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Co-creation as a means to enhance utilitarian dimensions on hedonic products

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Abstract (Portuguese Version)

Título: Cocriação como meio de realçar as dimensões utilitárias em produtos hedónicos.

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Quando uma compra é feita, os consumidores são obrigados a deliberar entre uma escolha mais hedónica ou uma mais utilitária. Durante vários anos investigadores têm tentado perceber este processo de decisão, em que os consumidores tendem a preferir atributos hedónicos, mas acabam por escolher a opção utilitária por causa do sentimento de culpa presente quando se escolhe a opção hedónica. Cocriação aparece como um meio para justificar o consumo hedónico sobre o utilitário, uma vez que os consumidores sabem exatamente as necessidades do mercado geral. Portanto, esta dissertação pretende explorar o efeito de os consumidores que observam saberem que um produto hedónico foi cocriado. A influência da cocriação nas perceções dos consumidores sobre as dimensões do produto foi analisada medindo a perceção de similaridade com a fonte de criação, as dimensões utilitárias e hedónicas e a intenção de compra. As hipóteses foram testadas através de um uma experiência 2 (modo de design: cocriação, empresa) x 2 (fonte de similaridade: alta, baixa) entre sujeitos, em que os participantes completaram um questionário e avaliaram determinadas dimensões do produto. Os resultados mostram que aqueles que se sentem similares à comunidade participante mostram maior intenção de compra em relação aos produtos hedónicos cocriados. Para além disso, a perceção das dimensões utilitárias nos produtos hedónicos é um importante impulsor da preferência por opções hedónicas cocriadas. O estudo complementa a literatura anterior fornecendo outra estratégia para destacar os produtos hedónicos, através do envolvimento dos consumidores, e aos gestores, mostra que a cocriação pode criar uma vantagem competitiva quando comparado com produtos desenvolvidos por profissionais.

Palavras-chave: hedónico, utilitário, cocriação, perceções, comportamento do consumidor, utilizadores observadores

Abstract

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Whenever a purchase is made, consumers must deliberate between making a more hedonic choice or a utilitarian one. For several years researchers have been trying to understand this decision-making process, whereas consumers tend to prefer hedonic attributes but end up choosing utilitarian options due to some guilt felt whenever choosing a hedonic option. Co-creation comes as a means to justify hedonic consumption over the utilitarian, since consumers know exactly what the general market needs. Therefore, this dissertation sets to explore the effect of observing consumers learning about a hedonic product being co-created. The influence of co-creation on the consumer' perception of the product dimensions was analyzed by measuring the perceived similarity to the source of creation, utilitarian and hedonic dimensions and willingness to purchase. The hypotheses were tested using a 2 (design mode: co-creation, firm) x 2 (source similarity: high, low) *between subject design*. in which participants would respond to a questionnaire and evaluate a certain product' dimensions. The results showed that those who perceive themselves as similar to the participating community show higher purchase intentions towards co-created hedonic products. Moreover, the perception of utilitarian dimensions on hedonic products is an important determinant for co-created hedonic options. The study complements the previous literature by providing another strategy to highlight hedonic products, through consumers' participation, and moreover, it highlights to managers that co-creation can create competitive advantage when compared to professional-driven products.

Keywords: hedonic, utilitarian, co-creation, perceptions, consumer behavior, observing users

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1. Introduction

Whenever a consumer is faced with a purchasing decision, often the decision depends on the properties of the product or service. The decision-making process is influenced by the utilitarian and hedonic dimension of the product that will be acquired (Dhar and Wertenbroch, 2000). Take for example the deliberation between an apartment with a nice view located far from work or one without a view but close to the office. Choosing between the more practical option or the more pleasant one?

This trade-off between the emotional side associated with the purchase and the rational part has been analyzed by researchers such as Hirschman and Holbrook (1982) who pioneered the study of utilitarian and hedonic dimensions in products.

A paradox seems to exist regarding the decision-making process. Depending on the context, consumers switch their preference from one dimension to another (Okada, 2005). Consumers show a preference for hedonic values connected to emotion and pleasure, but the final decision favors the utilitarian option over the rational alternative (Dhar and Wertenbroch, 2000).

This outcome is influenced by the belief that hedonic choices are often connected with a sense of guilt and consumers find themselves in a situation where they feel the need to justify the decision made (Okada, 2005).

Previous research carried out on this topic has concluded that several tactics work as an effective means to attenuate this guilt and highlight the preference for the hedonic option (Khan and Dhar, 2006; Strahilcvitz and Myers, 1998).

Therefore, it is reasonable to advocate that if an organization can direct a consumer's attention from a utilitarian perspective to a hedonic point of view, consumers would be in favor of choosing hedonic predominant products in the future. Thus, co-creation appears as a suitable, valuable and alternative strategy to change consumers perception about products and differentiate the hedonic options.

It is known that co-creation is a suitable strategy to change consumers' perceptions of products (Schreier, Fuchs and Dahl, 2012).

The realization that the knowledge is heterogeneously distributed, is making firms to adapt and adopt another approach rather than the traditional model of innovation, considering now other sources of knowledge (Chesbrough, 2006). Moreover, firms have several constraints, in terms of deadlines, budgets and number of employees that consumers don't have to consider (Schreier, Fuchs and Dahl, 2012).

Hence firms have realized that consumers are a valuable source of value creation and have begun to involve them in their new development product process (Prahalad and Ramaswamy, 2004).

Muji, through crowdsourcing campaigns, asks its consumers for innovative ideas and feedback on its products. Professionals then select the ultimately best option (Nishikawa et al, 2017). A similar process can be seen at Threadless. The company relies on its online community to come up with innovative designs for its t-shirts, thus possessing a pool of talent and ideas that would otherwise have been impossible if the company only worked with their own professionals to generate ideas for different designs (Ogawa and Piller, 2006). Similarly, Lego has built a software where users can design and bring their unique virtual Lego bricks to life, where they can be sent back to Lego to manufacture and commercialise it (Zwick, Bonsu and Darmody, 2008).

By exploring consumers' ideas, knowledge and experience, firms are able to find innovative and better solutions for their products. Moreover, consumers perceive those products that are co-created with clients as more trustworthy and of higher overall quality (Nishikawa et al, 2017).

