação apresentada)

página inicial > alimentos > snacks > cereais > barra de cereais > com fruta

[favoritos](#) | [compartilhar](#)

Barra de Cereais sem adição de açúcares, com alto teor de fibras – GoldNutrition

★★★★★ (Cód.50983211)

Barra nutritiva para todos os que pretendem comer um snack delicioso sem comprometer a sua dieta. Totalmente isenta de gordura hidrogenada e açúcar adicionado. Sabor conferido pelos frutos desidratados.

Peso Líquido: 87g

Informação Nutricional:

Calorias	Açúcares	Gorduras Totais	Gorduras Saturadas	Sódio
102	1,4g	2g	1,2g	0,06g
8%	1,5%	3%	1,7%	0,1%



CONDITION 4: Utilitarian 2 (Pre-review; Distant Reviewer)

Resultado da pesquisa: "Barra de Cereais Power Bar"

(por favor, analise a informação apresentada)

página inicial > alimentos > snacks > cereais > barra de cereais > com fruta

[favoritos](#) | [compartilhar](#)

Barra de Cereais, zero açúcares e com alto teor proteico – Power Bar

★★★★★ (Cód.50983211)

Procura uma barra nutritiva e com sabor? Se sim, então esta deliciosa barra de proteínas é a companhia ideal para si. Ótima para o seu lanche pós treino e para qualquer altura do dia. Sabor conferido pela fruta.

Peso Líquido: 87g

Informação Nutricional:

Calorias	Açúcares	Gorduras Totais	Gorduras Saturadas	Sódio
102	1,4g	2g	1,2g	0,06g
8%	1,5%	3%	1,7%	0,1%



[Set of questions presented below each condition PRE review.]

Q1: Tendo em conta a informação apresentada, avalie numa escala de 1-9, onde 1 significa "Nada" e 9 "Totalmente", a sua **concordância** com as seguintes afirmações:

	Nada					Totalmente			
	1	2	3	4	5	6	7	8	9
Sinto-me feliz com a compra deste produto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sinto-me satisfeito com a compra deste produto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sinto-me culpado com a compra deste produto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sinto-me confortável moralmente (ético) com a compra deste produto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q2: Antes de experimentar o produto acima apresentado, como classificaria a sua perceção acerca da experiência de consumo do mesmo.

Por favor avalie, numa escala de 1-9, onde 1 significa "Nada" e 9 significa "Totalmente" a sua **concordância** com o tipo de **experiência apresentada**:

	Nada					Totalmente			
	1	2	3	4	5	6	7	8	9
Prazerosa / divertida	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Funcional / utilitária	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONDITION 5: Hedonic 1 (Post-review; Close Reviewer)

Para obter ainda mais informações sobre este produto, foi procurar algumas **reviews** (avaliações) deixadas por **outros consumidores**.

Segue-se uma das reviews encontradas, deixada pela **Maria**, uma consumidora residente em **Coimbra, Portugal**:

Avaliações

Delicioso

★★★★☆

01/04/2020

Simplemente delicioso! Ótima textura, macia e com sabor, tamanho adequado.

 **Maria Andrade**
Coimbra, Portugal   comprei e avaliei



[ver mais reviews](#)

CONDITION 6: Hedonic 2 (Post-review; Distant Reviewer)

Para obter ainda mais informações sobre este produto, foi procurar algumas **reviews** (avaliações) deixadas por outros consumidores.

Segue-se uma das reviews encontradas, deixada pelo **Maximilian**, um consumidor residente em **Innsbruck, Áustria**:

Avaliações

Maravilhoso

★★★★☆

01/04/2020

Muito saboroso! O caramelo derrete-se na boca e ao mesmo tempo sentimos os amendoins crocantes.

 **Maximilian Gruber**
Innsbruck, Áustria   comprei e avaliei



[ver mais reviews](#)

CONDITION 7: Utilitarian 1 (Post-review; Close Reviewer)

Para obter ainda mais informações sobre este produto, foi procurar algumas reviews (avaliações) deixadas por outros consumidores.

Segue-se uma das reviews encontradas, deixada pela **Filipa**, uma consumidora residente em **Setúbal, Portugal**:




Avaliações


Saborosa

★★★★☆

01/04/2020

Barra muito saborosa! Bons níveis nutricionais. Saudável para comer entre as refeições.

