Classification of FMCG Product Macro-Categories on the Utilitarian *vs.* **Hedonic Dimensions**

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Abstract

The present study aims to classify several fast moving consumer goods (FMCG) macro-categories as holding more utilitarian vs. hedonic characteristics, allowing for future use in consumer decisionmaking studies. The classification of product categories along this continuum is becoming increasingly relevant, with different macro-categories generating special attention from the retailers, both in terms of layout and nature of the materials used, as well as of promotional activities. Additionally, a quick look at the penetration level of private labels (retailers' brands), across different product categories, seems to lead to the conclusion that the nature of each of these categories is each time more relevant (TNS Worldpanel, 2013). An online study (n=119) where participants were asked to classify 23 product categories (borrowed from TNS Worldpanel, 2010) along a utilitarian-hedonic continuum, allowed for the classification of each product category as having a more utilitarian vs. hedonic nature. These results may be used in future studies interested in this type of classification.

Key-words: Product categories, Hedonic, Utilitarian, Consumer behavior.

Resumo

O presente estudo visa obter uma classificação de diversas categorias de produto do mercado do grande consumo nas dimensões utilitário-hedónico, para que possa servir de referência em estudos futuros na área do comportamento do consumidor. A classificação de categorias de produto ao longo destas dimensões é de enorme pertinência, na medida em que diferentes categorias começam a beneficiar, cada vez mais, de tratamento diferencial por parte dos retalhistas, tanto ao nível do layout e materiais utilizados, como de atividades promocionais de diferente natureza. Adicionalmente, também a análise das taxas de penetração das marcas da distribuição (marcas próprias dos retalhistas) leva a crer que o estudo da natureza das diferentes categorias é um fenómeno relevante, na medida em que se registam diferenção bastante significativas entre as mesmas (TNS Worldpanel,

Author note: Research project financed by the Portuguese Foundation for Science and Technology – PTDC/EGE-GES/103899/ 2008.

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2013). A realização de um estudo online (n=119) permitiu a classificação de 23 macro-categorias (TNS Worldpanel, 2010) ao longo das dimensões utilitária-hedónica, podendo servir de base para estudos futuros interessados neste tipo de classificação.

Palavras-chave: Macro-categorias de produto, Hedónico, Utilitário, Comportamento do consumidor.

Introduction

Most of consumers' decision-making processes are heavily influenced by the utilitarian *vs.* hedonic properties of the products or services being acquired (Dhar & Wertenbroch, 2000). Specifically, attitudes and levels of satisfaction tend to be associated to the relative weight of both these dimensions (Mano & Oliver, 1993). While a consumer might value the utilitarian aspects of a new cell-phone (e.g., the ability to send and receive emails), another consumer might put an emphasis on its hedonic properties (e.g., a modern design), meaning that one of these two dimensions will ultimately play a critical role in the decision-making process. Although the majority of products can, to some degree, be evaluated in terms of both dimensions, it is not uncommon to find some products which are generally classified as having either higher utilitarian qualities (e.g., an ink cartridge) or higher hedonic ones (e.g., a party dress) (Dhar &Wertenbroch, 2000). Both fulfill specific purposes (i.e., printing or dressing appropriately for a dinner party), yet the emotional and satisfaction levels associated to each product are different.

The concept of hedonic products, or hedonic consumption, was introduced more than twenty years ago, in the seminal work of Holbrook and Hirschman (1982) and is commonly used nowadays in most academic works: "Hedonic consumption designates those facets of consumer behavior that relate to the multisensory, fantasy and emotive aspects of one's experience with products." (p. 92). Based on this notion, purchases or choices grounded on hedonic dimensions are frequently associated to an intense consumption experience, where positive emotions abound. This kind of experience is often described as entertaining, pleasant, exciting, spontaneous and sensory, although it may eventually be associated to feelings of guilt and different types of vices, given its hedonic nature (Botti & McGill, 2011; Dhar & Wertenbroch, 2000). In turn, utilitarian consumption experiences tend to be described as fundamentally functional, instrumental, sensible or practical, a kind of experience that is usually associated to a simple justification and to a set of needs that demand a clear solution (Dhar & Wertenbroch, 2000; Kivetz & Simonson, 2002; Okada, 2005; Sela, Berger, & Liu, 2009).

Consequently, affect and cognition play a central role in the distinction between utilitarian and hedonic dimensions. In the case of health food products, for example, it is often assumed that the intention to adopt a certain behavior represents the best possible prediction of that same behavior (Koelen & Van den Ban, 2004; Verplanken & Faes, 1999). Yet, if we focus on the set of attitudes that typically underlie hedonic consumption, we are prone to find a series of emotional considerations instead (Pham, 1998). These kinds of considerations often outshine typical utilitarian consumption intentions that tend to have a more cognitive motivation (Havlena & Holbrook, 1986; Mano & Oliver, 1993; Shiv & Fedorikhin, 1999). As such, hedonic consumption generally has an intrinsic motivation leading to an inherent reward that is sought after, in the form of a higher order goal. On the other hand, utilitarian consumption tends to have an extrinsic motivation that does not comprise in itself a reward but that is, in turn, instrumental in the accomplishment of different goals (Dhar & Wertenbroch, 2000; Pham, 1998). Hence, the prominently affective valence of certain goods and services (hedonic ones), and the many contextual variables that hinder an entirely rational decision-making (see Kahneman &

Tversky, 1979 for further detail) end up undermining the hierarchy of products we "should" buy, over the ones we "want" to buy.

