Hedonic Food Consumption: the impact of Healthy Labels, salient Health Goals, and Purchase Targets on consumers' representations and purchase intentions.

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Abstract

Over the years, consumers are becoming increasingly aware of the importance of making health and wellbeing decisions, not only as an ill individual, but also as a consumer. Additionally, consumers are progressively more concerned not only with their physical health, but also with their psychological health. Consumers want to make healthier choices, that can be supported by nutritional labels, but also want to experience the pleasure associated with eating certain foods, which can contribute to their psychological well-being.

This dissertation examines consumers' pleasure and diet expectations, physical and psychological health representations, purchase intentions, preferences, and level of anticipatory guilt towards hedonic products, depending on Health Saliency (Healthy Label vs. No-Label), Health Goals (Physical vs. Psychological), and Purchase Target (Self vs. Friend). The interactions between these variables were also explored.

The study comprised an online survey, where participants were randomly assigned to one of two Health Goals (Physical or Psychological) and to one of two Purchase Targets (Self or Friend).

Results revealed that the presence of healthy labels on hedonic products leads to a decrease in consumers' hedonic representation of those products. Furthermore, findings indicate that both consumers with a focus on psychological health and consumers purchasing for others express higher purchase intentions, pleasure, and enjoyment for hedonic foods, and they were also shown to believe that those products are better to make them feel emotionally well, when compared to consumers with a focus on their body's health and consumers purchasing for themselves.

Keywords: Hedonic Products; Healthy Labels; Health Goals: Physical Health; Psychological Health; Consumers' perceptions; Purchase Intentions; Purchase Targets; Self-other differences.

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Sumário

Os consumidores estão cada vez mais conscientes da importância de tomar decisões relacionadas com saúde e bem-estar, não só como alguém doente, mas também como consumidor. Adicionalmente, os consumidores preocupam-se crescentemente não só com a sua saúde física, mas também com a sua saúde psicológica. Estes querem fazer escolhas mais saudáveis, que podem ser suportadas por rótulos nutricionais, mas também desejam experienciar o prazer associado ao consumo de certos alimentos, que pode contribuir para o seu bem-estar psicológico.

Esta dissertação examina as expectativas de prazer e dieta, as representações de saúde física e psicológica, as intenções de compra, preferências e nível de culpa antecipada dos consumidores relativamente a produtos hedónicos, dependendo da Saliência de Saúde (Rótulo Saudável vs. Sem Rótulo), dos Objetivos de Saúde (Físicos vs. Psicológicos) e dos Alvos de Compra (Próprio vs. Amigo). As interações entre estas variáveis foram também exploradas.

O estudo incluiu um inquérito, em que os participantes foram aleatoriamente atribuídos a um dos dois Objetivos de Saúde e a um dos dois Alvos de Compra.

Os resultados revelaram que a presença de rótulos saudáveis em produtos hedónicos diminui a representação hedónica dos consumidores relativamente a esses produtos. Este estudo também demonstra que ambos os consumidores com objetivos de saúde psicológica e os que compram para outros, expressam maior intenção de compra, prazer e satisfação por produtos hedónicos, acreditando também que estes são melhores a fazê-los sentir emocionalmente bem, comparado com os consumidores com um foco na saúde física e os que compram para si próprios.

Palavras-chave: Produtos Hedónico; Rótulos Saudáveis; Objetivos de Saúde; Saúde Física; Saúde Psicológica; Perceção dos Consumidores; Intenção de Compra; Alvos de compra; Diferenças eu-outro.

Título: Consumo de Alimentos Hedónicos: o impacto de Rótulos Saudáveis, Objetivos de Saúde salientes e Alvos de Compra nas representações e intenções de compra dos consumidores.

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Glossary

H – Hypothesis

RQ – Research Question

ANOVA – Analysis of Variance

Chapter 1: Introduction

1.1 Topic Presentation

There is a recent change in the paradigm underlying health and wellbeing decisions, in which people are making less decisions in the perspective of a patient or an ill individual and more in the perspective of a consumer, and the pandemic just came to accelerate this trend. More than ever, consumers are concerned about having healthier lifestyles, and are focusing not only on their physical health, but also on being psychologically well. Consequently, consumers are becoming more conscious of the benefits of making healthier purchase decisions, but also want to experience the pleasure associated with eating hedonic foods (Papies et al., 2007). Interestingly, in situations such as this, consuming hedonic foods is usually perceived as a less healthy decision, but it can increase well-being, which can contribute to higher psychological health. Hence, the question becomes: Can consumers have healthier eating habits that are still pleasurable?

Throughout the years, companies have been adapting their products' offering in accordance with consumers' expectations, existing a considerable growth in the number of companies trying to offer healthier alternatives to their original products (Jakubanecs et al., 2018). This is particularly interesting when talking about healthier versions of hedonic products. Despite the growing interest in healthy eating, the integration of these products into the market can be a challenge due to the health-pleasure trade-off dilemma faced by consumers (Nørgaard & Brunsø, 2009). When information about the healthiness of the products is provided, consumers tend to see healthier products as less tasty and enjoyable, and consequently with a reduced hedonic appraisal (Raghunathan et al., 2006). As a result, buying intention appears to be significantly reduced when packages carry health benefit claims, instead of taste claims (Bialkova et al., 2014). However, it is also important to mention that these so-called healthier alternatives sometimes are not as healthy as consumers believe (Williams, 2005). For example, if a product has less fat it doesn't mean that it also has less sugar, and it can actually have more (Nguyen et al., 2016). In the end, what are consumers' perceptions of these healthier alternatives? Are they perceived as healthier or not? And are they less pleasurable than the originals? How do these representations of the products interact with consumers' perceived health needs?

Therefore, it is important to further explore consumers' perception of these healthier alternatives of hedonic products, trying to understand how people are representing these

products in terms of pleasure and health benefits and how this is affecting their judgements when shopping.

Furthermore, depending on personal goals, people tend to make different choices related to food (Ratneshwar et al., 1996). It can be argued that someone aiming at a good physical health would be more focused on eating healthily, while someone aiming at a good mental health would prefer a product capable of providing pleasure. Indeed, people tend to give more importance to physical goals, as there is a still stigma associated with mental health (Fox et al., 2018). So, what happens if consumers have salient psychological health goals instead of physical health goals? Can we expect to see major differences in their choices and representations of products? Will we see a focus on pleasurable experiences provided by hedonic food consumption depending on the individuals' health goals?

Often individuals do not choose just for themselves, but also for others (Baskin et al., 2014). What is the impact of purchase target on consumers' perceptions and decisions? When choosing for themselves, do consumers prefer healthier or more pleasurable products compared to when choosing for others?

Aiming to answer the previous questions, this study focuses on the role of health goals and of the purchase target on consumers' judgments about hedonic products, exploring how healthier versions of products are perceived by consumers compared to when original, and less healthy, product versions are represented. Specifically, this research aims to understand consumers' judgments of healthiness and pleasure, whether they are choosing for themselves or for a friend, and when there is a focus either on a psychological or physical goal.

1.1.1 Main paradigm

To test these various effects, following an experimental paradigm, the present study manipulates health goals in two conditions, physical and psychological health goals; and manipulates the target of purchase, the self or friend. Furthermore, to test the role of the products' hedonic representation, the present study presents chocolate as the hedonic product, using two chocolates from existing but unknown brands, presenting two versions of the same chocolate: a healthier version and the original. To differentiate the healthier product from the original one, the healthier chocolate has a nutritional label, a label stating No Added Sugar, and a different color, more associated with healthiness. This study then asks participants their

judgments on the products' pleasure and diet expectations, and physical and psychological health representations. Moreover, it also explores consumers' purchase intentions and preferences, as well as the level of anticipatory guilt induced by the products.

Throughout the study, we consider that pleasure expectations and psychological health representation conceptually aggregate into psychological well-being representation, while diet expectations and physical health representation aggregate into physical well-being representation.

This study aims to further explore the process of consumers' decision making, contributing with additional perspectives. Moreover, the study focuses on understanding how consumers are picturing healthier versions of hedonic products, in comparison to the original versions, as well as on how consumers behave depending on their health goal and decision target, exploring how companies can present hedonic products more efficiently, improving communication and understanding among consumers.

1.2 Problem Statement

The main purpose of this research is to understand inferences consumers make regarding pleasure and health on hedonic products, looking at healthier alternatives, and at the original products. Moreover, the differences when consumers choose for themselves or others and when they focus on psychological or physical goals are also investigated.

RQ1: How does the presence of healthy labels on hedonic products influence their hedonic representation and level of anticipatory guilt when compared to the same products without the label?

RQ2: How do health goals and purchase targets influence consumers' representations, purchase intentions and preferences of hedonic products?

Chapter 2: Literature Review

2.1 Hedonic and Utilitarian Consumption

Consumer choices are driven by both utilitarian and hedonic considerations (Dhar & Wertenbroch, 2000). Utilitarian goods deliver functional benefits, are necessary, effective, goal-oriented and represent individuals' cognitive preferences (Okada, 2005; Dhar & Wertenbroch, 2000; Voss et al., 2003; Strahilevitz & Myers, 1998). Hedonic goods are fun, enjoyable, exciting, and related to affective, sensory, and emotional experiences (Dhar & Wertenbroch, 2000; Voss et al., 2003; Hirschman & Holbrook, 1982). Furthermore, hedonic pleasure has been associated with luxury consumption, while utilitarian choices have been associated with necessities (Kivetz & Simonson, 2002; Strahilevitz & Myers, 1998).

"Hedonism and utilitarianism are not necessarily two ends of a one-dimensional scale" (Okada, 2005, p.43; Voss et al. 2003). Products can have different levels of both hedonic and utilitarian attributes at the same time (Crowley et al., 1992; Khan et al., 2005). In fact, Batra & Athola (1991) developed a scale to measure hedonic and utilitarian components of goods. For example, a phone has utilitarian attributes, if used to ask for help in a complicated situation, however, it also has hedonic attributes, such as chatting with friends (Khan et al., 2005).

In almost all human history the primarily goal of eating was to satisfy hunger and obtain energy (Lowe & Butryn, 2007), being this closely associated with utilitarian consumption. However, nowadays this perspective has changed. Research showed that another driver of food choices is the anticipated pleasure associated with the consumption, a hedonic motivation (Chandon & Wansink, 2007; Lowe & Butryn, 2007). On a study about food choices, Cramer & Antonides (2011) concluded that hedonic goods scored higher on taste when compared to utilitarian ones, while utilitarian goods scored significantly higher on healthiness. Taste and health are two extremely important determinants of consumers' food choices (Roininen et al., 1999; Steptoe et al., 1995). In a study developed by Johansen et al. (2011), healthiness and taste were identified as the main predictors of food choice. Nonetheless, when choosing food, consumers usually experience a conflict between health and taste, as people tend to assume that tasty food is unhealthy (Raghunathan et al., 2006). This ambivalence about unhealthy foods decreases the hedonic pleasure derived from food consumption and the intention to consume food that mainly provides pleasure (Conner et al., 2003; Sparks et al., 2001). Moreover, Connell & Mayor (2013) showed that activating health goals decreased the expected pleasure associated with consuming

hedonic products for individuals more likely to experience pleasure from their consumption and assumed that this could result in a lower likelihood of consuming the hedonic products.

A dimension that is usually present in the apparent conflict between hedonic and utilitarian products is time expected to achieve the goal. As described, consumers purchase goods and services and perform consumption behaviours for two main motives: (1) consummatory affective (hedonic) gratification (from sensory attributes), and (2) instrumental, utilitarian reasons (Batra & Athola, 1991). While hedonic food consumption is often associated with short-term pleasure, utilitarian health related consumption is usually associated with long-term goals and health concerns (Wansink & Chandon, 2006). Moreover, it is harder for individuals to justify money spent on hedonic goods, and easier to justify spending on utilitarian goods. (Prelec & Loewenstein, 1998). Also, the benefits of hedonic consumption are more difficult to quantify (Okada, 2005). Consequently, there is a sense of guilt associated with hedonic consumption (Kivetz & Simonson 2002; Strahilevitz & Myers 1998), that might prevent consumers from expressing their hedonic preference, opting to express a utilitarian preference instead, as seen in previous studies (Dhar & Wertenbroch, 2000; Okada, 2005). Hence, consuming hedonic products, like chocolates, is expected to trigger more anticipatory guilt than the consumption of utilitarian products (Lu et al., 2016; Wansink & Chandon, 2006). Moreover, healthier products, associated with utilitarian consumption, should induce fewer feelings of guilt (Steenhuis et al., 2010). For example, it was seen that low-fat claims on snack foods can lead to an increase in consumption due to diminished feelings of guilt, and wrong perception of the appropriate meal size. (Wansink & Chandon, 2006).