 Filipa Silva
Setúbal, Portugal  



[ver mais reviews](#)

CONDITION 8: Utilitarian 2 (Post-review; Distant Reviewer)

Para obter ainda mais informações sobre este produto, foi procurar algumas reviews (avaliações) deixadas por outros consumidores.

Segue-se uma das reviews encontradas, deixado pelo **Alexander**, um consumidor residente em **Bregenz, Áustria**:


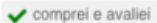
Avaliações


Bom sabor

★★★★☆

01/04/2020

Boa textura e sabor! Saudável, com bons níveis nutricionais. Ótima para levar na mala e comer depois do treino.

 Alexander Schmidt
Bregenz, Áustria  



[ver mais reviews](#)

[Set of questions presented below each condition POST review.]

Q3: Tendo em conta a informação apresentada, avalie numa escala de 1-9, onde 1 significa "Nada" e 9 "Totalmente", a sua **concordância** com as seguintes afirmações:

	Nada					Totalmente			
	1	2	3	4	5	6	7	8	9
Sinto-me feliz com a compra deste produto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sinto-me satisfeito com a compra deste produto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sinto-me culpado com a compra deste produto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sinto-me confortável moralmente (ético) com a compra deste produto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q4: Tendo em conta o review apresentado acima, como descreve o seu **sentimento face ao autor** deste review?

Por favor, numa escala de 1 a 9, onde 1 significa "Nada" e 9 "Totalmente", classifique qual o seu **grau de concordância** com as seguintes afirmações:

	Nada					Totalmente			
	1	2	3	4	5	6	7	8	9
Sinto-me psicologicamente próximo deste consumidor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identifico-me com este consumidor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sinto-me distante deste consumidor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q5: Qual o **país de residência** do autor do review apresentado anteriormente?

- Portugal
- Áustria
- França
- Holanda

Demographics:

Estamos mesmo a terminar.

Responda apenas a algumas questões demográficas:

Qual a sua idade?

0 _____ (slider option) _____ 90

Qual o seu género?

- Masculino
- Feminino
- Transgénero
- Não-binário
- Prefiro não definir o meu género

Em que país reside atualmente?

- Portugal
- Outro: _____

Qual é a sua ocupação?

- Estudante
- Trabalhador-estudante
- Empregado
- Desempregado
- Reformado
- Outro _____

Appendix VI – Internal Consistency Check of Satisfaction Measure (Study 1)

Variable	Cronbach Alfa	Number of Items	Internal Consistency
Satisfaction Pre Review - H	0.863	5	$0.9 > \alpha \geq 0.8$ (Good)
Satisfaction Pre Review - U	0.839	5	$0.9 > \alpha \geq 0.8$ (Good)
Satisfaction Post Review - H	0.802	3	$0.9 > \alpha \geq 0.8$ (Good)
Satisfaction Post Review - U	0.742	3	$0.8 > \alpha \geq 0.7$ (Acceptable)

Appendix VII – Internal Consistency Check of Reviewer Distance Measure (Study 2)

Variable	Cronbach Alfa	Number of Items	Internal Consistency
Hedonic_Closer_Pre Review	0.959	2	$\alpha \geq 0.9$ (Excelent)
Hedonic_Closer_Post Review	0.974	2	$\alpha \geq 0.9$ (Excelent)
Hedonic_Distant_Pre Review	0.963	2	$\alpha \geq 0.9$ (Excelent)
Hedonic_Distant_Post Review	0.950	2	$\alpha \geq 0.9$ (Excelent)

Utilitarian_Closer_Pre Review	0.971	2	$\alpha \geq 0.9$ (Excelent)
Utilitarian_Closer_Post Review	0.949	2	$\alpha \geq 0.9$ (Excelent)
Utilitarian_Distant_Pre Review	0.969	2	$\alpha \geq 0.9$ (Excelent)
Utilitarian_Distant_Post Review	0.919	2	$\alpha \geq 0.9$ (Excelent)

Appendix VIII – Internal Consistency Check of Reviewer Distance Measure per Product Type (Study 2)

Variable	Cronbach Alfa	Number of Items	Internal Consistency
Hedonic (closer reviewer)	0.752	3	$0.8 > \alpha \geq 0.7$ (Acceptable)
Hedonic (distant reviewer)	0.847	3	$0.9 > \alpha \geq 0.8$ (Good)
Utilitarian (closer reviewer)	0.812	3	$0.9 > \alpha \geq 0.8$ (Good)
Utilitarian (distant reviewer)	0.836	3	$0.9 > \alpha \geq 0.8$ (Good)