Therefore, a classification of products along these two dimensions may be critical to understand why and when consumers choose between different products or services. In the particular case of academia, this will allow researchers to have access to an *a priori* classification of products that will help to adequately test hypothesis related to products belonging to different macro-categories. Since most FMCG products that are typically available in hyper or supermarkets lack a consistent classification along these two dimensions, added to the fact that retailers are starting to subject an ever-increasing number of categories to differential treatment, not only in terms of layout (Levav & Zhu, 2009), but also in terms of section materials (Meyers-Levy & Zhu, 2007) and of promotional activities of different natures (Hui, Inman, Huang, & Suher, 2013), we consider a classification of this sort to be highly pertinent. Additionally, the differences found across product categories on the market share of retailers' brands also seem to suggest that the nature of products is becoming an increasingly relevant topic for the retail industry (TNS Worldpanel, 2013; Verga Matos & Coelho do Vale, 2013).

Method

A total of 119 participants (female=77, male=42) between the age of 19 and 74 (M=24.79; SD=6.35) responded to an online survey in exchange for a monetary compensation. Out of the 119 participants, 66 reported being students, and they were all Portuguese.

Participants were first told that the questions they were going to be presented with were part of a consumer behavior study and that all the information would be treated in a confidential and anonymous way. Next, participants were asked to evaluate a set of product categories typically available at supermarkets, in terms of its utilitarian *vs.* hedonic attributes. To guarantee that all participants held similar knowledge on these two concepts, a short definition of both hedonic and utilitarian products was presented: "Hedonic products: Products associated with amusement, experimentation, enthusiasm, satisfaction and pleasure. Though related to emotional gratification, buying and experimenting with this kind of products may lead to feelings of guilt or decrease the pleasure of consumption."; "Utilitarian products: Products that are acquired for a specific function of task. Utilitarian products are often characterized by its practicality and don't usually lead to feelings of pleasure or guilt" (see Appendix 1 for an example).

Each product category was introduced by a generic photographic composition of some of the most representative products of that same category, in order to facilitate categorization (e.g., Dairy category included milk, yogurt, and cheese). No brands were included, in order to rule out for any bias associated to participants' brand preferences. All participants were exposed to the same stimuli.

Measures

Macro-categories. In order to evaluate a representative set of typically available supermarket products, 23 macro-categories were borrowed from TNS' quarterly barometer (TNS Worldpanel, 2010), namely: *dairy, frozen food, health & beauty, house care, beverages, groceries, charcuterie, butchery, seafood, fruit & vegetables, bakery, alcoholic drinks, home decor, gardening, pet care, clothing, gourmet food, toys, stationery, books, sports & leisure, bricolage (Do It Yourself-DYI), and car accessories.*

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Utilitarian-hedonic Evaluation. Each macro-category was individually assessed by participants, using a seven-point semantic differential scale (e.g., "In general, how would you classify [product category] in terms of its hedonic/utilitarian attributes?"; 1-Very Utilitarian; 7-Very Hedonic; see Appendix 2). The use of a single dichotomous scale for each product category, instead of individual scales for each product dimension (utilitarian *vs.* hedonic) was preferred since the classification of a neutral point was desired. The use of semantic differential items was also preferred to the standard seven-point Likert scale to avoid acquiescence as a source of error, i.e., the propensity to respond positively to items irrespective of its contents (Friborg, Martinussen & Rosenvinge, 2006). Despite the drawback of a possible higher cognitive demand, participants responding to scales where responses have been manipulated (in this case, a semantic differential scale with a neutral mid-point) are also less subject to social desirability issues (Furnham, 1986) that tend to occur with the general use of Likert scales.

Results

An initial analysis on the means, standard deviations, and confidence intervals (95%) of every macro-category, allowed the ordering of the 23 categories along the predominance of each of the two dimensions (see Table 1). Additionally, the inter-quartile range was calculated¹ allowing for a clearer distinction, not only of the most utilitarian and hedonic categories, but also of the most neutral ones.