Throughout the study, it is presented a product usually associated with hedonic consumption, but displayed with healthier characteristics, trying to understand if the hedonic pleasure associated with its consumption is diminished. Moreover, it is also important to understand if people believe that this product is indeed healthier and less pleasurable, and therefore with lower hedonic attributes. Additionally, will these healthier products have a lower level of anticipatory guilt associated than the original products? And will different health goals influence consumers' perceptions of hedonic products?

2.2 Hedonic Consumption and the role of nutrition labels on consumers' perceptions

There is extensive research on consumers' perceptions of nutritional claims on food (Menger-Ogle & Graham, 2018; van Trijp & van der Lans, 2007; Cowburn & Stockley, 2005). Nutrition labels are important to guide individuals' food selection to more informed and healthier choices (Cowburn & Stockley, 2005; Talati et al., 2017), contributing to the improvement of public health, helping in the identification of healthier food choices (Roe et al., 1999).

Furthermore, nutritional labels are often associated with poorer taste and less natural products (Lähteenmäki et al., 2010). When associated with hedonic foods, nutritional claims tend to reduce consumers' purchase intentions due to the expected reduction of the hedonic benefits of the product (Bialkova et al, 2016), being confronted with a health-pleasure trade-off (Nørgaard & Brunsø, 2009). Indeed, consumers often believe that the less healthy a product is, the tastier it is, an effect known as "unhealthy equals tasty" intuition (Raghunathan et al., 2006). Healthier products are often associated with lower sugar and fat content and less calories (Carels et al. 2006, 2007), however these assumptions may lead to overeating (Brown et al., 2018). As an example, Chandon & Wansink (2007) observed that after consuming low-caloric food, consumers were more likely to choose dishes high in calories.

Nutritional claims can often be misleading to consumers (Fernan et al., 2018), increasing the perception of healthiness and inducing individuals to think products are healthier than they actually are (Nguyen et al., 2016; Williams, 2005). Furthermore, consumers may focus on positive attributes present on nutritional labels and overlook potentially negative attributes (Wellard et al., 2015), reflecting a health halo effect (Roe et al., 1999). This is especially relevant, and even worth of concern, for nutritionally poor products (Miklavec et al., 2015). For example, Nguyen et al. (2016) did a systematic comparison of several products, analyzing the sugar content of fat free, low fat and regular versions of the same foods. It was observed that the amount of sugar present in products with labels such as reduced calories, light or low fat was higher than in their "regular" versions. Additionally, in a study with the objective of assessing the effects of a nutrition logo on the evaluation of a chocolate mousse cake, participants rated the chocolate mousse cake with a logo as significantly less unhealthy than the same cake without logo (Steenhuis et al., 2010).

Following up this research, the present study aims to understand consumers' perception of pleasure and healthiness of hedonic products when confronted with products with nutrition labels.

2.3 Health Goals: Physical and Psychological

Food purchase and consumption is a motivated behavior (Hofmann et al., 2007; Vartanian, et al., 2008). Especially food that is associated with higher pleasure and lower healthiness is likely associated to a motivational conflict, which prompts consumers to make a motivated decision and act accordingly.

When faced with a motivational dilemma people need to self-regulate their behavior according to their most available or important goal. Self-regulation is a process by which people invest cognitive, emotional, and behavioral resources to pursue and attain goals, (Mann et al., 2013; De Ridder & De Wit, 2006) including the process "of setting goal-directed behavior, monitoring, and adjusting behavior, and is a form of control over goals and behavior" (Biber & Ellis, 2019, p.2; Baumeister & Heatherton, 1996; Carver and Scheier, 1981). Sometimes, self-regulation implies the pursuit of long-term goals, instead of short-term gratification and the control of temptations and impulses that may undermine the long-term goal (Metcalfe & Mischel, 1999; Baumeister & Heatherton, 1996), and can explain healthy behavior adoption and maintenance (Baumeister & Heatherton, 1996; Carver and Scheier, 1981). However, self-regulation is susceptible to failure, which may result in the development of several health conditions such as obesity, cardiovascular disease, or type II diabetes (Hagger et al., 2009). Some self-regulation mechanisms are associated with changes in the associations and representations of products. For example, individuals tend to consider fruits and vegetables nutritious and therefore related to long-term goal of staying healthy. On the other hand, indulgent foods, associated with hedonic consumption, are considered vices, and therefore associated with short-term indulgent goals (Jakubanecs et al., 2018). Consequently, hedonic products with healthy claims can have conflicting goals associated to them, due to the combination of healthiness and pleasure attributes (Jakubanecs et al., 2018). Hence, it is difficult for a food product to satisfy both pleasure and healthiness goals and the ability to satisfy one of these goals, reduces the ability to satisfy the other (Belei et al., 2012; Raghunathan et al., 2006).

Moreover, some people think about healthy eating in a negative perspective, associating it with counting calories, diets and not eating certain foods (Wahl et al., 2017). Diets and the feeling of restrained eating may in reality contribute to the risk of weight gain and eating disorders (Mann, 2007; van Strien et al., 2014). Restrained eating is also associated with poor psychological health (McFarlane et al., 1999). Additionally, Remick et al. (2009) showed that for those whom eating is associated with pleasure, restrained eating could have negative consequences on mental health. Block et al. (2011) proposed a shift from "food as health" to "food as wellbeing", changing the focus on restraint to a more positive view of the importance of pleasure in food consumption.

Media has been associating healthy eating with rational choices and willpower, while eating pleasure is seen as problematic and associated with the consumption of unhealthy foods (Dodds & Chamberlain, 2017). Indeed consumers "perceive healthy eating as a moral, disciplined choice, in which they must include eating pleasure sparingly, if they include it at all" (Landry et al., 2018, p.3; Delaney & McCarthy, 2014; Jallinoja et al,, 2010). The low importance attributed to pleasure is concerning. This negative perception attributed to food pleasure may have consequences on psychological wellbeing and may be related with the appearance of eating disorder symptoms (Lindeman & Stark, 2000).

Highly palatable food can stimulate brain rewards similar to drug abuse (Olsen, 2011) and it can lead to compulsive eating and eventually addiction (Davis, 2013). Also, studies show that when people are exposed to a stressor, the intake of palatable food can contribute to reduce stress and anxiety (Pecoraro et al., 2004; Ulrich-Lai et al., 2010).

"No one sits down to eat a plate of nutrients. Rather, when people sit down for a meal, they are seeking physical in addition to emotional and psychological nourishment—comfort, pleasure, love, and community" (Block et al., 2011, p.5). Hedonic food consumption may contribute to happiness, as it is an important source of pleasure (Berenbaum, 2002; Macht et al., 2005). "Comfort food" is a term related to food that provides consolation, an improvement in mood, stress relief, and wellbeing, offering some kind of psychological reassurance (Spence, 2017; Dallman et al., 2003). Depressed individuals often demonstrate preference for "comfort foods" to reduce negative feelings (Macht, 2008). However, if not controlled, eating "comfort food", rich in calories, can lead to obesity, which in turn can promote depression and anxiety (Simon et al., 2006; Kloiber et al., 2007). This suggests that individuals are motivated by both physical

and psychological health goals and the goal driving their behaviors depend on their context and the goals that each context elicit.

It is important to note that goals are "internal representations of desired outcomes, events, or processes that cut across cognitive, personality, and motivational domains" (Jakubanecs et al., 2018, p.4; Austin & Vancouver, 1996; Carver & Scheier, 1982). Goals thus play a central role in our everyday behavior and have a significant impact in our wellbeing, even when our goals are not highly salient in our memory (Carver & Scheier, 1998; Higgins, 1997). According to the situation, different goals can become activated, with people assuming different goals, which ends up influencing judgments and decisions about the products. (Ratneshwar et al., 2001). Dhar & Fort (2008) demonstrated that depending on the situation there is a different hierarchy of goals, in which certain goals are given higher priority and importance than others, thus leading to different judgments and perception of healthy products.

In sum, this study aims to understand if consumers make different choices and have different perceptions depending on their most salient health goal, physical health, or psychological health. For example, do consumers with a psychological health goal have higher pleasure expectations of hedonic products than those with a focus on having a healthy body? Finally, it is also important to understand how consumers' health goals influence the product's physical and psychological health representations.

2.4 Purchase Target: Self-other Differences

Frequently, consumers make purchase decisions, not only for themselves, but also for others (Baskin et al., 2014; Steffel & Le Boeuf, 2014). However, it has been observed that consumer's choices differ in function of the purchase target: themselves or others (Polman, 2012). Previous studies found that when choosing for others, consumers are more creative and search for more information (Polman & Emich, 2011), as well as they prefer to select from a larger choice set (Polman, 2012). Moreover, Laran (2010) observed that when choosing for others, consumers make more indulgent (i.e., permissive, pleasurable) choices, as they tend to focus on pleasure-seeking goals. A possible explanation can be the self-control conflict that consumers experience when making decisions about indulgent items, that are highly desirable. When choosing for others, consumers do not face this self-control conflict, believing that others do not exert self-control, simply choosing the most desirable indulgent items (Laran, 2010).

Moreover, construal level theory can also explain differences in choices and evaluations when choosing for the self and others. Construal level theory links distance and abstraction, suggesting that psychological distance is an important determinant in the process of decision making (Trope et al., 2007). When making choices for the self, psychological distance is zero, however when deciding for others the distance is higher (Lu et al., 2012). Accordingly, low psychological distance is associated with concrete decisions and a focus on feasibility, while high psychological distance leads to higher abstraction and a focus on desirability (Trope et al., 2007; Lu et al., 2012)

Adding to this, consumers deciding for others are more likely to choose hedonic over utilitarian products compared to when deciding for themselves (Lu et al., 2016). One explanation could be that decisions made for others are more public, raising concern on how the product fits others' preferences (Lu et al., 2016). Moreover, Lu et al. (2016) also mentions that hedonic products are expected to be more self-expressive than utilitarian (Maimaran & Simonson, 2011).

Another study found that when asked to choose meals either for themselves or for others, participants tend to choose healthier food items for themselves than for others (Sproesser et al., 2015). This may happen because people eat more, as well as more unhealthily, in social eating moments (Patel & Schlundt, 2001). Frequently, people observe others' eating habits in social situations, assuming others eat unhealthier than they actually do. (Sproesser et al., 2015).

Independently of the decision target, consumers have responsibility for the implications of their choices (Lerner & Tetlock, 1999). Individuals who make choices for others are more likely to be blamed for unappealing outcomes (Steffel et al., 2016). Therefore, people tend to feel guilty if they make poor decisions on behalf of others (Polman & Emich, 2011). However, Lu et al. (2016) showed that when choosing hedonic products, the level of anticipatory guilt was reduced when choosing for others.

Based on these findings, the present study expects that when choosing for others, consumers will have different perceptions of some products' characteristics, namely pleasure or physical and psychological health representation, when compared to choosing for the self. Also, we assume that when purchasing for others purchasing intentions for hedonic products will be higher, than when purchasing for the self.

2.5 The Present Research Hypotheses

Based on the findings presented previously, and building on the research questions, this section presents the hypothesis that will be tested on this study.

H1: *The presence of healthy labels on hedonic products leads to lower hedonic representation than the absence of healthy label in the same product.*

H1.1: *The presence of healthy labels on hedonic products leads to lower anticipated guilt than the absence of healthy label in the same product.*

H2: *Having a salient psychological health goal leads to higher pleasure expectations, psychological health representation, purchase intentions and preference for hedonic products with a healthy label than having a salient physical health goal.*

H2.1: *More specifically, the tendency for salient physical health goals to lead to lower pleasure expectations, psychological health representation and purchase intentions is higher when purchasing for the self, than when purchasing for others.*

H3: *Purchasing for others leads to higher pleasure expectations, psychological health representation, purchase intentions and preference for hedonic products without healthy label than purchasing for the self.*

In summary, despite the number of academic studies, there is shortage of comparative research on how the presence of healthy claims, salient health goals and different purchase targets influence consumers' representation, purchase intentions, preferences, and level of anticipatory guilt towards hedonic products. The main objective of this study is to further investigate this and to explore the interaction between the variables, understanding consumers' evaluations given different stimuli.

Chapter 3: Methodology and Data Collection

3.1 Participants

In total 141[1] responses were collected. The average age of participants was 38.07 years old, 77.3% of respondents were female and 22.7% were male.

The survey was developed using the platform Qualtrics and shared through social media (Instagram, LinkedIn, and Facebook) and messaging apps (WhatsApp and Messenger), between the 13th and 22nd of November, and participants were all volunteers. Moreover, there was not a specific target previously defined, meaning that there were no exclusion criteria related with nationality, age, gender, or education level.