In addition to higher overall perceived quality of co-created products (Nishikawa et al, 2017), co-creation provokes a sense of similarity with the participating users (Thompson and Malaviya, 2013). According to the Social Identity Theory (Tajfel and Turner 1986), people do not consider themselves as individual members of a society, but as members of a broader group, with whom they share beliefs, attributes, attitudes and ways of behaving. This similarity is reflected in co-created products (Fosfuri et al., 2011), making observing consumers, who identify themselves with the participating community, more inclined to co-created products (Dahl, Fuchs, and Schreier, 2014). Firms that foster consumer involvement in the development of their products are also perceived as having a better understanding of the real needs and preferences of the broader market

(Wu et al, 2017). This effect is triggered because observing users share some characteristics with those involved in the creation process (Dahl, Fuchs, and Schreier, 2014).

The effect of co-creation on observing users is a topic that is not yet completely saturated and there is still a lot that managers and researchers miss out on and do not understand fully. The same can be observed whenever the discussion about hedonic and utilitarian goods arises. It is important to address the contradictory behavior of consumer. They show preference for hedonic values but end up opting for the more utilitarian alternative. Moreover, the recent literature has not focused on the relationship between the perceptions of utilitarian and hedonic dimensions on co-created products.

This thesis covers precisely these two fields of study and analyzes whether co-creation can be used as a persuasion mechanism to stand out hedonic products at the eyes of those who did not participated in the new development process. Whether the better understanding of the consumers' needs and preferences by including consumers in the development process, and the similarity effect, change perception of hedonic products by observing users, highlighting the utilitarian value of those products, reflecting on a higher purchase intention for co-created products.

2. Literature Review

2.1. Hedonic vs Utilitarian

Hedonic goods are characterized by providing more experiential consumption, fun, pleasure, and excitement, whose consumption is primarily characterized by an affective and sensory experience of aesthetic or sensual pleasure or fantasy (Hirschman and Holbrook 1982).

On the other hand, utilitarian goods are primarily instrumental and functional, whose consumption is more cognitively driven, instrumental, and goal oriented and accomplishes a functional or practical task (Strahilcvitz and Myers 1998).

In reality, products are not considered merely hedonic or utilitarian as they do not represent two ends of a one-dimensional scale. Each product has its own unique characteristics, that may be higher on hedonism and lower on utilitarianism or the other way around (Voss, Spangenberg and Grohmann, 2003). Consumers are often faced with the decision of having to make a choice between hedonic or utilitarian alternatives (Dhar and Wertenbroch, 2000). This may be whether to choose a delicious dessert with a high caloric value over a lighter dessert, considered the healthier option (Okada, 2005), or to choose between an apartment nearby the work place or an apartment with a great view (Dhar and Wertenbroch, 2000). The trade-off between making an emotional, desire-driven choice rather than a cognitive, more rational choice, or the other way around, is an important aspect to acknowledge in order to understand the consumer decision-making process (Okada, 2005; Kivetz and Simonson, 2002; Strahilcvitz and Myers, 1998; Dhar and Wertenbroch, 2000).

Hedonic and utilitarian dimensions can be linked to “*wants*” and “*should*” and bring the two-selves problem into discussion. People behave almost as if they were two different self. When people are asked what they want and what they should, answers tend to differ (Bazerman, Tenbrunsel and Wade-Benzoni, 1998). “*Wants*” represent a more emotive, affective and impulsive reaction (hedonic), whereas “*should*” provide a more rational and cognitive reaction (utilitarian) (Bazerman, Tenbrunsel and Wade-Benzoni, 1998).

Moreover, “*wants*” have a negative association, connected to “*vices*” that provide instant gratification and negative payoffs, which might even cause harm in the long-run, whereas, “*should*” have a positive associations, representing “*virtues*”, a relatively more responsible decision

concerning the consequences of the consumption (Bazerman, Tenbrunsel and Wade-Benzoni, 1998).

Current research has been trying to uncover the mystery behind the decision between hedonic and utilitarian alternatives, which stresses that both hedonic and utilitarian products have their own benefits, meaning that hedonic consumption does not necessarily harm the consumer (Okada, 2005; Kivetz and Simonson, 2002; Strahilevitz and Myers, 1998).

2.1.1. Decision-Making Process

Consumers, in general, value more hedonic choices and products in comparison to utilitarian ones (Okada, 2005). For example, in 2000, Dhar and Wertenbroch showed that hedonic vehicles owners would value more their cars than utilitarian cars owners.

However, hedonic options are not always chosen over utilitarian. Depending on the context of the decision and the stimuli presented to the consumer, the choice is different. The choice seems to be driven by whether the hedonic alternative can be justified (Okada, 2005).

Okada (2005) investigated further the trade-offs between choices of hedonic and utilitarian dimensions and realized that, once again, the choice is contextualized, if options are presented separately, consumers are more likely to choose the hedonic option. However, when presented jointly, the utilitarian dimension becomes more attractive. These findings demonstrate that consumers have a natural preference for hedonic choices (Dhar and Wertenbroch, 2000). However, when the consumer is forced to deliberate about the options and make the trade-off between them and both products/dimensions are presented at the same time, a dilemma is created as utilitarian goods fulfil a specific need and functionality and consumers perceive them as having higher utility, consequently giving more weight to them (Kivetz and Simonson, 2002). Such weighting makes it easier to justify a utilitarian consumption over a hedonic option. In a direct comparison case, the consumers explicitly must reject one of the options and, although hedonic dimensions might be preferred by consumers, its benefits are more difficult to evaluate and justify, creating a feeling of guilt if the hedonic choice is made.

Existing research has looked at how consumers cope with this need to justify hedonic consumption whenever the consumer must decide between the two alternatives (Strahilevitz and Myers, 1998). The feeling of guilt that follows a hedonic decision might be attenuated by certain factors.

2.1.2. Boundary Conditions for Utilitarian Preferences

Even though people would not make the purchase, hedonic options appear to be more favourable whenever it is someone else making the decision for us, for example, a gift or a present (Okada, 2005). The fact that the decision was made by someone else attenuates the need to justify the decision.

The same reasoning applies to prizes. A reward does not require as much justification as a normal purchase (O'Curry and Strahilevitz 2001). Moreover, the lower the probability of receiving a certain product, the easier it is to opt for the hedonic reward, since the probability of getting it is very low (O'Curry and Strahilevitz 2001).

Charitable actions or donations also contribute to the preference of hedonic products. Strahilevitz and Myers (1998) found that bundling products with a promise contribution to charity would shift consumers' preferences from practical necessities for more luxurious goods. The positive outcome of contributing to charity would make consumers feel that they have earned the right to choose the more hedonic alternative (Khan and Dhar, 2006).