Appendix IX – Means, Standard Deviations (SD) and ANOVA’s Results of Social Distace Manipulation (Study 2)

Measure	Social Distance	Mean (SD)	Statistical Values
General Satisfaction	Closer	5.44 (0.222)	$F(1.60) = 0.142, p = .708, \eta_p^2 = .002$
	Distant	5.49 (0.199)	
Guilt	Closer	3.81 (0.216)	$F(1.60) = 2.098, p = .153, \eta_p^2 = .034$
	Distant	3.62 (0.218)	
Ethics	Closer	5.49 (0.265)	$F(1.60) = 0.016, p = .899, \eta_p^2 = .000$
	Distant	5.48 (0.257)	

References

- Anderson, E. W. (1998). Customer Satisfaction and Word of Mouth. *Journal of Service Research*, 1(1), 5–17. <https://doi.org/10.1177/109467059800100102>
- Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology and Marketing*, 20(2), 123–138. <https://doi.org/10.1002/mar.10063>
- Babin, B. J., Darden, W. R., & Griffin, M. (1994b). Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value. *Journal of Consumer Research*, 20(4), 644–656.
- Barry, T. E., & Howard, D. J. (1990). A Review and Critique of the Hierarchy of Effects in Advertising. *International Journal of Advertising*, 9(2), 121–135. <https://doi.org/10.1080/02650487.1990.11107138>
- Batra, R., & Ahtola, O. T. (1991). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters*, 2(2), 159–170. <https://doi.org/10.1007/BF00436035>
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1995). Personal narratives about guilt: Role in action control and interpersonal relationships. *Basic and Applied Social Psychology*, 17(1–2), 173–198. https://doi.org/10.1207/s15324834basp1701&2_10
- Belch, G., & Belch, M. (2009). *Advertising and Promotion. An Integrated Marketing Communication Perspective*.
- Bone, P. F. (1995). Word-of-mouth effects on short-term and long-term product judgments. *Journal of Business Research*, 32(3), 213–223. [https://doi.org/10.1016/0148-2963\(94\)00047-1](https://doi.org/10.1016/0148-2963(94)00047-1)
- Bright Local. (2020, Dezembro 9). *Local Consumer Review Survey: How Customer Reviews Affect Behavior*. BrightLocal. <https://www.brightlocal.com/research/local-consumer-review-survey/>
- Broadly. (2017). Online Review Statistics—15 Reasons Why Your Business Needs Them! *Broadly – Get Better Online Reviews*. <https://broadly.com/blog/online-review-statistics/>
- Chatterjee, P. (2001). Online Reviews: Do Consumers Use Them? *ACR North American Advances*, NA-28. <https://www.acrwebsite.org/volumes/8455/volumes/v28/NA-28/full>
- Chen, X., Sheng, J., Wang, X., & Deng, J. (2016). *Exploring Determinants of Attraction and Helpfulness of Online Product Review: A Consumer Behaviour Perspective* [Research Article]. *Discrete Dynamics in Nature and Society*; Hindawi. <https://doi.org/10.1155/2016/9354519>
- Cheung, C. M. K., Lee, M. K. O., & Rabjohn, N. (2008). The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, 18(3), 229–247. <https://doi.org/10.1108/10662240810883290>
- Cheung, C. M. K., & Thadani, D. R. (2010). *The Effectiveness of Electronic Word-of-Mouth Communication: A Literature Analysis*. 18.