The survey was available both in English and in Portuguese, allowing to gather more answers from people that may not know or may not feel comfortable with the English language.

3.2 Materials

3.2.1 Independent Variables

The products used to test our hypotheses on hedonic products were chocolates. The chocolates used are from existing brands, however they were carefully chosen with the intention of being from unknown brands. Moreover, they were also chosen due to the packaging, that was easy to manipulate in terms of color and content. For the chocolates from the same brand participants were presented with the original version and with a healthier version. This last version was designed to look healthier, so the colors blue and green were used (Huang & Lu, 2016). Also, this version had a "no added sugar" label that was not present in the original version (see Appendix 1). We selected two different brands of chocolates, each with two chocolates (Healthy Label vs. No-Label), resulting in a total of four chocolates. Throughout the survey, all participants were presented with these four chocolates.

[1] We conducted power analyses to determine sample size. Based on a small effect size ($\eta_{partial}^2 = 0.01$), the minimum required sample size was N = 138; and based on a medium effect size ($\eta_{partial}^2 = 0.06$), the minimum required was N = 24 (Cohen, 1988; Miles & Shevlin, 2001), for an ANOVA with repeated measures, within-between interaction, sensitivity power analysis at 80% and alpha = .05.

Chocolates' health saliency

Health saliency was manipulated by changing the health focus of the products, resulting in two salience conditions, Healthy Label and No-Label. In the No-Label condition, products were presented in their original appearance and in the Healthy Label condition, the same products were added a label suggesting higher health. This manipulation is important to comprehend consumers' reasoning and decisions depending on the presence or absence of a healthy label.

Health Goals

Health goals were manipulated by changing the attribution of health either to the body or to the mind. Participants were presented with one of two health goals: physical health goal or psychological health goal. The objective was to induce these health goals on participants, so that they would be under the influence of one of these health goals during the whole survey, and in that way understand how health goals influence consumers' judgements and decisions. Moreover, in the middle of the survey participants were reminded of the condition they were assigned to with a small description, that was also shown in the beginning.

Participants assigned to the physical health goal were presented with a description that highlighted the wellbeing of their body, and the importance of what their body could do if healthy. Also, they were shown an image of a person running to increase the immersive nature of the description.

Participants assigned to the psychological health goal were presented with a description that highlighted the wellbeing of their mind, and the importance of knowing themselves. Also, they were shown an image of a person mediating that was in accordance with the description.

Purchase target

To test whether judgments about the products differ regarding the target of the purchase, we manipulated purchase target, leading to two target conditions, self vs. others. Right in the beginning participants were told to imagine they were doing their groceries and buying a snack for themselves (self-condition), or for a friend (others condition), depending on the condition they were assigned to. Investigating this variable allows to better understand how consumers make choices in daily life, and how those choices can vary, depending on who they are choosing for. Throughout the whole survey participants were reminded the target of their purchase, themselves, or a friend.

3.2.2 Dependent Variables

Pleasure Expectations and Diet Expectations

Each one of the four chocolates was presented separately to the participants, and participants were asked to evaluate the chocolates on some characteristics. To understand how health saliency of chocolates (healthy label vs. no-label), health goals (physical vs. psychological) and purchase targets (self vs. other) influence product expectations, we asked participants to provide their diet and pleasure expectations about the product. To measure pleasure expectations, we asked participants to rate their agreement (on a scale from 1, not at all to 7, Extremely) on the following items. "It provides enjoyment.","" It is tasty.", "It is pleasurable.", "It provides satisfaction.". The same scale was used to measure diet expectations – "It is nutritive.", "It is helpful for a diet.", "It is highly caloric.", "It is healthy.".

Physical Health Representation and Psychological Health Representation

To measure the perceived physical and psychological health associated with the chocolate's health representation, participants were asked how helpful the chocolate was for their physical and psychological health. Similarly, they were also asked to think about their purchase target and rate how much the chocolate would make them feel physically and emotionally well. All questions were rated on a scale from 1(not at all) to 7(Extremely).

Purchase Intentions

To measure purchase intentions, participants were asked to express their likelihood of purchasing the chocolate for themselves (or for a friend), on a scale from 1(not at all) to 7(Extremely) (adapted from Loebnitz and Grunert (2017)).

Consumers' preferences

To measure participants' purchase decision, the two versions (Healthy Label and No-Label) of chocolates from the same brand were presented side by side, and participants were asked to decide which one they would buy, either for themselves or for a friend, depending on the assigned condition (adapted from Lu et al., 2016). Participants gave their answer in a bipolar scale from 1 (Definitely product A) to 7 (Definitely Product B).

Anticipatory Guilt

To measure anticipatory guilt, the two versions were also shown side by side and participants where asked which one would make them feel more guilty, when buying for their purchase target, on a bipolar scale from 1 (Definitely product A) to 7 (Definitely Product B) (adapted from Lu et al. (2016)).

3.2.3 Control and Manipulation Check Measures

Control: Self-Health Awareness

To measure self-health awareness, participants were asked to share their level of agreement with six statements, on a scale from 1(not at all) to 7(Totally) (previously used and tested by Loebnitz and Grunert (2017)).

Control: Proneness to Guilt

To control for individual differences while experiencing guilt in day-to-day life, participants were presented with five situations, and were asked to indicate the likelihood of behaving like described, on a scale from 1(not at all) to 7(Totally) (developed by Cohen et al. (2011) and used and tested by Lu et al. (2016)).

Manipulation Check

To confirm that participants were under the conditions they were assigned to, they were asked the type of health highlighted on the survey and to whom they were buying the chocolate. To check if they noticed the healthy label, the main difference between the two chocolates from the same brand was asked.

Attention Check

To measure participants' attention, they were asked which type of chocolate was shown in the study.

3.3 Procedure

Participants were invited to complete an online survey and were randomly assigned to one experimental condition. They were assigned to one of four conditions: physical health goal and

choosing for the self; physical health goal and choosing for a friend; psychological health goal and choosing for the self; psychological health goal and choosing for a friend.

In the beginning of the survey, participants were presented with an introductory text, explaining that the study was developed within the scope of the Final Dissertation at Católica Lisbon School of Business and Economics. Moreover, they were told that the purpose of the study was to better understand consumer's perception on some chocolate characteristics. Furthermore, it was explained that the survey was completely anonymous and used only for academic purposes (see Appendix 1).

Next, participants were asked to think about their health and to imagine they were shopping while completing the survey. They were also told they would be presented with some products and that they would be asked to make several judgements about those products.

Firstly, the health goal, either physical health goal or psychological health goal, was presented. Next, participants were asked to imagine they were in a supermarket considering choosing products either for themselves or for a friend (purchase target).

Following, all participants were exposed to the four chocolate options, two from each brand. For the chocolates from the same brand a version without label, and a version with a healthy label were presented. The order by which one of the two brands was presented was randomized, and the order by which the original and healthy versions from the same brand appeared, was also randomized to avoid order effects. Firstly, participants were asked to evaluate the two versions of chocolates from the same brand separately, and then to compare them. After making judgments about the first chocolates pair, and before starting the evaluation of chocolates from the other brand, participants were reminded of the health goal that was presented in the beginning of the survey, as well as they were reminded that they were doing their groceries and buying a snack either for themselves or for a friend. The evaluation of the second pair of chocolates followed the exact same procedure of the first one.

When evaluating each chocolate separately, participants were firstly presented with eight statements regarding pleasure and diet expectations Next, they were asked to indicate their purchase intentions and finally four questions were asked to measure the perceived physical and psychological health representation of the chocolates.

When comparing the chocolates, participants were told that the chocolates were from the same brand and had the same price. To understand their preferences, participants were asked which

chocolate they were more likely to buy, and to understand the guilt associated with the purchase, they were asked which of the chocolates made them feel more guilty.

When all the chocolates were evaluated, participants were asked to rate six statements regarding their self-health awareness as a control measure.

Subsequently, participants were presented with five situations and were asked to indicate the likelihood of behaving like described, to evaluate their proneness to guilt.

Following, some manipulation checks were done. Participants were presented with a manipulation check for the health goals and another for the purchase target. To understand if consumers saw the "No sugar Added" label on the healthier version and if they saw it as the main difference when comparing to the original version, another question was done.

Lastly, demographics were collected, more specifically, participants shared their age, gender, nationality, level of education and occupation.

To conclude, an empty field was left for comments and participants were thanked for their participation.

3.4 Design

The study conducted followed a 2 Health Goal (Physical health, Psychological health) x 2 Purchase Target (Self, Other) x 2 Product health saliency (Healthy Label, No-label) mixed-subject design. Health Goal and Purchase Target were between-subject variables, while Product health saliency was a within-subject variable.

Participants were assigned to Health Goals: either to a Physical Health Goal or Psychological Health Goal; and to one of the two Purchase Target Conditions: choosing for the self or choosing for other. This means that there were four scenarios to which participants were randomly assigned: physical health goal and choosing for the self; physical health goal and choosing for a friend; psychological health goal and choosing for the self; psychological health goal and choosing for a friend. Finally, they were directed to the survey, being presented with the four chocolates.

Chapter 4: Analysis of Results

4.1 Participants

A total of 141 valid responses[2] were collected, from which 35 for the physical health goal and self-condition, 36 for physical health goal and other-condition, 35 for psychological health goal and self-condition and 35 for psychological health goal and other-condition.

Regarding sample demographics, from the 141 participants, 22.7% were men, and 77.3% were women. Moreover, the mean age range was 38.07 (SD=14.251). Concerning nationality, 90.1% were Portuguese and 9.9% were from other nationalities.

As to highest level of education completed, most respondents had an Undergraduate's Degree, representing 63.1% of the sample, while 5.7% completed Middle School, 15.6% did High School and 15,6% had a Postgraduate's Degree. Regarding current occupation, 22,7% were students, 8,5% student-workers, 66% employed and 2,8% unemployed (Appendix 2).

4.2 Results

In the following section the statistical analysis performed for each independent variable, to test the hypothesis formulated, is presented. The statistical tests included ANOVAS and Repeated Measures ANOVAS at a 95% confidence level, to measure the effect of independent variables on the dependent variables, and t-tests to further understand the differences between conditions.

4.2.1 Pleasure Expectations

To test Pleasure Expectations, the data analysis relied on a 2 *Health Goal* (Physical health, Psychological health) x 2 *Purchase Target* (Self, Other) x 2 *Health saliency* (Healthy Label, No-label) ANOVA with Repeated Measures on *Health Saliency* and with between subjects on *Health Goal* and *Purchase Target* and within subjects on the last factor, *Health Saliency*.

There is a main effect for *Health Saliency* (F (1, 137) = 5.38, p = .022, η^2 = .04). This result indicates that when a healthy label is present, pleasure expectations are lower than when a healthy label is not present ($M_{Healthy\ Label}$ = 4.18, SD = 1.35; $M_{No\text{-}label}$ = 4.33, SD = 1.37).

[2] In total, the survey had 341 initiated responses. However, answers from participants that did not conclude the survey were not considered in the analysis.

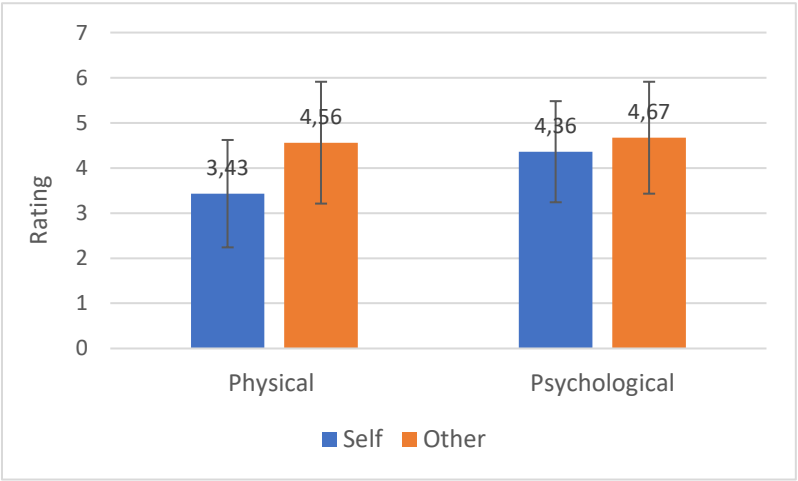
Regarding *Health Goal*, a main effect was also found (F (1, 137) = 6.19, p = .014, η^2 = .04), meaning that for participants with a salient psychological health goal, pleasure expectations are higher than for those with a salient physical health goal ($M_{Physical}$ = 4.00, SD = 1.39; $M_{Psychological}$ = 4.51, SD = 1.18).

For *Purchase Target* there is also a main effect (F (1, 137) = 12.23, p = .001, η^2 = .08). This result denotes that when purchasing for others, pleasure expectations are higher than when purchasing for the self (M_{Self} = 3.89, SD = 1.24; M_{Other} = 4.62, SD = 1.29).