Hard work also makes people feel that they have earned the right to abdicate the utilitarian option (Kivetz and Simonson, 2002). If high levels of effort are required to obtain a certain product, people will feel entitled to get the reward and choose a more pleasant alternative. For instance, the normal consumer prefers to pay in time hedonic consumptions and in money utilitarian purchases (Okada, 2005). Paying in time requires more effort than simply paying with money. Moreover, the monetary value of time is more ambiguous than normal currency, which, once more, makes it easier to justify the choice and the likelihood of consumption of the hedonic dimension increases (Okada, 2005; Kivetz and Simonson, 2002).

People are loss-averse for hedonic attributes (Dhar and Wertenbroch, 2000). If, for some reason, the consumer is obliged to give up one of the attributes (a clear case of forfeiture), consumers tend to retain the hedonic attribute and give away the utilitarian one, confirming that people value more hedonic attributes than utilitarian and rather keep the hedonic attribute, once already owned, than the utilitarian attribute (Okada, 2005). In contrast, when the choice is about acquiring one attribute, the utilitarian attribute is more likely to be chosen. The consumer values more the hedonic attribute when they have both and chooses not to lose it, but when it comes to acquiring one, the utilitarian is the elected one (Dhar and Wertenbroch, 2000).

Take the example of owning an apartment. Suppose an individual owns an apartment with a great view (hedonic attribute), located near his work place, which means he does not face traffic (utilitarian attribute). Unfortunately, the individual must move and has two options: an apartment with a great view, but far away from the work place and another one with a poor view but nearby his work place. In this case, the individual must give up one of these attributes. Research shows that he will give up the utilitarian one (close to work). However, if the current apartment did not have any of the two attributes and he had the option to acquire one of them, the utilitarian aspect would more likely be the chosen one (close to work), (Dhar and Wertenbroch, 2000).

Research has shown that although consumers tend to attribute more value to hedonic dimensions on products (Okada, 2005; Dhar and Wertenbroch, 2000), when faced with the paradigm of having to choose between a hedonic or a utilitarian product, the need to justify a more pleasant-driven consumption makes consumers opt for the utilitarian alternative (Okada, 2005; Strahilevitz and Myers, 1998). However, several tactics can be implemented to attenuate and reduce the guilt resulting from the choice and increase the attractiveness of hedonic products (Khan and Dhar, 2006; Kivetz, Simonson, 2002). I argue that co-creation, through social identification with the source of creation, can also have an impact on consumers, attenuating the need for justification of hedonic consumption.

2.2. Co-creation

The openness and democratization of innovation lead to users, and other stakeholders, to engage in the process of New Product Development. This evolution offers advantages both to the users (also intermediaries firms) and to firms (von Hippel, 2005; Cui and Wu, 2017).

Traditionally, consumers were just a source of information for firms to identify the needs of consumers and, internally, with their employees, come up with the solution and create a product that would satisfy the market's needs (Schreier, Fuchs and Dahl, 2012). Consumers would be left aside from the process of creating a new product.

However, a new approach has been adopted by firms. Firms have access to their user community and have been using them to create new products designs; that are then presented to the market (Common Design by User). In this case, the company is almost outsourcing the New Product Development to their user community (Schreier, Fuchs and Dahl, 2012). This method represents the extreme of the consumer involvement in the creation process, where the firm is absent, and does not take into consideration the hybrid cases of co-creation (von Hippel, 2005).

For the hybrid cases, firms often use a crowdsourcing-based NPD strategy. The consumer is as involved in the creative process as the firm, providing ideas, as the ideator in the ideation phase, or inputs, as the co-creator, in the following product development phase (Luchs, Swan and Creusen, 2016).

Therefore, co-creation can be summarized as being the “process in which both parties systematically interact, learn, share information and integrate resources to jointly create value”, customers are no longer just a source of information. They participate actively in the creation process of new products with their intellectual and technical competences and help organizations solve problems developing and creating new products and even new concepts (Prahalad and Ramaswamy, 2004).

2.2.1. Users

The literature has viewed the effect of co-creation from two perspectives: those that take part in the co-creation process (Hippel, 2005) and consumers that are informed that the product or services is the result of a co-creation process (Dahl, Fuchs, and Schreier, 2014).

2.2.1.1 Participating Users

In the perspective of the participating user, those that have an active role in the development of products along with firms, previous studies highlight that customers' participation and involvement in the product development process creates a positive reaction towards consumers and even increase the purchase intention (Fuchs and Schreier, 2011).

Firms have the power to decide in which of the three phases of the new product development (NPD) to include consumers participation in the process.

In the ideation phase, firms engage with them to obtain knowledge regarding consumers' needs and expectations to evaluate the potential of ideas for new products, improve the ideas and select the most promising ones for further development (Chang and Taylor, 2016).

In the product development phase or product design phase, consumers are asked to provide solutions for product related problems, through their technical know-how and ability to innovate (Chang and Taylor, 2016). Firms often have the upper hand with their technology and patents, but also face some constraints such as budget and deadlines. These constraints do not affect consumers, in addition, consumers even benefit from background diversity and empirical knowledge about the product (they are the ones using it) (Schreier, Fuchs and Dahl, 2012). The combination of these factors makes participating users valuable elements during development phase (Chang and Taylor, 2016).

The last phase is the launch stage, which involves prototyping and market launch. Consumers are invited to test and suggest improvements to the product and ultimately help the company introduce the product into the market, to facilitate the adoption of the new product by the mass market (Chang and Taylor, 2016).

Consumers know exactly what they want and might not be willing to wait several years for the company to realize the real need (von Hippel, 2005). Moreover, the connection between firm and its consumers is getting stronger, which means consumers are closer to firms and able to inform companies about their wants, desires and needs (Prahalad and Ramaswamy, 2004).

With the participation of consumers in the creation process of new products, consumers expect companies to deliver products without imperfections (von Hippel 2005), because consumers have a better understanding of their own needs than firms' specialists, and participate directly in the new development product process, being able to better inform firms about their preferences (Prahalad and Ramaswamy, 2004).

The interaction between firm and consumers generates products with better market performances, perceived as having better quality from those products merely developed by professionals (Nishikawa et al, 2017), with a greater variety and novelty of products (Stock, Oliveira and von Hippel, 2015; Al-Zu'bi and Tsinopoulos, 2012). The simple fact of involving consumers in the creation process generates, by itself, more value to the product (Vargo and Lusch, 2008). Following this line of reasoning, the fact that customers participate in the NPD, creates a feeling of empowerment toward the product, which will lead to a positive effect on the purchasing moment (Fuchs, Prandelli and Schreier, 2010).