- Chu, S.-C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *International Journal of Advertising*, 30(1), 47–75. <https://doi.org/10.2501/IJA-30-1-047-075>
- Cialdini, R. B. (2007). *Influence: The psychology of persuasion* (Vol. 55). Collins New York.
- Court, D., Elzinga, D., Mulder, S., & Jørgen Vetvik, O. (2009). The consumer decision journey. *McKinsey Quarterly*. <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/the-consumer-decision-journey>
- Dellarocas, C., Zhang, X. (Michael), & Awad, N. F. (2007). Exploring the value of online product reviews in forecasting sales: The case of motion pictures. *Journal of Interactive Marketing*, 21(4), 23–45. <https://doi.org/10.1002/dir.20087>
- Dhar, R., & Wertenbroch, K. (2000). Consumer Choice between Hedonic and Utilitarian Goods. *Journal of Marketing Research*, 37(1), 60–71. <https://doi.org/10.1509/jmkr.37.1.60.18718>
- Elwalda, A., & Lu, K. (2016). The impact of online customer reviews (OCRs) on customers' purchase decisions: An exploration of the main dimensions of OCrs. *Journal of Customer Behaviour*, 15(2), 123–152. <https://doi.org/10.1362/147539216X14594362873695>
- Engel, J. F., Kollat, D. T., & Blackwell, R. D. (1968). *Consumer behavior*. Holt, Rinehart, and Winston.
- Engelmann, J. B., Capra, C. M., Noussair, C., & Berns, G. S. (2009). Expert Financial Advice Neurobiologically “Offloads” Financial Decision-Making under Risk. *PLoS ONE*, 4(3), e4957. <https://doi.org/10.1371/journal.pone.0004957>
- Fischer, E., & Arnold, S. (1990). More Than A Labor of Love: Gender Roles and Christmas Gift Shopping. *Journal of Consumer Research*, 17, 333–345. <https://doi.org/10.1086/208561>
- Forman, C., Ghose, A., & Wiesenfeld, B. (2008). Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets. *Information Systems Research*, 19(3), 291–313. <https://doi.org/10.1287/isre.1080.0193>
- Hassan, S., Nadzim, S. Z. A., & Shiratuddin, N. (2015). Strategic Use of Social Media for Small Business Based on the AIDA Model. *Procedia - Social and Behavioral Sciences*, 172, 262–269. <https://doi.org/10.1016/j.sbspro.2015.01.363>
- Häubl, G., & Trifts, V. (2000). Consumer Decision Making in Online Shopping Environments: The Effects of Interactive Decision Aids. *Marketing Science*, 19(1), 4–21. <https://doi.org/10.1287/mksc.19.1.4.15178>
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52. <https://doi.org/10.1002/dir.10073>
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic Consumption: Emerging Concepts, Methods and Propositions. *Journal of Marketing*, 46(3), 92–101. <https://doi.org/10.1177/002224298204600314>

- Kazançoğlu, İ., & Özhan Dedeoğlu, A. (2012). Consumer Guilt: A Model of Its Antecedents and Consequences. *Ege Akademik Bakis (Ege Academic Review)*, 12(1), 9–9. <https://doi.org/10.21121/eab.2012119542>
- Kim, K., Zhang, M., & Li, X. (2008). Effects of Temporal and Social Distance on Consumer Evaluations: Table 1. *Journal of Consumer Research*, 35(4), 706–713. <https://doi.org/10.1086/592131>
- Kivetz, R., & Simonson, I. (2002). Earning the Right to Indulge: Effort as a Determinant of Customer Preferences toward Frequency Program Rewards. *Journal of Marketing Research*, 39(2), 155–170.
- Kivetz, R., & Zheng, Y. (2017). The effects of promotions on hedonic versus utilitarian purchases. *Journal of Consumer Psychology*, 27(1), 59–68. <https://doi.org/10.1016/j.jcps.2016.05.005>
- Ledgerwood, A., Wakslak, C. J., & Wang, M. A. (2010). Differential information use for near and distant decisions. *Journal of Experimental Social Psychology*, 46(4), 638–642. <https://doi.org/10.1016/j.jesp.2010.03.001>
- Liu, Y. (2006). Word of Mouth for Movies: Its Dynamics and Impact on Box Office Revenue. *Journal of Marketing*, 70(3), 74–89. <https://doi.org/10.1509/jmkg.70.3.074>
- Lu, J., Liu, Z., & Fang, Z. (2016). *Hedonic products for you, utilitarian products for me*. 10.
- Malhotra, N., Nunan, D., & Birks, D. (2017). *Marketing Research: An Applied Approach*.
- Marks, L. J., & Mayo, M. A. (1991). An empirical test of a model of consumer ethical delimitas. *ACR North American Advances*.
- McWilliam, G. (2000). Building stronger brands through online communities. *MIT Sloan Management Review*, 41(3), 43.
- Okada, E. M. (2005). Justification Effects on Consumer Choice of Hedonic and Utilitarian Goods. *Journal of Marketing Research*, 42(1), 43–53. <https://doi.org/10.1509/jmkr.42.1.43.56889>
- Park, D.-H., Lee, J., & Han, I. (2007). The Effect of On-Line Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement. *International Journal of Electronic Commerce*, 11(4), 125–148. <https://doi.org/10.2753/JEC1086-4415110405>
- Rennie, A., Jonny, P., Claire, C., & Gerald, B. (2020). *Decoding Decisions Making sense of the messy middle* (p. 98). Think with Google.
- Roy, R., & Ng, S. (2012). Regulatory focus and preference reversal between hedonic and utilitarian consumption: Regulatory focus and preference reversal. *Journal of Consumer Behaviour*, 11(1), 81–88. <https://doi.org/10.1002/cb.371>
- Schindler, R. M., & Bickart, B. (2005). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52. <https://doi.org/10.1002/dir.10073>