We found a significant interaction effect between *Health Goal* and *Purchase Target* (F (1, 137) = 3.99, p = .048, η^2 = .03). When a physical health goal is salient, the difference observed in pleasure expectations between the self and other conditions is significant (M_{Self} = 3.43, SD = 1.19; M_{Other} = 4.56, SD = 1.35; t (69) = -3.76, p < .001), whereas when a psychological health goal is salient, that difference is non-significant. (M_{Self} = 4.36, SD = 1.12; M_{Other} = 4.67, SD = 1.24; t (68) = -1.10, p = .276). This suggests that when consumers have a salient psychological health goal pleasure expectations will be similar, independently of the purchase target. However, when focused on a physical health goal, consumers expect lower pleasure only when they are buying chocolates for themselves.

Figure 1

Pleasure Expectations: Interaction Health Goal, Purchase Target



The other interaction effects were non-significant (Appendix 3.1).

4.2.2 Diet Expectations

In order to test Diet Expectations, the data analysis relied on a 2 *Health Goal* (Physical health, Psychological health) x 2 *Purchase Target* (Self, Other) x 2 *Health saliency* (Healthy Label, No-label) ANOVA with Repeated Measures on *Health Saliency* and with between subjects on *Health Goal* and *Purchase Target* and within subjects on the last factor, *Health Saliency*.

There is a main effect for *Health Saliency* (F (1, 137) = 54.40, $p < .001$, $\eta^2 = .28$). This result indicates that when a healthy label is present, diet expectations are higher than when a label is not present ($M_{Healthy\ Label} = 3.14$, $SD = 1.10$; $M_{No\text{-}label} = 2.58$, $SD = 1.04$).

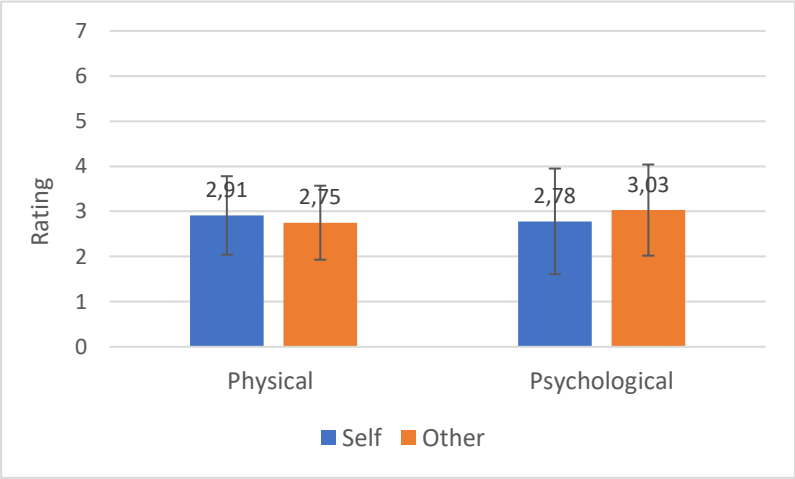
Regarding *Health Goal*, no main effect was found (F (1, 137) = .23, $p = .633$, $\eta^2 < .01$).

No main effect was found for *Purchase Target* (F (1, 137) = .08, $p = .777$, $\eta^2 < .01$).

A significant interaction between *Health Goal* and *Purchase Target* was not found (F (1, 137) = 1.62, $p = .205$, $\eta^2 = .01$). When a physical health goal is salient, the difference observed in diet expectations between purchasing for the self and others is not significant ($M_{Self} = 2.91$, $SD = .87$; $M_{Other} = 2.75$, $SD = .82$; t (69) = .81, $p = .421$), as well as when a psychological health goal is salient ($M_{Self} = 2.78$, $SD = 1.17$; $M_{Other} = 3.03$, $SD = 1.01$; t (68) = -.98, $p = .330$).

Figure 2

Diet Expectations: Interaction Health Goal, Purchase Target



All other effects were non-significant (Appendix 3.2).

4.2.3 Physical Health Representation

In order to comprehend how perceived physical health is affected by the independent variables the data analysis relied on a 2 *Health Goal* (Physical health, Psychological health) x 2 *Purchase Target* (Self, Other) x 2 *Health saliency* (Healthy Label, No-label) ANOVA with Repeated Measures on *Health Saliency* and with between subjects on *Health Goal* and *Purchase Target* and within subjects on the last factor, *Health Saliency*.

There is a main effect for *Health Saliency* (F (1, 137) = 15.11, $p < .001$, $\eta^2 = .10$). This result indicates that when a healthy label is present, products are perceived as better for physical health than when a label is not present ($M_{Healthy\ Label} = 2.73$, $SD = 1.40$; $M_{No\text{-}label} = 2.49$, $SD = 1.27$).

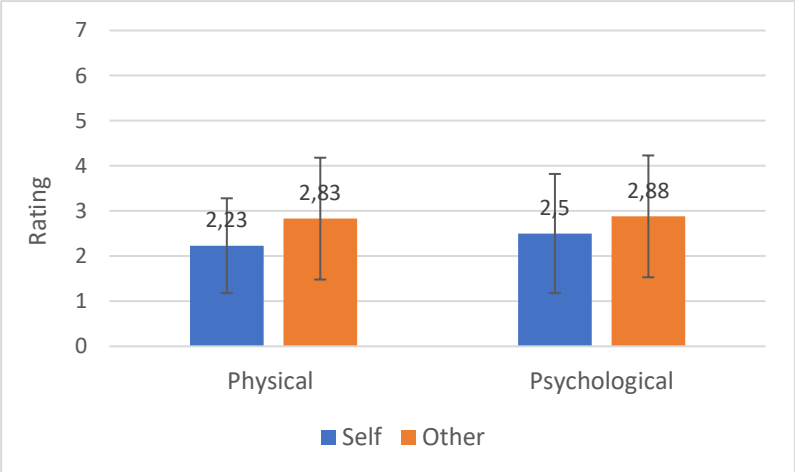
For *Purchase Target* there is also a main effect (F (1, 137) = 5.30, $p = .023$, $\eta^2 = .04$). This result denotes that participants purchasing for others perceive the products as better for physical health than those purchasing for the self ($M_{Self} = 2.36$, $SD = 1.19$; $M_{Other} = 2.86$, $SD = 1.34$).

Regarding *Health Goal*, no main effect was found (F (1, 137) = .56, $p = .457$, $\eta^2 < .01$).

The interaction between *Health Goal* and *Purchase Target* was found not to be significant (F (1, 137) = .29, $p = .593$, $\eta^2 < .01$). However, when participants have a salient physical health goal, the difference between the self and other conditions is significant ($M_{Self} = 2.23$, $SD = 1.05$; $M_{Other} = 2.83$, $SD = 1.35$; t (69) = -2.12, $p = .038$), whereas when a psychological health goal is salient, that difference is non-significant ($M_{Self} = 2.50$, $SD = 1.32$; $M_{Other} = 2.88$, $SD = 1.35$; t (68) = -1.19, $p = .239$).

Figure 3

Physical Health Representation: Interaction Health Goal, Purchase Target



All other effects were non-significant (Appendix 3.3).

4.2.4 Psychological Health Representation

In order to comprehend the perceived psychological health, the data analysis relied on a 2 *Health Goal* (Physical health, Psychological health) x 2 *Purchase Target* (Self, Other) x 2 *Health saliency* (Healthy Label, No-label) ANOVA with Repeated Measures on *Health Saliency* and with between subjects on *Health Goals* and *Purchase Targets* and within subjects on the last factor, *Health Saliency*.

The variable *Health Saliency* was found to be marginally significant (F (1, 137) = 3.38, p = .068, η^2 = .02). This result indicates that when a healthy label is present, products are perceived as worse for psychological health than when a label is not present ($M_{Healthy\ Label}$ = 3.95, SD = 1.52; $M_{No\text{-}label}$ = 4.07, SD = 1.59).

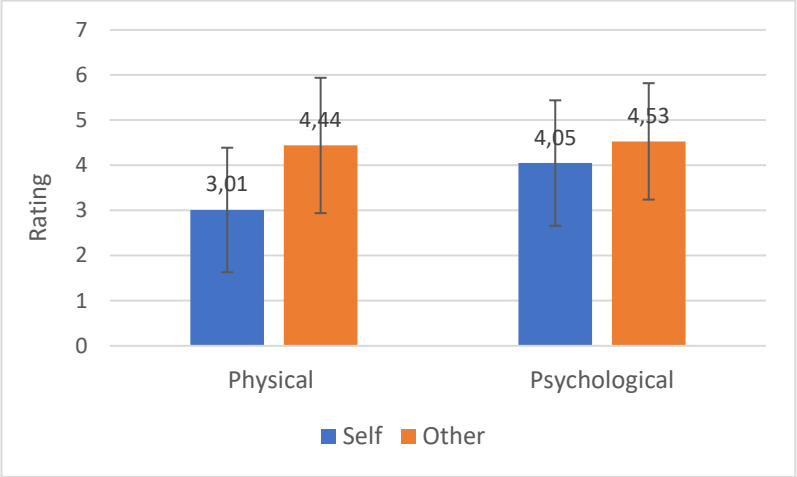
Regarding *Health Goal*, a main effect was found (F (1, 137) = 5.76, p = .018, η^2 = .04), meaning that for participants in the psychological health goal condition, products are perceived as better for psychological health, than for those in the physical goal condition ($M_{Physical}$ = 3.73, SD = 1.60; $M_{Psychological}$ = 4.29, SD = 1.35).

For *Purchase Target* there is also a main effect (F (1, 137) = 16.54, p < .001, η^2 = .11). This result denotes that when purchasing for others, participants perceive products as better for psychological health than when purchasing for themselves (M_{Self} = 3.53, SD = 1.47; M_{Other} = 4.49, SD = 1.39).

The interaction between *Health Goal* and *Purchase Target* is significant (F (1, 137) = 4.05, p = .046, η^2 = .03). When a physical health goal is salient, the difference observed on the psychological health representation of products between the self and other conditions is significant (M_{Self} = 3.01, SD = 1.38; M_{Other} = 4.44, SD = 1.50; t (69) = -4.17, p < .001), whereas when there is a salient psychological health goal, that difference is non-significant (M_{Self} = 4.05, SD = 1.39; M_{Other} = 4.53, SD = 1.29; t (68) = -1.50, p = .137). When consumers have a salient psychological health goal, psychological health representation will be similar, independently of the purchase target. However, when with a salient physical health goal, consumers in the self-condition will rate the products as worst for psychological health than those in the other condition.

Figure 4

Psychological Health Representation: Interaction Health Goal, Purchase Target



The other interaction effects were non-significant (Appendix 3.4).

4.2.5 Purchase Intentions

To test Purchase Intentions, the data analysis relied on a 2 *Health Goal* (Physical health, Psychological health) x 2 *Purchase Target* (Self, Other) x 2 *Health saliency* (Healthy Label, No-label) ANOVA with Repeated Measures on *Health Saliency* and with between subjects on *Health Goals* and *Purchase Targets* and within subjects on the last factor, *Health Saliency*.

The variable *Health Goal* was found to be marginally significant (F (1, 137) = 3.21, p = .076, η^2 = .02), meaning that for consumers with a salient psychological health goal, purchase intentions for hedonic products are higher than for those with a salient physical health goal ($M_{Physical}$ = 3.29, SD = 1.66; $M_{Psychological}$ = 3.74, SD = 1.41).

For *Purchase Target* there is also a main effect (F (1, 137) = 7.68, p = .006, η^2 = .05). This result denotes that when purchasing for others, purchase intentions are higher than when purchasing for the self (M_{Self} = 3.17, SD = 1.49; M_{Other} = 3.86, SD = 1.54).

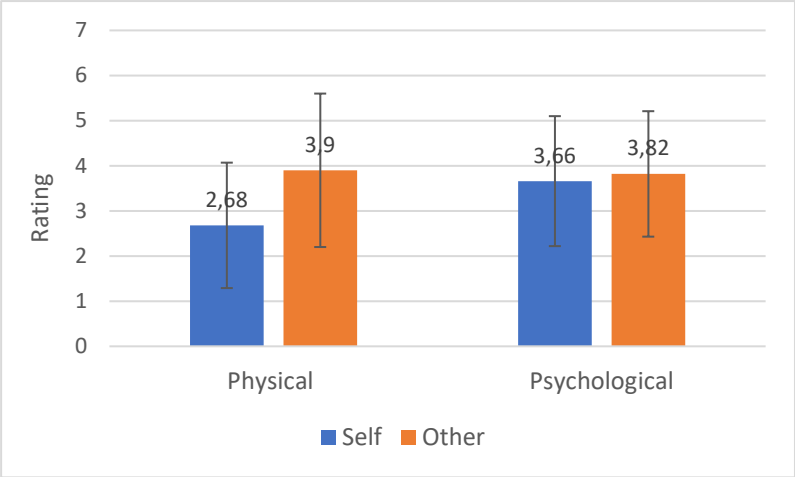
Regarding *Health Saliency*, no main effect was found (F (1, 137) = .07, p = .794, η^2 < .01).