2.2.1.2. Observing Users

Ultimately, the final product will be introduced into the market and the mass market, which is composed mainly by non-participating users, who will decide whether to purchase the new product or not. Therefore, it is in the organisation's interest to understand the effect co-creation has on observing users and when to inform or not inform the broader market about consumers' involvement.

Consumers tend to have a positive response (Fuchs et al, 2010; Nishikawa et al, 2017). Firms that foster consumers' involvement in the creation process increase observing users' perception regarding the firm's ability to innovate and hold the belief that those firms are better prepared to create new and different products from the ones that already exist in the market (Schreier, Fuchs and Dahl, 2012). In addition to this, the preoccupation of inviting consumers to

collaborate with the firm makes observing users feel that the organisation is customer-oriented (Fuchs and Schreier, 2011) and has a better understanding of their real needs and preferences (Wu et al, 2017).

The reflection of this effect is the preference for co-created products instead of products developed by firm's specialists (Nishikawa et al, 2017), with consumers expressing more purchase intentions and loyalty toward these organisations and a greater willingness to recommend them to others (Schreier, Fuchs and Dahl 2012).

2.2.1.3. Social Identification

Non-participating consumers are able to identify user-driven companies and feel similar to the consumers that were involved in the NDP process (Dahl, Fuchs, and Schreier, 2014). According to the Social Identity Theory (Tajfel and Turner 1986), people not only perceive themselves as individual beings, "I", but also as a social self, "we" (Turner, 1999), in which each one self-determines and self-categorizes according to some social categories, what makes them similar to members of the same social category group, in contrast with people that do not share the same social identification (Turner, 1999). The feeling of belonging to a group depends on whether the individual is able to feel they share a similarity to other members of the group (Tajfel, 1972).

The social identification with the developers, generally arises from source similarity (similarity persuasion) with the target, which makes the persuasion more effective towards the consumers regarding the creation, opposing to professionals' creation (Thompson and Malaviya, 2013). The sense of belonging to a certain user community that developed the new product (shared similarities with firms' participating users) triggers this social identification effect on observing users who feel psychologically empowered, since they feel they indirectly participated, through their similar participating users, in the NDP process (Dahl, Fuchs, and Schreier, 2014).

Upon learning that a product was co-created, the positive effects of source similarity are transferred to the product (Fosfuri et al.,2011). The outcome is a clear preference for the product, brand and the firm involved (Dahl, Fuchs, and Schreier, 2014; Thompson and Malaviya, 2013).

However, a certain level of scepticism about developers' competences and skills might appear (Thompson and Malaviya, 2013). The uncertainty about the specific level of knowledge required to develop a high quality product may have a negative impact on observing consumers (Thompson and Malaviya, 2013), especially if the complexity of the product level is high, making observing users doubt the participating users' technical skills and rely instead on the firms' experts (Schreier, Fuchs and Dahl 2012). The scepticism felt by the broader consumer market can be attenuated if firms inform consumers about participating users' backgrounds, and if it is somewhat similar to consumers it enhances source similarity once more (Thompson and Malaviya, 2013).

Observing users prefer organisations that are completely open regarding the participation of consumers in the creation process (opposed to being selective), because they feel socially included. Otherwise, consumers will not feel as connected to the firm and its user community as opposed to if it was completely open (Dahl, Fuchs, and Schreier, 2014).

2.2.2. Competitive Advantage

An organisation's goal with the new process development is to increase the value of the final product, increasing customers' satisfaction and willingness to buy their product. Consumers often have limited information about firms and their products (Hong and Wyer, 1989). Therefore, consumers react on inferences, such as beliefs, theories and perceptions which they have on the product/firm (Schreier, Fuchs and Dahl 2012). To persuade and influence consumers' perceptions about the firm/product, firms have begun to include consumers in the NDP process, creating positive outcomes (Wu et al, 2017; Fuchs and Schreier, 2011; Chang and Taylor, 2016).

In the case of common design by users, the perception of the innovative ability of the firm, the perception the company is able to generate more innovative products, increase, which triggers the "innovation effect of user design" (increase purchasing intentions, willingness to purchase and willingness to recommend the firm to others), making the firm more attractive to consumers (Schreier, Fuchs and Dahl 2012).

Likewise, firms that adopt user-driven products strategy benefit from competitive advantage. Not only are the products produced better, or at least they are closer to consumers'

needs (Wu et al, 2017), but firms are also perceived as more customer oriented, more concerned about the customer and putting their interests first (Fuchs and Schreier, 2011).

Following this line of thought, marketing the source of design will actually increase the performance of the product (can even reach 20%). The client, at the point of purchase, perceives, since users were involved in the process, that the product addresses better their needs and that the product has higher quality (Nishikawa et al. 2017).

Consumers do not have the same constraints that firms have to follow, such as budgets, and deadlines that they have to meet (Schreier, Fuchs and Dahl, 2012). Moreover, the user-community, obviously, is composed by a considerable higher number of people (not limited to the number of firms' employees), which means more minds and experts thinking about the problem, that have a variety of different backgrounds (Schreier, Fuchs and Dahl, 2012), which will enhance product diversity and greater variety of product lines (Al-Zu'bi and Tsinopoulos, 2012).

Despite all positive aspects regarding co-creation and customer involvement in the NPD, firms should take into consideration when to avoid this strategy. Customer involvement can have a different impact depending on the phase of the NPD. In ideation and product launch user participation in NPD accelerates the time to market (higher financial return), whereas in the development phase it slows down the time (less financial return). This trade-off between the benefits of including customers and postponing the introduction to the market must be evaluated and decided which option is the best one (Chang and Taylor, 2016).

When buying a luxury product, customers expect a product that represents a high status and quality, designed by specialists in the field, something that would differentiate them from their competitors. As a result, customers of luxury brands do not value a product created by the mass market since the masses fail to signal the high status that customers are looking for. Furthermore, regarding quality, consumers perceive luxury products that were co-created as having lower quality (Fuchs, Prandelli, Schreier, and Dahl, 2013).

As the luxury product research shows, NPD performance is influenced by contextual variables. The performance is greater for technologically turbulent NPD projects, in emerging countries, in low-tech industries, for business customers, and for small firms (Chang and Taylor,

2016). Likewise, observers tend to react positively to customer's involvement in the process if the product complexity is low (Nishikawa et al. 2017; Costa and Vale, 2018).