- Sen, S., & Lerman, D. (2007). Why are you telling me this? An examination into negative consumer reviews on the Web. *Journal of Interactive Marketing*, 21(4), 76–94. <https://doi.org/10.1002/dir.20090>
- Senecal, S., & Nantel, J. (2004). The influence of online product recommendations on consumers' online choices. *Journal of Retailing*, 80(2), 159–169. <https://doi.org/10.1016/j.jretai.2004.04.001>
- Shah, A. K., & Oppenheimer, D. M. (2008). Heuristics made easy: An effort-reduction framework. *Psychological Bulletin*, 134(2), 207–222. <https://doi.org/10.1037/0033-2909.134.2.207>
- Spiegel Research Center. (2017). *How Online Reviews Influence Sales—The Medill IMC Spiegel Research Center*. <https://spiegel.medill.northwestern.edu/online-reviews/>
- Stankevich, A. (2017). Explaining the Consumer Decision-Making Process: Critical Literature Review. *JOURNAL OF INTERNATIONAL BUSINESS RESEARCH AND MARKETING*, 2(6), 7–14. <https://doi.org/10.18775/jibrm.1849-8558.2015.26.3001>
- Strahilevitz, M., & Myers, J. G. (1998). Donations to Charity as Purchase Incentives: How Well They Work May Depend on What You Are Trying to Sell. *Journal of Consumer Research*, 24(4), 434–446. <https://doi.org/10.1086/209519>
- Sungur, H., Hartmann, T., & van Koningsbruggen, G. M. (2016). Abstract Mindsets Increase Believability of Spatially Distant Online Messages. *Frontiers in Psychology*, 7. <https://doi.org/10.3389/fpsyg.2016.01056>
- Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt* (pp. xvi, 272). Guilford Press. <https://doi.org/10.4135/9781412950664.n388>
- Testimonial Engine. (2017). *How Reviews Affect Purchasing Decisions and SEO*. Testimonial Engine. <https://mytestimonialengine.com/how-reviews-affect-purchasing-decisions-and-seo/>
- Townsend, W. W. (1924). *Bond salesmanship*. New York,. [http://hdl.handle.net/2027/uc1.\\$b37470](http://hdl.handle.net/2027/uc1.$b37470)
- Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological Review*, 110(3), 403–421. <https://doi.org/10.1037/0033-295X.110.3.403>
- Westbrook, R. A., & Oliver, R. L. (1991). The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction. *Journal of Consumer Research*, 18(1), 84–91. <https://doi.org/10.1086/209243>
- Yoon, K., & Tran, T. V. (2011). Revisiting the Relationship Between Consumer Loyalty and Price Sensitivity: The Moderating Role of Deal-Proneness. *Journal of Marketing Theory and Practice*, 19(3), 293–306. <https://doi.org/10.2753/MTP1069-6679190303>
- Zeelenberg, M. (1999). Anticipated regret, expected feedback and behavioral decision making. *Journal of Behavioral Decision Making*, 12(2), 93–106. [https://doi.org/10.1002/\(SICI\)1099-0771\(199906\)12:2<93::AID-BDM311>3.0.CO;2-S](https://doi.org/10.1002/(SICI)1099-0771(199906)12:2<93::AID-BDM311>3.0.CO;2-S)

Zemack-Rugar, Y., Rabino, R., Cavanaugh, L. A., & Fitzsimons, G. J. (2016). When donating is liberating: The role of product and consumer characteristics in the appeal of cause-related products. *Journal of Consumer Psychology*, 26(2), 213–230.
<https://doi.org/10.1016/j.jcps.2015.06.001>