The interaction between *Health Goal* and *Purchase Target* is significant (F (1, 137) = 4.48, p = .036, η^2 = .03). When a physical health goal is salient, the difference in purchase intentions between the self and other conditions is significant (M_{Self} = 2.68, SD = 1.39; M_{Other} = 3.90, SD = 1.70; t (69) = -3.31, p = .001), whereas when psychological health goal is salient, that difference is non-significant (M_{Self} = 3.66, SD = 1.44; M_{Other} = 3.82, SD = 1.39; t (68) = -.49, p

= .628). This suggests that when consumers have a salient psychological health goal, purchase intensions will be similar, independently of the purchase target. However, when there is a salient physical health goal, consumers will demonstrate lower purchase intentions in the self-condition.

Figure 5

Purchase Intentions: Interaction Health Goal, Purchase Target



All other effects were non-significant (Appendix 3.5).

4.2.6 Consumers' Preferences

A 2 Health Goal (Physical health, Psychological health) x 2 Purchase Target (Self, Other) ANOVA with between subjects on *Health Goals* and *Purchase Targets* was conducted to test participants' preference ratings for each product type (where 1 = product without Label and 7 = product with Healthy Label). A higher score indicates a higher preference for the product with the healthy label, when compared to the non-labelled one.

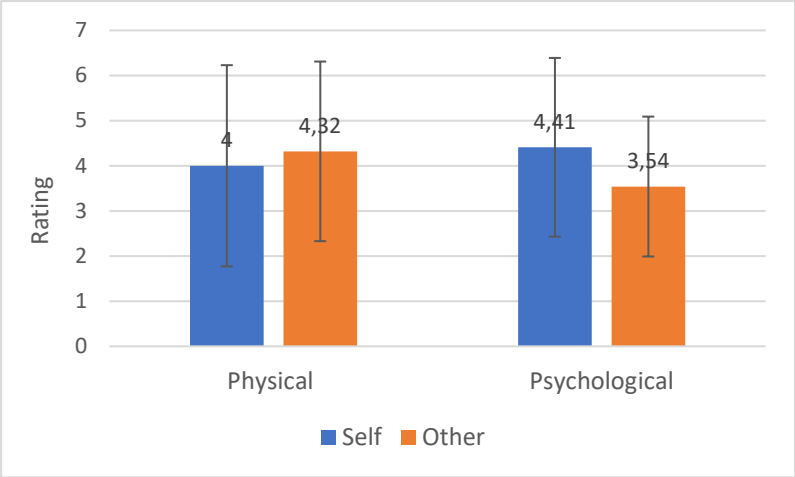
No Main effect of Health goal was found (F <1). Also, no main effect of Purchase Target was found (F<1).

The interaction between *Health Goal* and *Purchase Target* was found to be marginally significant (F (1, 137) = 3.28, p = .072, η^2 = .02). When consumers have a salient physical health goal, the difference on consumers' preferences between the self and other conditions is non-significant (M_{Self} = 4.00, SD = 2.23; M_{Other} = 4.32, SD = 1.99; t (69) = -.64, p = .526), whereas when consumers have a salient psychological health goal, that difference is significant (M_{Self} = 4.41, SD = 1.98; M_{Other} = 3.54, SD = 1.55; t (68) = 2.05, p = .044). While when exposed

to a physical health goal consumers will express similar preferences, independently of the purchase target, when a psychological health goal is salient, participants purchasing for others show higher preference for the original product (the less healthy version) than when buying for themselves.

Figure 6

Consumers' Preferences: Interaction Health Goal, Purchase Target



4.2.7 Anticipatory Guilt

A 2 *Health Goal* (Physical health, Psychological health) x 2 *Purchase Target* (Self, Other) ANOVA with between subjects on *Health Goals* and *Purchase Targets* was conducted to test participants' anticipatory guilt ratings for each product type (where 1 = product without Label and 7 = product with Healthy Label). A higher score indicates a higher anticipatory guilt for the product with healthy label, when compared to the non-labelled one.

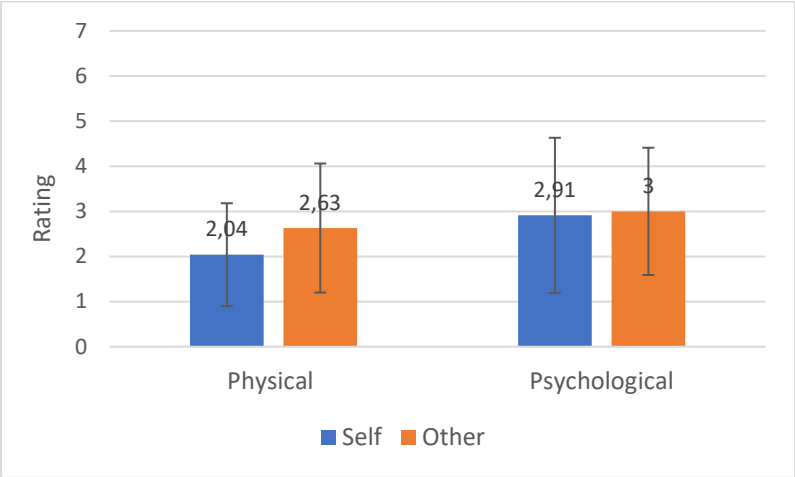
The analysis revealed a main effect of Health Goal (F (1, 137) = 6.60, p = .011, η^2 = .046). Consumers express a higher level of anticipatory guilt for products without label (when compared to the ones with healthy label) in the physical health goal condition than in the psychological health goal condition ($M_{Physical}$ = 2.34, SD = 1.32; $M_{Psychological}$ = 2.96, SD = 1.56). The level of anticipatory guilt associated with the consumption of a product without healthy label is higher when a physical health goal is salient than when a psychological health goal is salient.

For *Purchase Target*, no main effect was found (F (1, 137) = 1.89, p = .171, η^2 = .01).

The interaction between *Health* Goal and *Purchase Target* is not significant (F (1, 137) = 1.05, p = .308, η^2 = .01). Nonetheless, when consumers have a salient physical health goal, the difference in the level of anticipatory guilt between the self and other conditions is marginally significant (M_{Self} = 2.04, SD = 1.14; M_{Other} = 2.63, SD = 1.43; t (69) = -1.89, p = .063), whereas when a psychological health goal is salient, that difference is non-significant (M_{Self} = 2.91, SD = 1.72; M_{Other} = 3.00, SD = 1.41; t (68) = -.23, p = .820).

Figure 7

Anticipatory Guilt: Interaction Health Goal, Purchase Target



4.3 Manipulation Check

A manipulation check was conducted to understand if the manipulations of Health Saliency, Health Goal and Purchase Target worked as planned.

To test if participants noticed the No Added Sugar Label they were asked: "What was the main difference between the chocolates from the same brand presented?". Participants had five options to choose from and 79% selected the right option: "Sugar Label".

Furthermore, to test the manipulation of Health Goal, participants were asked "Which type of health was highlighted in the beginning of the survey?", being presented with the options, "Physical Health", "Psychological Health" and "None". Moreover, they also had the option to select both physical and psychological health. From the participants in the physical health goal condition, 69% answered correctly "Physical Health", while 17% answered both physical and psychological health, and 14% gave as an answer "Psychological Health". As to the

psychological health goal condition, there was a smaller than expected number of participants answering correctly “Psychological Health”, only 40%. However, 17% answered both physical and psychological health and 43% gave the wrong answer, “Physical Health”.

Moreover, to understand if participants were aware of their purchase target, they were asked to complete the following statement: “During the survey you were instructed to buy a chocolate for....”, with “Yourself” and “A friend” as possible answers. On the self-condition, 93% of the participants answered correctly “Yourself”, and only 7% answered incorrectly “A friend”. Regarding the other condition, 97% of participants answered correctly “A friend” and just 3% gave the wrong answer, “Yourself”.

Also, as an attention check the question “Which type of chocolate did you see during the survey?” was presented to participants and they were given five options to choose from. 95% of participants gave the right answer: “Milk Chocolate”, which is a good indicator of their attention during the realization of the survey.

The results obtained for the manipulation check of Purchase Target and Health Saliency were in line with expectations, revealing that this manipulation was successful. However, the manipulation check for Health Goal did not present the results expected. Some reasons that may explain why this happened will be further explored in the last chapter. No participants were excluded from the analysis based on their answers in the manipulation check.

4.4 Controls

Individual characteristics may influence judgements and choices. For instance, people with a higher level of self-health awareness show higher concern about their health, higher motivation to engage in healthy behaviors, as well as they are more attentive to nutrition claims (Kraft & Goodel, 1993; Mai & Hoffman, 2012). Moreover, Bialkova et al. (2015) demonstrated that health motivation influences product evaluation and purchase intentions. Concerning proneness to guilt, Wansink & Chandon (2006), concluded that guilt associated with food consumption often occurs because of two opposite goals present in consumers’ minds: the hedonic goal of pleasure and enjoyment, and the utilitarian goal of staying healthy. Furthermore, feelings of guilt after eating certain foods stay in consumers’ memory and may influence future judgements and decisions in similar conditions (Hur & Jang, 2015), possibly discouraging certain eating behaviors. However, in day-to-day life consumers’ experience guilt in different levels.

Consequently, as self-health awareness and proneness to guilt are dispositional variables because they represent individual responses to situations that are based on consumers' past experiences, and personality traits, it is important to test if self-health awareness and proneness to guilt may explain the results found for health goals and purchase targets.

Regarding Self-Health Awareness, a 2 *Health Goal* (Physical health, Psychological health) x 2 *Purchase Target* (Self, Other) ANOVA revealed that participants in the physical and psychological health goal conditions ($M_{Physical}$ = 4.27, SD = 1.23; $M_{Psychological}$ = 4.45, SD = 1.22) did not differ in self-health awareness (F (1, 137) = .74, p = .390, η^2 = .01). Moreover, participants in the self and other conditions (M_{Self} = 4.37, SD = 1.18; M_{Other} = 4.34, SD = 1.27) did not present significant differences in self-health awareness (F (1, 137) = .03, p = .863, η^2 < .01).

As to Proneness to Guilt, a 2 *Health Goal* (Physical health, Psychological health) x 2 *Purchase Target* (self, other) ANOVA revealed that participants in the physical and psychological health goal conditions ($M_{Physical}$ = 6.04, SD = 1.14; $M_{Psychological}$ = 6.08, SD = 1.08) did not differ in guilt sensitivity (F (1, 137) = .05, p = .817, η^2 < 0.01), as well as participants in the self and other conditions (M_{Self} = 6.02, SD = 1.24; M_{Other} = 6.10, SD = 0.97) did not present significant differences in guilty sensitivity (F (1, 137) = .20, p = .660, η^2 < 0.01).

These outcomes suggest that the variables Self-Health Awareness and Proneness to Guilt do not explain the differences that can be found in the study and do not play a role on the effect of health goal or decision target on the dependent variables.

Chapter 5: Main Conclusions and Future Research

5.1. Main Findings

This study is intended at comprehending the impact of healthy labels on the hedonic representation of hedonic products and on the level of anticipatory guilt. Moreover, another important objective of this research is to understand the influence of health goals and purchase targets on consumers' representations and decisions regarding hedonic products.

It was argued that the presence of healthy labels on hedonic products would lead to lower hedonic representation of those products, when compared with the same product without healthy labels. Indeed, as expected, when a healthy label was present participants expressed lower psychological well-being - pleasure expectations and psychological health representation - and higher physical well-being - diet expectations and physical health representation-, than when a healthy label was not present (H1).

It was hypothesized and confirmed that participants experienced a higher level of anticipatory guilt for products without a healthy label (H1.1). Additionally, it was seen that there was not a significant difference in the level of anticipatory guilt experienced by participants when purchasing for the self or for other and that the level of anticipatory guilt towards products without healthy label was higher for participants with a salient physical health goal than for the ones with a psychological health goal.

Moreover, according to the hypothesis, this study showed that having a salient psychological health goal leads to higher psychological well-being representation - pleasure expectations, psychological health representation - and purchase intentions of hedonic products, than having a salient physical health goal. However, we observed that participants with different health goals did not express significantly different preferences for hedonic products with healthy label or without (H2). It was also observed that the physical well-being representation of products did not change according to the different health goals.