2.3. Hypothesis Development

The contradictory decision of opting for a more utilitarian product even though consumers prefer hedonic alternatives (Dhar and Wertenbroch, 2000) is explain by the difficulty of justifying the preference for a product directly connect with desire and pleasure over a more functional and practical one (Okada, 2005).

However, co-creation, as some other product tactics (Khan and Dhar, 2006; Kivetz, Simonson, 2002), might have an important role in shifting this paradigm. Research proved that source similarity is an effective persuasion tool (Thompson and Malaviya, 2013), making consumer more sensitive to user-driven firms, because they identified themselves with participating users and sense they indirectly participated in the process (Dahl, Fuchs, and Schreier, 2014). If the observing consumers perceive themselves similar to the participating users they are able to transfer the positive effect into the product (Fosfuri et al.,2011), and since consumers nowadays are closer to firms and are able to better transmit their needs and desires to firms (Prahalad and Ramaswamy, 2004), they expect no imperfection on the final product and an overall better product (Wu et al, 2017; von Hippel, 2005). The perceived similarity with the source of creation will create the sense that the firm really understands consumers' needs, which increases the quality of the products. This perceived increase in the quality of products will highlight the utilitarian attributes of the hedonic goods, making them more attractive to consumers who perceive themselves similar to the community that was involved in the development of the hedonic product.

Therefore, I argue that observing consumers will perceive hedonic co-created products as having better utilitarian features than non-co-created hedonic products.

H1A: The effect of learning about a product was co-created increases observing consumers preferences for co-created products

H1B: Observing consumers preferences for co-created hedonic products is driven by higher utilitarian perceptions on hedonic products

Moreover, the effect of source similarity enhancing utilitarian perceptions will lead to a preference for co-created product towards hedonic consumption.

H2: Observing users' preference for co-created products is moderated by the perceived level of similarity to participating users.

3. Methodology

In order to respond to the research questions and test the hypothesis presented I conducted one study. I followed the approach suggested by Dahl, Fuchs, and Schreier (2014) that used students to test source similarity and product preferences. The hedonic and utilitarian dimension of the product were tested according to a classification method developed by Voss, Spangenberg and Grohmann in 2003.

The main purpose of the study is to test our proposed utility account which states that the utilitarian dimension in a co-created product is heighten. We examine the influence on perceived utilitarian dimension on hedonic consumption. The second objective of the study is to investigate whether source similarity can account for such influence. Finally, the study assesses how co-creation influences consumers' preferences for a certain hedonic type of product.

3.1. Study

A total of 71 people participated in this study. The data for this study was collected through an online questionnaire.

The respondents were 52% female (37 women) and 48% male (34). The age of the participants varies between 19 and 25 years old ($M_{age} = 22$ years). The study follows a 2 (design mode: co-creation, firm) x 2 (source similarity: high, low) between subject design.

3.2. Procedure

Before reading about the manipulation test, participants were asked some questions regarding the product involvement, in this case, about the consumption of chocolate, the product chosen for the test, because it is clearly a hedonic product and it was used in other researches (Strahilevitz and Myers, 1998).

Participants were introduced two chocolate firms (Firm A and Firm B) that were reported to have gained market share in Portugal. The chocolates produced by both firms were classified “very good” in terms of “taste” and “functionality”, by a consumer report based by a study from

DECO. This test was introduced to participants to minimize preferences in terms of product attribute perceptions. Consumers were informed that the two firms had different market strategies. One of the firms was described as fostering co-creation and involving its customers in the process of coming up with the new product/design, working closely with firm's professionals, to be introduced to the market, whether the other one was described as being driven by its professionals, the employees would be the only ones to come up with the new product to be introduced in the market. The similarity with the source of creation was manipulated by stating that the user-driven firm's consumer community consisted predominantly of female consumers (i.e., "This community consists of 95% females"). The expected result was that female participants would feel more similar to the consumer community than male participants. The between-subjects treatment (i.e., firm philosophy factor) was that Firm A was described as the user-driven firm and Firm B as the designer-driven firm, or vice versa (Firm A was designer-driven and Firm B was user-driven). After having read the manipulations, participants were exposed to color pictures and descriptions of two different chocolates, one from firm A and another from firm B.

After reading about the two firms and the manipulations scenarios, the participants were asked to respond to a series of questions about both products, such as product involvement, perceived similarity with the participating community, purchase intentions toward both products, utilitarian and hedonic dimensions of each product and the amount of guilt felt when consuming chocolate in general and when consuming the co-creation-driven firm's chocolate. Demographic questions were asked before the end of the questionnaire and the final appreciation for the time spent to respond the questionnaire.

Table 1 - Measurement Items

Construct	Item	Measurement
Product Involvement	Do you like chocolate?	1 = "Not at all"; 5 = "Very much"
	How often do you consume chocolate?	1 = "Never"; 5 = "Every day"
Perceived similarity	How similar do you think are the members of the user community to yourself?	1 = "I feel not similar"; 5 = "I feel similar"
		1 = "I feel not very close"; 5 = "I very feel close"
Purchase Intention	I would more likely buy a chocolate from firm...	1 = "Professionals-driven firm"; 7 = "User-driven firm"
	I have a strong preference for the chocolate of firm...	1 = "Professionals-driven firm"; 7 = "User-driven firm"
Utilitarian dimensions	Please classify the chocolate from firm A/B according to these characteristics.	Effective: 1 = "Not at all"; 7 = "Very much"
		Functional: 1 = "Not at all"; 7 = "Very much"
		Necessary: 1 = "Not at all"; 7 = "Very much"
Hedonic dimensions	Please classify the chocolate from firm A/B according to these characteristics.	Fun: 1 = "Not at all"; 7 = "Very much"
		Exciting: 1 = "Not at all"; 7 = "Very much"
		Thrilling: 1 = "Not at all"; 7 = "Very much"
Guilt	Please indicate the amount of guilt you feel when you consume chocolate.	1 = "Not at all"; 5 = "Very much"
	Please think about the amount of guilt you would feel when consuming the chocolate of the user-driven firm.	1 = "Not at all"; 5 = "Very much"

4. Results

Product Involvement

Regarding the involvement with the product, the results are very similar whether the user-driven firm is described as being firm A or being firm B ($M_A = 3.70$, $M_B = 3.77$; $F_{(1, 69)} = 0.09$, $p = 0.77$). However, the study indicated that women tend to like more chocolate than men ($M_{\text{Female}} = 4.00$, $M_{\text{Male}} = 3.44$; $F_{(1, 69)} = 4.75$, $p = 0.03$), what might have an impact on the rest of the study regarding product preferences, due to the fact that women show more preferable intensions towards chocolate than men.