Similarly, it was hypothesized and confirmed in this research, that purchasing for others leads to higher psychological well-being representation – pleasure expectations, psychological health representation – and purchase intentions of hedonic products, than purchasing for the self. However, no significant differences were found between participants' preferences for hedonic products with or without label when purchasing for the self or for others (H3). Moreover, we

saw that when purchasing for others physical health representation is higher than when purchasing for the self, but diet expectations were similar in the self and other conditions.

Interestingly, significant interactions between health goals and purchase target were found. Participants with a salient physical health goal expressed lower psychological well-being - pleasure expectations, psychological health representation - and purchase intentions on the self-condition than on the other condition (H2.1). However, participants with a salient psychological health goal showed similar pleasure expectations, psychological health representation, and purchase intentions when purchasing for themselves and for others. Furthermore, no significant differences were seen on the physical well-being representation of products either when participants had a psychological or physical health goal and were purchasing for themselves or for others.

Moreover, we observed that participants with a salient psychological health goal, when purchasing for the self, expressed a higher preference for products with a healthy label, while when purchasing for others, showed a higher preference for products without a healthy label. Nonetheless, participants with a salient psychological health goal expressed similar preferences, when purchasing for themselves or others.

Additionally, regarding purchase intentions, no significant interaction between Health Saliency and Health Goals was observed. It was found that when a healthy label is present there are no significant differences in purchase intentions for the different health goals. However, when no healthy label is present, purchase intentions for hedonic products were higher when a psychological health goal was salient, than when a physical health goal was salient.

Similarly, for purchase intentions, an interaction between Health Saliency and Purchase Target was not found. In both products, with and without a healthy label, the difference in purchase intentions on the self and other conditions were similar, and in both products purchase intentions were higher when purchasing for others.

5.2. Discussion

One of the main objectives of this study was to understand consumers' hedonic representation of hedonic products with healthy labels. Our findings suggest that hedonic products with healthy labels are represented as less tasty, satisfying, enjoyable, pleasurable, and helpful for

psychological health and as worse to make consumers feel emotionally well, leading to a decrease in psychological well-being representation. This can indicate that consumers associate the label with a reduction on the pleasure of consumption and therefore a reduction on the wellbeing that eating a pleasurable product may bring and on the hedonic appraisal of it, confirming the "unhealthy equals tasty" intuition, portrayed by Raghunathan et al. (2006). On the other hand, our results suggest that consumers see hedonic products with healthy labels as healthier, better for a diet, less caloric, more nutritive, more helpful for their physical health and better to make them feel physically well, than when no label is present, increasing physical well-being representation, also leading to a reduced hedonic representation of products. Indeed, a previous study by Steenhuis et al. (2010), showed that participants rated chocolate mousse cake with a healthy logo as significantly less unhealthy than the same cake without a logo.

Regarding anticipatory guilt, results show that consumers express a higher level of anticipatory guilt for the original hedonic products (less healthy). Indeed, Steenhuis et al. (2010) had already defended that healthier products, in this case products with a healthy label, induce fewer feelings of guilt. Moreover, consumers with a physical health goal expressed more feelings of guilt for the product without the healthy label than consumers with a psychological health goal. Literature shows that self-regulation implies the pursuit of long-term goals and the control of temptations that may undermine it (Metcalfe & Mischel, 1999). For someone with a focus on having a healthy body, the consumption of hedonic products, often seen as temptations, can result in a higher level of required self-control, and therefore on a higher level of anticipatory guilt associated with its consumption.

Furthermore, another crucial aim for us, was to understand how salient physical and psychological health goals could influence consumers' judgements and purchase intentions regarding hedonic foods. Our findings lead us to conclude that consumers with the objective of having a healthy body demonstrated lower enjoyment and pleasure for hedonic foods and perceived this type of food as less important to make them feel emotionally well, consequently lowering the psychological well-being representation associated with these products, as well as they expressed lower purchase intentions, than consumers who had the objective of feeling good with their mind. Consumers tend to link hedonic foods to unhealthy eating (Dodds & Chamberlain, 2017) and vices, being its consumption associated with short-term indulgent goals (Jakubanecs et al., 2018). Literature on self-regulation theory showed that in some circumstances the pursuit of long-term goals, in this case physical health goals, require the

control of immediate or short-term temptations that may undermine the long-term goal (Metcalfe & Mischel, 1999). In these cases, the process of self-regulation implies an adjustment in behavior, in order to achieve higher goals (Baumeister & Heatherton, 1996), and lower pleasure expectations, psychological health representation and purchase intentions can be a result of that adjustment in behavior in order to achieve the higher goal of being physically healthy. Indeed, literature showed people who have diet goals associate negative attributes with hedonic foods (Fugita & Han, 2009), which may help to explain our results.

Moreover, consumers make different purchase decisions and have different perceptions of hedonic products depending on the purchase target, in the case of this study, either themselves or a friend. Altogether results suggest that consumers tend to represent the products as generally better, for both physical and psychological health, when they are purchasing for a friend than when they purchase for themselves. These results are in accordance with the literature that shows that purchasing for others leads to more positive attitudes towards the products (Laran, 2010; Lu et al., 2013). It was also found that consumers expressed higher purchase intentions and pleasure expectations for hedonic products when purchasing for others, which can be explained by construal level theory. When consumers are purchasing for others, there is a higher psychological distance, and a higher abstraction leading to a focus on satisfaction and meaning of products, while when they are purchasing for themselves, psychological distance is lower, and decisions are more concrete (Lu et al., 2013). Another explanation could be that choosing for others is associated with higher satisfaction and lower fatigue (Polman & Vohs, 2016), which can explain why when deciding for others pleasure expectations are higher.

Interestingly, results show that consumers who are making purchasing decisions for themselves and have a focus on having a healthy body express significantly lower enjoyment and pleasure regarding hedonic foods, as well as they perceive the product as less helpful for their psychological health and express lower purchase intentions. On the other hand, consumers with a focus on the mind, and consumers with a focus on having a healthy body but purchasing for others express similar perceptions and purchase intentions. These results as a whole make sense because they are a combination of the results previously stated. As mentioned, individuals with diet goals associate negative attributes with hedonic foods (Fugita & Han, 2009) and when purchasing for the self there is lower psychological distance, being decisions more concrete and focused on feasibility instead of desire (Lu et al., 2013), which can explain the results obtained.

Finally, no main effects were found between the presence of a healthy label or not and the focus of consumers' on having a healthy body or mind. Similarly, no interactions were observed between the presence of a healthy label or not and the purchase target – self or other.

5.3. Managerial/Academic Implications

Nowadays, consumers are increasingly aware of the importance of making healthier purchase decisions and companies must be able to adapt their products constantly to keep up with consumers' needs. This is a challenge for many companies, especially for companies marketing hedonic food, as consumers want to eat healthier, but also want to have pleasure while eating, and for many, these are conflicting goals. Nutritional labels, when used with the best of interests, are an important way of communication with customers, providing them information that they can rely on, while also helping them making healthier decisions. In this study, we provide insights on consumers' perceptions and decision making, regarding the presence of healthy labels on hedonic products and how health mindsets can be elicited to support consumer's informed decision.

Moreover, to our knowledge, there are not a lot of studies investigating the role of physical and psychological health goals on consumers' perceptions and decisions related to food. However, as shown in our study, and particularly to hedonic foods, participants with distinct health goals have different perceptions of food, which may influence their purchase decisions. Therefore, marketeers and managers should be aware of the existence of these different health goals when deciding how to promote products. Simply put, marketing strategies could benefit from acknowledging that psychological well-being is part of consumers' health and, subsequently matching consumers' health goals.

The present research also explores the effect of purchase targets on consumers' decision-making. This is especially important because hedonic products are often something people like to offer (Williams & Rosenzweig, 2017). It is crucial for companies to understand if consumers' perception of products change as a function of the purchase target and understand if certain products should be marketed for their own consumption, or for others' consumption.

However, it is important to mention that framing hedonic products as good for psychological well-being has its pros and cons. An increasing focus on pleasure and psychological well-being may distract consumers from choosing healthier options, as well as healthy labels can be

misleading, making consumers perceive products as healthier than they are. To overcome the potential problem that a focus on pleasure and psychological health may bring, a solution could be to include in hedonic products with healthy labels a frame for psychological well-being and mental illness. A strategy that would focus on health as body and mind, portraying a balance between the two.

5.4. Limitations and Future Research

Some limitations can be mentioned, offering opportunities for future research.

Firstly, the manipulation of the psychological health goal can be a limitation. On the manipulation check, when asked which type of health was highlighted in the beginning of the survey, a considerable number of participants answered physical health, when they were, in reality, presented with a situation portraying psychological health. However, there are several reasons why this may happen. Starting with the definition of health in 1948, the Constitution of the World Health Organization defined that "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.". Unfortunately, the notion of health is often only associated with the absence of disease or infirmity, overshadowing the importance of mental and social aspects on health (Aguilera et al., 2019). This possibly happens because of the stigma associated with mental health (Fox et al., 2018) and the constant lookout for the perfect body (Brownell, 1991). Additionally, some participants may see food as something only associated with physical health, neglecting the pleasure that food can provide, associated with social activities, happiness, and good mental-health (Gómez-Pinilla, 2008; Aguilera et al., 2019). Therefore, when asked the type of health portrayed, they might not be able to understand that food can be related to psychological health, or they can think of psychological health as physical health, not being able to make the distinction. These reasons make us believe that although a significant number of participants answered wrongly, a psychological health goal was salient anyway, and because of that it was decided not to delete those observations, as that would also reduce the size of our sample, making us lose power in our tests. Future research could explore if the hypothesis presented to justify this limitation are verified. Moreover, a bigger sample would allow to compare participants with a salient psychological health goal: those who answered wrongly and those who got it right, trying to understand if there are significant differences between them.

Furthermore, although sufficient, the sample size was relatively small. Also, the sample's demographic characteristics could be more representative of the population in general, as, for example, in this study the percentage of women participating is much higher than men. Consequently, a bigger sample, with more diverse demographic characteristics would allow to further test the applicability of the results found, improving the results from the whole study.

The manipulation of health goals could be explored in different ways, such as complementing what was done with a game to find words in a puzzle, in which participants in the physical health goal condition would see words associated with physical health, while participants in the psychological condition would be presented with words related to psychological health (Connell & Mayor, 2013).

This study focuses on hedonic food consumption, and to test our hypothesis we chose chocolate, a product usually associated with hedonic consumption and already used in other studies (Kuikka & Laukkanen, 2012). Further research could explore other foods associated with hedonic consumption such as potato chips or cakes, to strengthen the current study, or to possibly understand if different outcomes would be observed. Another idea for future research would be to replicate the study for food with utilitarian benefits, instead of hedonic ones.

Following on the previous idea, in this study in particular the healthy label used was "No Added Sugar". However, other studies could use other nutrition labels, such as reduced fat or sugar, in order to strengthen the current study.

Also, the images presented to consumers could be different. Although we used two chocolates from two different unknown brands, and with different packaging layouts, to account for differences in consumers' visual perceptions, it would be interesting to test if consumers would express different perceptions if exposed to other, more appealing, layouts and to chocolates from famous brands.

Finally, it would be interesting to replicate this study combining healthy labels and taste labels. Would this combination increase consumers' pleasure expectations and purchase intentions? Would it make healthier products more appealing?

To conclude, there's space to improve and strengthen the results from the present study, as well as to expand them with future research.

Appendices

Appendix 1. Online Survey

Introduction to the study:

Dear Participant,

I would like to thank you for taking the time to participate in this study.
My name is Raquel Sousa, and the following survey was developed within the scope of my final Dissertation at Católica Lisbon School of Business and Economics.
This survey will help to understand better consumer's perception on some chocolate characteristics.
I really appreciate your honesty and attention when answering these questions, as they are really important for the study. Please note that there are no right or wrong answers and that all responses will be kept confidential, anonymous, and used only for academic purposes.
This survey takes approximately 7 minutes to complete.
In case you have any further questions, please contact me at: 152120235@alunos.lisboa.ucp.pt

Thank you once again for your collaboration.

General Introduction:

In this study, we would like to ask you to think about your health and what is important to you, and to imagine yourself going shopping.
Then, you will be presented with a couple of products and will be asked several judgments about those products.
You can proceed when you feel ready to start the study.

Introduction for Health Goals: (participants are randomly assigned to 1 of the 2 conditions)

A. Physical Health Goal

Please, think about your health and what is important to you.

Focus on the well-being of your body and the proper functioning of your organism. Thank your body for all the challenges it has gone through throughout the years. You can perform daily tasks, you feel well while exercising, you live comfortably in your body. Everything feels like it is working in unison. You feel in peace with your body. You want to live a long and healthy life.

B. Physical Health Goal (this version is presented in parenthesis)

Please, think about your health and what is important to you.

Focus on the well-being of your mind, on your emotions and feelings. You know who you are, you know your capabilities, and you respect yourself. You are kind, you know your own imperfections and weaknesses, but, after all, that is part of being human. When you're stressed, you use resources and learn skills to better deal with it. You look to the future with enthusiasm and take time to appreciate life.

Introduction for Purchase Targets: (participants are randomly assigned to 1 of the 2 conditions)

A. Purchasing for the self

Imagine you are doing your groceries and think about buying a snack for yourself.

Now think about yourself and what your body (mind) needs, what is important to you and will make you feel better.

Next, you will be presented with some products. Please, imagine you are **considering purchasing these products for yourself.**

Please, answer the following questions based on your own feelings and intuitions.

A. Purchasing for others (this version is presented in parenthesis)

Imagine you are doing your groceries and think about buying a snack for a friend.

Now think about your friends and what their minds (bodies) need, what is important to them and will make them feel better.

Next, you will be presented with some products. Please, imagine you are **considering purchasing these products for your friend.**

Please, answer the following questions based on your own feelings and intuitions.

Block 1: Individual judgement of chocolates (participants were randomly presented with the four different chocolates)

Imagine you are buying this chocolate for **yourself (a friend).**

or

or

or

Q1: Please rate this product on the following features.

	Not at all 1	2	3	4	5	6	Extremely 7
It provides enjoyment.	○	○	○	○	○	○	○
It is tasty.	○	○	○	○	○	○	○
It is nutritive.	○	○	○	○	○	○	○
It is helpful for a diet.	○	○	○	○	○	○	○
It is pleasurable.	○	○	○	○	○	○	○
It is highly caloric.	○	○	○	○	○	○	○
It is healthy.	○	○	○	○	○	○	○
It provides satisfaction.	○	○	○	○	○	○	○

Q2: Please indicate the likelihood of buying this chocolate for **yourself (a friend).**

	1	2	3	4	5	6	7	
Not likely at all	○	○	○	○	○	○	○	Extremely likely

Please have in mind the chocolate you just saw and considered buying for **yourself (a friend).**

Q3: How helpful is it to your (your friends') physical health?

Not at all 1	2	3	4	5	6	Extremely 7
○	○	○	○	○	○	○

Q4: How helpful is it to your (your friends') psychological health?

Not at all 1	2	3	4	5	6	Extremely 7
○	○	○	○	○	○	○

Q5: Does it make you (your friends) feel physically well?

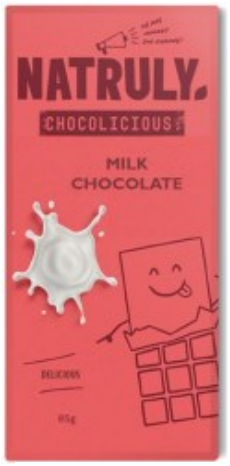
Not at all 1	2	3	4	5	6	Extremely 7
○	○	○	○	○	○	○

Q6: Does it make you (your friends) feel emotionally well?

Not at all 1	2	3	4	5	6	Extremely 7
○	○	○	○	○	○	○

<u>Block 2: Combined judgement of chocolates</u> (participants were presented with the two combinations of chocolates)

Imagine you are considering purchasing a chocolate **for yourself (a friend)**.
You are now deciding between two options from the **same brand and with same price**.
Please take a moment to think and decide which of these two chocolates you are more likely to purchase.



Chocolate A

Chocolate B

or

Chocolate A

Chocolate B

Q7: Which chocolate would you buy?

	1	2	3	4	5	6	7	
Definitely Chocolate A	○	○	○	○	○	○	○	Definitely Chocolate B

Q8: Which chocolate would make you feel more guilty?

	1	2	3	4	5	6	7	
Definitely Chocolate A	○	○	○	○	○	○	○	Definitely Chocolate B

Block 3: Self-Health Awareness

Q9: Please indicate to what extent do you agree with the following statements.

	Not at all 1	2	3	4	5	6	Totally 7
I consider myself very health conscious.	○	○	○	○	○	○	○
I am constantly examining my health.	○	○	○	○	○	○	○
I reflect about my health a lot.	○	○	○	○	○	○	○
I am very involved with my health.	○	○	○	○	○	○	○
I usually read the ingredients in food labels.	○	○	○	○	○	○	○
I am interested in information about my health.	○	○	○	○	○	○	○

Block 4: Proneness to Guilt

Q10: In this section, you will read about five situations that people could encounter in day-to-day life, followed by reactions to those situations. As you read each scenario, try to imagine yourself in that situation. Then indicate the likelihood that you would react in the way described.

1. After realizing you have received too much change at a store, you decide to keep it because the salesclerk doesn't notice. What is the likelihood that you would feel uncomfortable about keeping the money?

	1	2	3	4	5	6	7	
Not at all	○	○	○	○	○	○	○	Totally

2. You secretly commit a felony. What is the likelihood that you would feel remorse about breaking the law?

	1	2	3	4	5	6	7	
Not at all	○	○	○	○	○	○	○	Totally

3. At a coworker's housewarming party, you spill red wine on their new cream-colored carpet. You cover the stain with a chair so that nobody notices your mess. What is the likelihood that you would feel that the way you acted was pathetic?

	1	2	3	4	5	6	7	
Not at all	○	○	○	○	○	○	○	Totally

4. You lie to people, but they never find out about it. What is the likelihood that you would feel terrible about the lies you told?

	1	2	3	4	5	6	7	
Not at all	○	○	○	○	○	○	○	Totally

5. Out of frustration, you break the photocopier at work. Nobody is around and you leave without telling anyone. What is the likelihood you would feel bad about the way you acted?

	1	2	3	4	5	6	7	
Not at all	○	○	○	○	○	○	○	Totally

Block 5: Manipulation Checks and attention check

In this section, you will be answering some questions about this survey.

Q11. Which type of health was highlighted in the beginning of the survey?

- ☐ Physical Health
- ☐ Psychological Health
- ☐ ⃠ None of the above

Q12. During the survey you were instructed to buy a chocolate for....

- ☐ Yourself
- ☐ A friend

Q13. What was the main difference between the chocolates from the same brand presented?

- [ ] Size
- [ ] Sugar Label
- [ ] Type of chocolate
- [ ] Fat Label
- [ ] Vegetarian Label

Q14. Which type of chocolate did you see during the survey?

- [ ] Dark Chocolate
- [ ] Chocolate with Caramel
- [ ] Milk Chocolate
- [ ] White Chocolate
- [ ] Chocolate with almonds

Demographics

Before you complete this survey, please answer the following demographic questions.

Q15. How old are you?

_____

What is your gender?

- ○ Male
- ○ Female
- ○ Non-binary
- ○ Prefer not to answer

Q16. What is your nationality?

- ○ Portuguese
- ○ German
- ○ British
- ○ French
- ○ Italian
- ○ Brazilian
- ○ Other

Q17. What is the highest degree you have completed?

- ○ Less than Highschool
- ○ High School Degree
- ○ Undergraduate Degree (Bachelor or equivalent)
- ○ Postgraduate Degree (Master or equivalent)
- ○ Professional Degree (PhD or equivalent)
- ○ Other

Q18. What is your occupation?

- ○ Student
- ○ Student-worker
- ○ Employed
- ○ Unemployed
- ○ Retired
- ○ Other

If you have any comment or question about the study, you can write it down below.

Thank you for your participation.

Appendix 2. Demographic characterization of the sample

Table 1

Sample Demographics: Age

Variables	n	min	max	mean	SD
Age	141	16	66	38,07	14,251

Table 2

Sample Demographics: Gender, Nationality, Education and Occupation

Variable		n	%
Gender	Male	32	22,7%
	Female	109	77,3%
Nationality	Portuguese	127	90,1%
	Other	14	9,9%
Education	Middle School	8	5,7%
	High School	22	15,6%
	Undergraduate	89	63,1%
	Postgraduate	22	15,6%
Occupation	Student	32	22,7%
	Student-Worker	12	8,5%
	Employed	93	66,0%
	Unemployed	4	2,8%

Appendix 3. SPSS results from the study

Appendix 3.1. Pleasure Expectations

Table 3

Pleasure Expectations: M, SD, F, p and η^2

Variables			*M*	*SD*	*F*	*p*	η^2
Healthy Label			4.18	1.35	5.38	.022	.04
No-Label			4.33	1.37			
Physical			4.00	1.39	6.19	.014	.04
Psychological			4.51	1.18			
Self			3.89	1.24	12.23	.001	.08
Other			4.62	1.29			
Physical	Self		3.43	1.19	3.99	.048	.03
	Other		4.56	1.35			
Psychological	Self		4.36	1.12			
	Other		4.67	1.24			
Healthy Label	Physical		3.96	1.45	1.01	.318	.01
	Psychological		4.41	1.22			
No-Label	Physical		4.04	1.45			
	Psychological		4.61	1.24			
Healthy Label	Self		3.81	1.27	.15	.710	.00
	Other		4.56	1.33			
No-Label	Self		3.98	1.35			
	Other		4.67	1.31			
Physical	Healthy Label	Self	3.35	1.28	.79	.376	.01
		Other	4.56	1.35			
	No-Label	Self	3.51	1.29			
		Other	4.57	1.41			
Psychological	Healthy Label	Self	4.27	1.10			
		Other	4.55	1.33			
	No-Label	Self	4.44	1.27			
		Other	4.79	1.21			

The interaction *Health Saliency*Health Goal* is not significant (F (1, 137) = 1.01, p = .318, η^2 = .01). However, in products with a healthy label, the difference in pleasure expectations when there is a salient physical or psychological health goal is marginally significant ($M_{Physical}$ = 3.96, SD = 1.45; $M_{Psychological}$ = 4.41, SD = 1.22; t (139) = -1.97, p = .051), whereas in products with no label it is significant ($M_{Physical}$ = 4.04, SD = 1.45; $M_{Psychological}$ = 4.61, SD = 1.24; t (139) = -2.51, p = .013).

The interaction *Health Saliency*Purchase Target* is not significant (F (1, 137) = .14, p = .710, η^2 < .01). This means that the difference in pleasure expectations between the self and other conditions is similar both in products with healthy label (M_{Self} = 3.81, SD = 1.27; M_{Other} = 4.56, SD = 1.33; t (139) = -3.41, p = .010) and without (M_{Self} = 3.98, SD = 1.35; M_{Other} = 4.67, SD = 1.31; t (139) = -3.12, p = .020).

The interaction *Health Saliency*Health Goal*Purchase Target* is not significant (F (1, 137) = .79, p = .376, η^2 = .01). When consumers have a salient physical health goal, purchasing for others leads to higher pleasure expectations both for products with a healthy label (M_{Self} = 3.35, SD = 1.28; M_{Other} = 4.56, SD = 1.35; t (69) = -3.89, p < .001) and without (M_{Self} = 3.51, SD = 1.29; M_{Other} = 4.57, SD = 1.41; t (69) = -3.30, p = .002). When consumers have a salient psychological health goal, they express similar pleasure expectations on the self and other conditions, both in products with healthy label (M_{Self} = 4.27, SD = 1.10; M_{Other} = 4.55, SD = 1.33; t (68) = -.96, p = .343) and without (M_{Self} = 4.44, SD = 1.27; M_{Other} = 4.79, SD = 1.21; t (68) = -1.16, p = .250).

Appendix 3.2. Diet Expectations

Table 4

Diet Expectations: M, SD, F, p and η^2

Variables			*M*	*SD*	*F*	*p*	η^2
Healthy Label			3.14	1.10	54.40	.000	.28
No-Label			2.58	1.04			
Physical			2.83	0.84	.23	.63	.00
Psychological			2.90	1.09			
Self			2.84	1.02	.08	.777	.00
Other			2.89	0.92			
Physical	Self		2.91	.87	1.62	.205	.01
	Other		2.75	.82			
Psychological	Self		2.78	1.17			
	Other		3.03	1.01			
Healthy Label	Physical		3.08	1.02	.41	.522	.00
	Psychological		3.21	1.18			
No-Label	Physical		2.57	.85			
	Psychological		2.60	1.21			
Healthy Label	Self		3.14	1.16	.25	.617	.00
	Other		3.15	1.05			
No-Label	Self		2.54	1.08			
	Other		2.63	1.00			
Physical	Healthy Label	Self	3.13	1.05	1.97	.163	.01
		Other	3.04	1.00			
	No-Label	Self	2.69	.82			
		Other	2.46	.88			
Psychological	Healthy Label	Self	3.15	1.28			
		Other	3.26	1.09			
	No-Label	Self	2.40	1.29			
		Other	2.80	1.09			

The interaction *Health Saliency*Health Goal* is not significant (F (1, 137) = .41, p = .522, η^2 < .01), such that consumers express similar diet expectations when they have salient physical and psychological health goals both in products with healthy label ($M_{Physical}$ = 3.08, SD = 1.02; $M_{Psychological}$ = 3.21, SD = 1.18; t (139) = -.69, p = .492) and without ($M_{Physical}$ = 2.57, SD = .85; $M_{Psychological}$ = 2.60, SD = 1.21; t (124) = -.18, p = .86).