Similarity Manipulation

In both scenarios the perceived similarity with the user community is similar ($M_A = 3.67$, $M_B = 3.57$; $F_{(1, 69)} = 0.06$, $p = 0.81$).

However, the female populations responded that they would feel more similar to the user-community than the male population ($M_{\text{Female}} = 4.78$, $M_{\text{Male}} = 2.35$; $F_{(1, 69)} = 85.97$, $p = .00$). These results follow the desire finding and it is fair to state that similarity was successfully manipulated.

Having accomplished the source similarity manipulation - the female vs male population, the following steps would be to analyze the dimensions of the product.

Purchase Intentions

Regarding purchase intention, the results suggest that the general population have a slight preference for the chocolate from co-creation-driven firm, however the result is not very clear since the value is very close to the 4 which means indifference between both products ($M = 4.51$). Aligned with this finding, both scenarios present results higher than 4 and the difference continues not being significant between firm A being the co-creation-driven or the firm B being the co-creation-driven ($M_A = 4.56$, $M_B = 4.46$; $F_{(1, 69)} = 0.08$, $p = 0.78$). By looking to the results, there is

a partial preference for co-created products, however, these findings are not enough to confirm H1A and state that consumers prefer co-created to products developed only by firms' specialists.

Source Similarity

I next analyzed the participants' perceived similarity with the co-creation-driven firm's community. The identification with the source of creation should lead to a higher preference for co-creation-driven firm's products. The results, as expected, hold this reasoning. A significant effect can be noticed ($\beta = 0.52$, $p < 0.01$), which confirms my theory, a stronger preference for the co-creation-driven firm's products is prompted by higher sense of similarity with the source of creation.

Table 2 - Purchase intention per level of similarity

Level of Similarity	Purchase Intentions
High	5,27
Low	3,68

Moreover, as Table 2 shows, a clear distinction can be made between groups whether similarity is triggered. The population that perceives themselves as being similar to the user community (high similarity) shows preference for the co-creation-driven firm's chocolate, in contrast with the other group (low similarity), whose purchase intentions leans towards the professional-driven firm's chocolate ($M_{\text{High Similarity}} = 5.27$, $M_{\text{Low Similarity}} = 3.68$; $F_{(1, 69)} = 29.09$, $p = .00$).

These findings confirm the hypothesis H1A and H2, showing that those that identify themselves as being similar with the source of creation, show higher purchase intentions towards the product which had the collaboration of consumers.

Utilitarian Dimensions

Table 3 - Utilitarian Dimensions per Scenario

Firm Philosophy	Scenario	Utilitarian Dimensions
Co-Creation	A	4,36
	B	4,03
Firm	A	3,97
	B	3,74

When firm A is described to the co-creation-driven firm, both products are perceived as having a slight higher utilitarian value, but it cannot be said that the results are significant ($M_{A, \text{co-creation}} = 4.36$, $M_{B, \text{co-creation}} = 4.03$; $F_{(1, 69)} = 1.24$, $p = 0.27$; $M_{A, \text{firm}} = 3.97$, $M_{B, \text{firm}} = 3.74$; $F_{(1, 69)} = 0.81$, $p = 0.37$). Therefore, the results can be analyzed depending on the firm market philosophy, regardless of the scenario presented to participants, because both scenarios have the same results, meaning that changing the co-creation-driven firm order do not produce any effect.

The co-creation-driven firm's product is perceived as being more utilitarian than the professional-driven firm's chocolate, but the effect is partially significant ($M_{\text{co-creation}} = 4.20$, $M_{\text{firm}} = 3.86$; $t = 1.72$, $p < 0.10$), thus it is not clear that observing users perceive the chocolate from the co-creation-driven firm as being more utilitarian than the chocolate from professional-driven firm, extra analyze must be done.

An effect was found regarding the relationship between perceiving a product as being more utilitarian and preference for the co-created product. Higher levels of perceived utilitarian dimensions on the co-creation-driven firm's product lead to a stronger preference for the co-creation-driven firm's chocolate ($\beta = 0.653$, $p < 0.01$), whereas the opposite effect is observed for the professionals-driven firm, which the more utilitarian the professional-driven firm is perceived, less purchase intentions are shown towards the co-creation-driven firm's product ($\beta = -0.38$, $p < 0.01$).

Further analyzes were made to test whether the sense of similarity with the source of creation would highlight utilitarian perceptions of the product.

Perceived similarity felt with the participating users, by the observing users, reflects on a higher and significant utilitarian value attributed to the co-creation-driven firm's chocolate ($\beta = 0.42, p < 0.01$).

In the case of the professional-driven firm, its chocolate does not gain extra utilitarian value when similarity with the user community increases ($\beta = 0.04, p > 0.1$). These findings suggest that only the utilitarian dimensions of the co-creation-driven firm's product are affected by perceived identification with those involved in the new development process.

To have an even clear idea about the effect of social identification with the community on the utilitarian dimensions, an analyze was conducted depending on the level of similarity of each group (Table 4).

Table 4 - Utilitarian Dimensions per Level of Similarity

Firm Philosophy	Level of Similarity	Utilitarian Dimensions
Co-Creation	High	4,59
	Low	3,76
Firm	High	3,78
	Low	3,94

The results suggest that the group that shared high similarity considers the chocolate from the co-creation-driven firm as being more utilitarian than the low similarity group ($M_{\text{co-creation, high similarity}} = 4.59, M_{\text{co-creation, low similarity}} = 3.76; F_{(1, 69)} = 8.50, p = .00$).

Regarding the professionals-driven firm, although the group with low similarity attaches slightly higher utilitarian value to the chocolate than the high similarity group, the effect is non-significant, suggesting than there are no perception differences from the high similarity group to

the low similarity group ($M_{\text{firm, high similarity}} = 3.78$, $M_{\text{firm, low similarity}} = 3.94$; $F_{(1, 69)} = 0.38$, $p = 0.54$) regarding product dimensions.

Moreover, if both firms are compared by each group, the results suggest that the high similarity group perceives the co-creation-driven firm's product as being more utilitarian than professionals-driven firm's product ($M_{\text{co-creation, high similarity}} = 4.59$, $M_{\text{firm, high similarity}} = 3.78$; $t = 3.17$, $p = .00$). In the low similarity case, no significant effect is noticed between both firms ($M_{\text{co-creation, low similarity}} = 3.76$, $M_{\text{firm, low similarity}} = 3.94$; $t = -0.62$, $p = 0.54$), what means that the low similarity group perceives both chocolates as being equal in terms of utilitarian dimensions, regardless of the firm philosophy.