The interaction *Health Saliency*Purchase Target* is not significant (F (1, 137) = .25, p = .617, η^2 < .01). It seems that consumers express similar diet expectations in both self and other conditions for products with healthy label (M_{Self} = 3.14, SD = 1.16; M_{Other} = 3.15, SD = 1.05; t (139) = -.37, p = .971) and without (M_{Self} = 2.54, SD = 1.08; M_{Other} = 2.63, SD = 1.00; t (124) = -.47, p = .640).

The interaction *Health Saliency*Health Goal*Purchase Target* is not significant (F (1, 137) = 1.969, p = .163, η^2 = .014). When with a salient physical health goal, consumers express similar diet expectations on the self and other conditions, both in products with healthy label (M_{Self} = 3.13, SD = 1.05; M_{Other} = 3.04, SD = 1.00; t (69) = .39, p = .702) and without (M_{Self} = 2.69, SD = .82; M_{Other} = 2.46, SD = .88; t (69) = 1.15, p = .255). Likewise, when with a salient psychological health goal, the same is observed for products with healthy label (M_{Self} = 3.15, SD = 1.28; M_{Other} = 3.26, SD = 1.09; t (68) = -.39, p = .697) and for products without it (M_{Self} = 2.40, SD = 1.29; M_{Other} = 2.80, SD = 1.09; t (68) = -1.40, p = .167).

Appendix 3.3. Physical Health Representation

Table 5

Physical Health Representation: M, SD, F, p and η^2

Variables			*M*	*SD*	*F*	*p*	η^2
Healthy Label			2.73	1.40	15.11	.00	.10
No-Label			2.49	1.27			
Physical			2.53	1.24	.56	.457	.00
Psychological			2.69	1.34			
Self			2.36	1.19	5.30	.023	.04
Other			2.86	1.34			
Physical	Self		2.23	1.05	.29	.593	.00
	Other		2.83	1.35			
Psychological	Self		2.50	1.32			
	Other		2.88	1.35			
Healthy Label	Physical		2.62	1.34	1.48	.226	.01
	Psychological		2.85	1.46			
No-Label	Physical		2.45	1.26			
	Psychological		2.53	1.29			
Healthy Label	Self		2.49	1.31	.05	.818	.00
	Other		2.97	1.46			
No-Label	Self		2.24	1.16			
	Other		2.74	1.33			
Physical	Healthy Label	Self	2.27	1.13	1.94	.166	.01
		Other	2.95	1.45			
	No-Label	Self	2.18	1.03			
		Other	2.72	1.41			
Psychological	Healthy Label	Self	2.71	1.44			
		Other	2.99	1.49			
	No-Label	Self	2.29	1.29			
		Other	2.77	1.27			

The interaction *Health Saliency*Health Goal* is not significant (F (1, 137) = 1.48, p = .226, η^2 = .01). It seems that consumers have similar physical health representations of products when physical and psychological health goals are salient, both in products with healthy labels ($M_{Physical}$ = 2.62, SD = 1.34; $M_{Psychological}$ = 2.85, SD = 1.46; t (139) = -.38, p = .705) and without ($M_{Physical}$ = 2.45, SD = 1.26; $M_{Psychological}$ = 2.53, SD = 1.29; t (139) = -.98, p = .331).

The interaction *Health Saliency*Purchase Target* is not significant (F (1, 137) = .05, p = .818, $\eta^2 < .01$), such that the difference in physical health representation on the self and other conditions is similar both in products with healthy label (M_{Self} = 2.49, SD = 1.31; M_{Other} = 2.97, SD = 1.46; t (139) = -2.05, p = .042) and without (M_{Self} = 2.24, SD = 1.16; M_{Other} = 2.74, SD = 1.33; t (139) = -2.41, p = .017).

The interaction *Health Saliency*Health Goal*Purchase Target* is not significant (F (1, 137) = 1.94, p = .166, η^2 = .01). When consumers have a salient physical health goal, purchasing for others leads to higher expectations of physical health both for products with healthy label (M_{Self} = 2.27, SD = 1.13; M_{Other} = 2.95, SD = 1.45; t (69) = -2.20, p = 0.031) and without (M_{Self} = 2.18, SD = 1.03; M_{Other} = 2.72, SD = 1.41; t (69) = -1.83, p = 0.072), although this effect is marginally significant for products without label. When with a salient psychological health goal, consumers express similar physical health representations when purchasing for the self and for others, both in products with healthy label (M_{Self} = 2.71, SD = 1.44; M_{Other} = 2.99, SD = 1.49; t (68) = -.79, p = .430) and without (M_{Self} = 2.29, SD = 1.29; M_{Other} = 2.77, SD = 1.27; t (68) = -1.56, p = .123).

Appendix 3.4. Psychological Health Representation

Table 6

Psychological Health Representation: M, SD, F, p and η^2

Variables			*M*	*SD*	*F*	*p*	η^2
Healthy Label			3.95	1.52	3.38	.068	.02
No-Label			4.07	1.59			
Physical			3.73	1.60	5.76	.018	.04
Psychological			4.29	1.35			
Self			3.53	1.47	16.54	.000	.11
Other			4.49	1.39			
Physical	Self		3.01	1.38	4.05	.046	.03
	Other		4.44	1.50			
Psychological	Self		4.05	1.39			
	Other		4.53	1.29			
Healthy Label	Physical		3.69	1.60	.12	.734	.00
	Psychological		4.22	1.39			
No-Label	Physical		3.79	1.69			
	Psychological		4.36	1.43			
Healthy Label	Self		3.46	1.46	.08	.776	.00
	Other		4.44	1.42			
No-Label	Self		3.60	1.61			
	Other		4.54	1.42			
Physical	Healthy Label	Self	2.94	1.35	.21	.652	.00
		Other	4.42	1.49			
	No-Label	Self	3.09	1.57			
		Other	4.47	1.54			
Psychological	Healthy Label	Self	3.99	1.40			
		Other	4.46	1.35			
	No-Label	Self	4.11	1.51			
		Other	4.61	1.31			

The interaction *Health Saliency*Health Goal* is not significant (F (1, 137) = .12, p = .734, η^2 < .01). This result indicates that the difference in products' psychological health representation between participants with a salient physical or psychological health goal is similar both in products with healthy label ($M_{Physical}$ = 3.69, SD = 1.60; $M_{Psychological}$ = 4.22, SD = 1.39; t (139) = -2.11, p = .037) and without ($M_{Physical}$ = 3.79, SD = 1.69; $M_{Psychological}$ = 4.36, SD = 1.43; t (139) = -2.18, p = .031).

The interaction *Health Saliency*Purchase Target* is not significant (F (1, 137) = .08, p = .776, η^2 < .01), meaning that the difference in products' psychological health representation on the self and other conditions is similar both in products with healthy label (M_{Self} = 3.46, SD = 1.46; M_{Other} = 4.44, SD = 1.42; t (139) = -4.01, p < .001) and without (M_{Self} = 3.60, SD = 1.61; M_{Other} = 4.54, SD = 1.42; t (139) = -3.65, p < .001).

The interaction *Health Saliency*Health Goal*Purchase Target* is not significant (F (1, 137) = .21, p = .652, η^2 < .01). When consumers have a salient physical health goal, purchasing for others leads to higher psychological health expectations for both products with a healthy label (M_{Self} = 2.94, SD = 1.35; M_{Other} = 4.42, SD = 1.49 t (69) = -4.35, p < .001) and without (M_{Self} = 3.09, SD = 1.57; M_{Other} = 4.47, SD = 1.54; t (69) = -3.75, p < .001). When with a salient psychological health goal, consumers express similar psychological health representations for the self and other conditions, both in products with healthy label (M_{Self} = 3.99, SD = 1.40; M_{Other} = 4.46, SD = 1.35; t (68) = -1.43, p = .156) and without (M_{Self} = 4.11, SD = 1.51; M_{Other} = 4.61, SD = 1.31; t (68) = -1.46, p = .150).

Appendix 3.5. Purchase Intentions

Table 7

Purchase Intentions: M, SD, F, p and η^2

Variables			*M*	*SD*	*F*	*p*	η^2
Healthy Label			3.53	1.65	.07	.794	.00
No-Label			3.50	1.61			
Physical			3.29	1.66	3.21	.076	.02
Psychological			3.74	1.41			
Self			3.17	1.49	7.68	.006	.05
Other			3.86	1.54			
Physical	Self		2.68	1.39	4.48	.036	.03
	Other		3.90	1.70			
Psychological	Self		3.66	1.44			
	Other		3.82	1.39			
Healthy Label	Physical		3.33	1.71	.98	.325	.01
	Psychological		3.69	1.50			
No-Label	Physical		3.27	1.75			
	Psychological		3.79	1.52			
Healthy Label	Self		3.19	1.58	.46	.499	.00
	Other		3.82	1.59			
No-Label	Self		3.15	1.61			
	Other		3.90	1.63			
Physical	Healthy Label	Self	2,67	1.51	2.47	.118	.02
		Other	3.97	1.67			
	No-Label	Self	2.69	1.48			
		Other	3.83	1.83			
Psychological	Healthy Label	Self	3.70	1.50			
		Other	3.67	1.52			
	No-Label	Self	3.61	1.62			
		Other	3.97	1.41			

The interaction *Health Saliency*Health Goal* is not significant (F (1, 137) = .98, p = .325, η^2 = .01). In products with a healthy label, the difference in purchase intentions when with a salient physical or psychological health goal is not significant ($M_{Physical}$ = 3.33, SD = 1.71; $M_{Psychological}$ = 3.69, SD = 1.50; t (139) = -1.31, p = .192), whereas in products with no label it is marginally significant ($M_{Physical}$ = 3.27, SD = 1.75; $M_{Psychological}$ = 3.79, SD = 1.52; t (139) = -1.90, p = .059).

The interaction *Health Saliency*Purchase Target* is not significant (F (1, 137) = .46, p = .499, η^2 < .01), as the difference in purchase intentions when purchasing for the self or for others is similar both in products with a healthy label (M_{Self} = 3.19, SD = 1.58; M_{Other} = 3.82, SD = 1.59; t (139) = -2.39, p = .018) and without (M_{Self} = 3.15, SD = 1.61; M_{Other} = 3.90, SD = 1.63; t (139) = -2.76, p = .007).

The interaction *Health Saliency*Health Goal*Purchase Target* is not significant (F (1, 137) = 2.471, p = .118, η^2 = .02). When with a salient physical health goal, consumers purchasing for others demonstrate higher purchase intentions both for products with a healthy label (M_{Self} = 2.67, SD = 1.51; M_{Other} = 3.97, SD = 1.67; t (69) = -3.45, p = .001) and without (M_{Self} = 2.69, SD = 1.48; M_{Other} = 3.83, SD = 1.83; t (69) = -2,90, p = .005). When with a salient psychological health goal, consumers express similar purchase intentions on the self and other conditions, both in products with healthy label (M_{Self} = 3.70, SD = 1.50; M_{Other} = 3.67, SD = 1.52; t (68) = .08, p = .937) and without (M_{Self} = 3.61, SD = 1.62; M_{Other} = 3.97, SD = 1.41; t (68) = -.99, p = .328).

Appendix 3.6. Consumers' Preferences

Table 8

Consumers' Preferences: M, SD, F, p and η^2

Variables		*M*	*SD*	*F*	*p*	η^2
Physical		4.16	2.09	.30	.583	.00
Psychological		3.98	1.83			
Self		4.21	2.09	.71	.403	.01
Other		3.93	1.84			
Physical	Self	4.00	2.23	3.28	.072	.02
	Other	4.32	1.99			
Psychological	Self	4.41	1.98			
	Other	3.54	1.55			

Appendix 3.7. Anticipatory Guilt

Table 9

Anticipatory Guilt: M, SD, F, p and η^2

Variables		*M*	*SD*	*F*	*p*	η^2
Physical		2.34	1.32	6.60	.011	.05
Psychological		2.96	1.56			
Self		2.48	1.44	1.89	.171	.01
Other		2.81	1.44			
Physical	Self	2.04	1.14	1.05	.308	.01
	Other	2.63	1.43			
Psychological	Self	2.91	1.72			
	Other	3.00	1.41			

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