These findings confirm H1B, by showing that learning that the product was co-created by individual similar to the consumer, increases observing users' utilitarian perceptions of a certain hedonic product.

Hedonic Dimensions

Table 5 - Hedonic Dimensions per Scenario

Firm Philosophy	Scenario	Hedonic Dimensions
Co-Creation	A	4,47
	B	4,66
Firm	A	4,11
	B	4,54

When firm A is described to the co-creation-driven firm, both products are perceived as having a slight lower hedonic value, but it cannot be said that the results are significant ($M_{\text{A, co-creation}} = 4.47$, $M_{\text{B, co-creation}} = 4.66$; $F_{(1, 69)} = 0.40$, $p = 0.53$; $M_{\text{A, firm}} = 4.11$, $M_{\text{B, firm}} = 4.54$; $F_{(1, 69)} = 0.61$, $p = 0.44$). Therefore, the results can be analyzed depending on the firm market philosophy, regardless of the scenario presented to participants, because both scenarios have the same results,

meaning that changing the co-creation-driven firm order do not produce any effect, as it happened with the utilitarian dimension.

There is no effect on hedonic perceptions regardless of the firm philosophy ($M_{\text{co-creation}} = 4.56$, $M_{\text{firm}} = 4.32$; $t = 1.17$, $p = 0.25$). The co-creation-driven firm's chocolate is attributed as being more hedonic than the professional-driven product, but the result is not statistically significant. Thus, it is not clear that observing users perceive the chocolate from the co-creation-driven firm as being more hedonic than the chocolate from professional-driven firm.

An effect was found regarding the relationship between perceiving a product as being more hedonic and preference for the co-created product. Higher levels of perceived hedonic dimensions on the co-creation-driven firm's product lead to a preference for the co-creation-driven firm's chocolate ($\beta = 0.42$, $p < 0.05$). The opposite effect is observed for the professionals-driven firm, which the more hedonic the of the product of the professional-driven firm is perceived, less purchase intentions are shown towards the user-driven firm's product ($\beta = -0.24$, $p > 0.10$), but in this case the result is not significant.

Further analyzes were made to test whether the sense of similarity with the source of creation would influence hedonic perceptions of the product.

Perceived similarity felt with the participating users, by the observing users, reflects on a higher, although with a partial significance effect, hedonic value attributed to the co-creation-driven firm's chocolate ($\beta = 0.16$, $p > 0.05$).

In the case of the professional-driven firm, its chocolate does not gain extra hedonic value when similarity with the user community increases ($\beta = 0.04$, $p > 0.1$). These findings suggest that only the hedonic dimensions of the co-creation-driven firm's product is slight affected by perceived identification with those involved in the new development process.

To have an even clear idea about the effect of social identification with the community on the hedonic dimensions, an analyze was conducted depending on the level of similarity of each group (Table 6).

Table 6 - Hedonic Dimensions per Level of Similarity

Firm Philosophy	Level of Similarity	Hedonic Dimensions
Co-Creation	High	4,81
	Low	4,29
Firm	High	4,43
	Low	4,21

The results suggest that the group that shared high similarity considers the chocolate from the co-creation-driven firm as being more hedonic than the low similarity group ($M_{\text{co-creation, high similarity}} = 4.81$, $M_{\text{co-creation, low similarity}} = 4.29$; $F_{(1, 69)} = 3.24$, $p = 0.08$).

Regarding the professionals-driven firm, the high similarity group continues to attach slightly higher hedonic value to the chocolate than the group with low similarity. The effect is non-significant, suggesting that there are no perception differences from both groups ($M_{\text{firm, high similarity}} = 4.43$, $M_{\text{firm, low similarity}} = 4.21$; $F_{(1, 69)} = 0.61$, $p = 0.44$) regarding product dimensions.

Furthermore, the same hedonic value is attributed to chocolates from the co-creation-driven firm and professional-driven firm by both groups ($M_{\text{co-creation, high similarity}} = 4.81$, $M_{\text{firm, high similarity}} = 4.43$; $t = 1.51$, $p = 0.13$; $M_{\text{co-creation, low similarity}} = 4.29$, $M_{\text{firm, low similarity}} = 4.21$; $t = 0.27$, $p = 0.79$), confirming my prediction, that the main effect would be on the utilitarian perceptions.

These findings suggest that the way consumers perceive hedonic dimensions of co-created hedonic products affects positively their purchase intentions toward the co-creation-driven firm's product. This can be explained by the fact that consumers might get excited by the involvement of others in the creation of the product.

Regarding all other effects, co-creation does not affect the hedonic perceived value of hedonic products. Moreover, the hedonic value of the professional-driven firm's product does not affect purchase intentions of consumers. These results make sense since the hedonic value was already there (it was the main purpose of the product) and what co-creation brings to the picture is

a better understanding of the needs of consumers and more functional products that have higher utilitarian values than ordinary products developed exclusively by firm`s specialists.

Guilt

Before presenting the scenarios, the amount felt whenever a participating consumed a chocolate in general was registered. The amount of guilt felt by consuming the chocolate from the co-creation-driven firm was also registered in the end of the questionnaire. The results show two evidences. The first one is that participants of the study would feel a small amount of guilt when consuming chocolate. The second is that there is no evolution regarding the guilt felt when consuming chocolate or the chocolate from the co-creation-driven firm ($M_{\text{chocolate}} = 1.97$, $M_{\text{co-creation, chocolate}} = 1.92$; $t = 0.37$, $p = 0.71$). These results were expected since the need for justification appears whenever a choice must be done between a hedonic product and a utilitarian one. Hence, since in this study the consumer is only presented to hedonic options it was expected that they would not feel a great deal of guilt.

5. Conclusions

5.1. Discussion

This thesis broaches the contradictory topic of making the decision between a hedonic or a utilitarian option. The recent study analyzes the implications of observing user learning about a certain consumer community which had been involved in the development process of a hedonic product and whether this consumer involvement changes observing users' perceptions on the product, when the observing user identifies with the user community (source of creation).

The findings of the study suggest that the hypotheses are correct. The hypotheses were built drawing from the Social Identity Theory. More favorable attitudes were expected from the group of participants who shared some similar characteristics with the community that was involved in the creation of the product.

The hypotheses H1A and H2 were confirmed since higher purchase intentions were shown by those who shared the sense of similarity with the participating users than the others. These findings follow my reasoning: when the sense of similarity is triggered, observing users perceive the product as being better and having a higher utilitarian value, because those who participated in the process are the ones that truly understand their needs. The result is a higher willingness to buy that product, when compared with the one only designed by the firm's specialists.

Moreover, the group who identifies with the participating user perceives the product of the firm that involves its user community in the process as having higher utilitarian value than the product from the firm that trusts only in its professional to develop the product. The fact that the product was co-created makes observing users perceive the product and the firm as having a better understanding of their needs (Wu et al, 2017), making the product more utilitarian, meaning more functional. The increase of the utilitarian value attributed to the hedonic product has proven to influence consumers purchase intentions. The more the consumer perceives the product as having higher utilitarian value, the stronger the preference shown towards that hedonic product. Co-creation triggers similarity, which enhances the utilitarian attributes of the product, provoking a positive willingness to buy that product, proving the veracity of hypothesis H1B.

The group who does not feel similar to participating users, shows evidence of perceiving both products, from the one that involved its consumers and the one that did not, as being equally utilitarian and functional, which means that co-creation has no implications regarding perceptions of utilitarian values on hedonic products on people whose feeling of similarity is not triggered. A preference for the product developed only by firm's professionals is shown by consumers that attribute higher utilitarian value to those products. However, contrary to what seems to happen with the user-driven firm's product, similarity, or the lack of similarity have no impact on the utilitarian value given to the product that had no customer involvement, which means that the preference for those products and the utilitarian value that is attributed to them is inherent to those products and co-creation produces no effect on them.

The pleasure component of the product was tested as well. A small effect was registered in the co-created product. Hedonic dimensions influence the purchase intention of the user-driven firm's product, with consumers showing a positive reaction when a higher hedonic value is given to the product. When consumers notice the involvement of others in the new product development process they tend to feel empowered and that might create the sense of excitement that is passed to the product.

However, the effect is small and the results for the preference of the product developed by professionals is not influenced by the hedonic attributes. In addition, research implies that both groups, those that feel similar to the participating community and those who do not, perceive both products as being equally fun and hedonic. The reasoning behind this result is that the hedonic value was already there, and what co-creation does is highlight the functional dimension of the hedonic product.

Previous research has focused on the guilt felt when choosing between a hedonic and a utilitarian alternative (Okada, 2005). In the case of this study, the guilt measured showed that consumers do not feel any kind of regret when consuming the hedonic product. Even if the guilt felt when consuming chocolate in general is compared with the guilt of consuming a product developed by consumers the conclusion is that the amount felt is very similar. These results occur because the guilt appears whenever the consumer is obliged to justify the hedonic choice over the utilitarian one (pleasure over rationality). In this study, participants were only presented with

hedonic products where the presence of co-creation would vary and no deliberation between hedonism and utilitarianism was made. Without deliberation, the sense of guilt becomes absent.

5.1. Academic Relevance

This research is built on previous literature on hedonic and utilitarian choices (Okada, 2005), that strives to understand the reason why people show preference for hedonic attribute but end up opting for the utilitarian one (Dhar and Wertenbroch, 2000). Different approaches and strategies were studied to make it easier to choose the hedonic alternative instead of the utilitarian one (Strahilevitz and Myers, 1998; Kivetz and Simonson, 2002; Khan and Dhar, 2006; O'Curry and Strahilevitz 2001).

It is known that co-creation changes consumers' perceptions about products (Schreier, Fuchs and Dahl, 2012). Academically, this dissertation brings together two fields of research that have not previously been linked and increases the knowledge of involving and communicating customer participation to observing users and the added value resulting from that action.

Firstly, regarding hedonic consumption, the findings of this study compliment the literature since it provides another way to attenuate the need for justification (over utilitarian choices), showing that source similarity is a suitable strategy to increase the value of hedonic products, as it was shown already with charity, donations and gifts (Strahilevitz and Myers, 1998; Okada, 2005).

Secondly, in terms of the co-creation field of study, it provides valuable insights regarding how observing consumers perceive hedonic products and how important is to communicate who are the ones participating in the creation process, completing previous studies about this topic.

5.2. Managerial Relevance

Many companies have already realized the impact and the benefits of involving consumers during the new development product process and have started to pursue this strategy in order to obtain better products and ultimately better market performance (Nishikawa et al, 2017).

product process and have started to pursue this strategy in order to obtain better products and ultimately better market performance (Nishikawa et al, 2017).

Thanks to this paper, managers now acquire the knowledge that source similarity, in fact, increases the value of a hedonic product, gaining competitive advantage against companies that do not involve consumers in the new development product process and trust all the process to their professionals. Besides this, the increased value of the product might even make it easier to choose the hedonic attribute over the utilitarian one. Therefore, managers who's core business consists predominantly of providing pleasure and a sense of satisfaction, are able now to deliberate whether they should involve their user community to better engage with the rest of the market, and provide them with better products with a higher level of utilitarianism.

However, managers should take into consideration the similarity effect when deciding to enhance consumer participation, because if the broader market is extremely diverse and if few similarities can be found between each consumer, the identification effect will not have any impact. As this study shows, co-creation does not harm the product if the observing consumer does not feel similar to the participating community but involving consumers in the process can add some complication in the new development product process, especially in the development phase (Chang and Taylor, 2016), since the firm is no longer in total control of the operations.

6. Limitations and Future Research

Although the findings of this research are significant and important, there are several limitations that might be subject to further analysis for future research.

This research focus on millennials and how they react to certain stimuli. Different generations have different perceptions, expectations and beliefs. Therefore, generations before and after might not react the same way as millennials when co-creation comes to the fore. A sample with higher diversity would provide a more accurate result.

In terms of manipulating source similarity, gender is an important factor according to the Social Identity Theory (Tajfel and Turner 1986). Nevertheless, it is not the only one. More variables should be considered in future studies, for instance religion, area of work and previous academic path or even simple hobbies.

The study tested only one single hedonic product. For better results and understanding of the implications of co-creation on hedonic perceptions, a greater volume of products should be analysed. Furthermore, in this thesis, brand association was blinded to avoid double effects. However, communicating the brand can have a significant impact on the perceptions, influencing the way observing users perceive the product. Brand loyalty can play a critical role when choosing between different hedonic and utilitarian attributes.

Finally, this research suggests that co-creation increases the value of hedonic products through social identification with the creator. An important and valuable research should be made regarding the choice between a utilitarian alternative or a hedonic one. Whether this increases value of the hedonic product, through co-creation, and whether it is enough to justify hedonic consumption over the utilitarian one.

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