Table 1

Product Macro-category ^a	Classification (1=Utilitarian, 7=Hedonic)		Confidence Interval (95%)	
	М	DP	LB	UB
Frozen food	1.81	1.65	1.52	2.11
Fruit & vegetables	1.92	1.52	1.64	2.19
Dairy	2.09	1.71	1.78	2.40
Seafood	2.40	1.56	2.11	2.68
Bakery	2.44	1.55	2.16	2.71
Butchery	2.53	1.69	2.23	2.84
House care	2.73	1.12	2.53	2.93
Stationery	3.03	1.39	2.78	3.28
Health & beauty	3.10	1.37	2.86	3.35
Bricolage (DIY)	3.50	1.65	3.20	3.80
Pet care	3.55	1.93	3.20	3.89
Books	3.58	1.63	3.29	3.87
Clothing	3.81	1.70	3.51	4.12
Sports & leisure	4.01	1.56	3.73	4.29
Gardening	4.02	1.86	3.69	4.36
Car accessories	4.27	1.83	3.94	4.59
Toys	4.40	1.36	4.16	4.65
Beverages	4.43	1.67	4.13	4.73
Charcuterie	5.35	1.74	5.04	5.67
Groceries	5.67	1.48	5.40	5.94
Home décor	5.69	1.24	5.47	5.92
Gourmet food	5.75	1.40	5.50	6.00
Alcoholic drinks	6.02	1.30	5.79	6.26

Classification of Product Macro-categories on the Utilitarian vs. Hedonic Continuum

Note. n=119.; Q1=2.63; Q2=3.58; Q3=4.41; ^a Categories in Portuguese are respectively: comida congelada, fruta e legumes, lacticínios, peixaria, padaria, talho, cuidados da casa, papelaria, higiene pessoal, bricolage, artigos para animais de estimação, livraria, roupa, desporto, jardinagem, acessórios para automóveis, brinquedos, sumos, charcutaria, mercearia, decoração, comida gourmet, bebidas alcoólicas.

¹ IQ=Q₃-Q₁.

As can be observed in Table 1, the product categories holding stronger utilitarian characteristics are *frozen food* (M=1.81; SD=1.65), *fruit* & *vegetables* (M=1.92; SD=1.52), *dairy* (M=2.09; SD=1.71), *seafood* (M=2.40; SD=1.56), *bakery* (M=2.44; SD=1.55) and *butchery* (M=2.53; SD=1.69), all positioning under the first quartile (Q_1 =2.63). On the other hand, the product categories that were indicated as holding stronger hedonic characteristics are *beverages* (M=4.43; SD=1.36), *charcuterie* (M=5.35, SD=1.74), groceries (M=5.67; SD=1.48), home decor (M=5.69; SD=1.24), gourmet food (M=5.75; SD=1.40) and *alcoholic drinks* (M=6.02; SD=1.30), all positioning over the third quartile (Q_3 =4.41). The macro-categories that were classified as more neutral were *house care* (M=2.73; SD=1.12), stationery (M=3.03; SD=1.39), health & beauty (M=3.10; SD=1.37), bricolage (DIY) (M=3.50; SD=1.65), pet care (M=3.55; SD=1.93), books (M=3.58; SD=1.63), clothing (M=3.81; SD=1.70), sports & leisure (M=4.01; SD=1.36), indicating that there is a significant number of categories regarding which consumers do not associate as being hedonic nor utilitarian.

The ranking of the different macro-categories across the continuum scale utilitarian-hedonic, allows researchers interested in using this classification to choose the classification splitting point that better suffices the research questions that are being analyzed. For example, if one would like to narrow the set of products classified under each dimension, he/she can take into account the lower and upper boundaries of each confidence intervals as the splitting criteria among different groups. As such, one might use *dairy*'s upper bound confidence interval as the splitting point to identify utilitarian products (UB_{Dairy}=2.40<Q₁=2.63), restricting the classification of most utilitarian categories to *frozen food*, *fruit and vegetables* and *dairy*. In a similar vein, one may also confine the most hedonic categories to *charcuterie*, *groceries*, *house decoration*, *gourmet food*, and *beverages*, when using *charcuterie*'s lower bound confidence interval as the splitting criteria (LB_{Charcuterie}=5.04>Q₃=4.41).

Conclusion

In the present study, 23 product macro-categories were evaluated on the utilitarian-hedonic dimensions. We believe that future studies, particularly in the area consumer behavior, might benefit from an *a priori* classification of this type.

Notwithstanding, a couple of limitations should be addressed regarding both the sample and the product categories used in this study. Firstly, researchers should be aware that the entire subject pool is comprised of Portuguese individuals, which may lead to relevant idiosyncrasies related to culture and shopping habits, mainly regarding product categories that might be country-specific. Secondly, researchers should note that, despite the effort to classify the largest possible number of product categories, we restricted our macro-categories sample to the most frequently acquired supermarket products, covering only around 60% of the total product macro-categories available in retailing (TNS Worldpanel, 2010). We therefore propose that future studies aiming for a classification of this sort should focus on less common product categories than those considered in this work.

Still, we reckon that the data resulting from this study may contribute to future research works, offering a previous evaluation of the utilitarian *vs.* hedonic attributes of some of the most representative product macro-categories available in the FMCG industry.

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Appendix 1

Definition of Hedonic and Utilitarian Products

1a. English Version

Hedonic Products

Products associated with amusement, experimentation, enthusiasm, satisfaction and pleasure. Though related to emotional gratification, buying and experimenting with this kind of products may lead to feelings of guilt or decrease the pleasure of consumption.

Utilitarian Products

Products that are acquired for a specific function or task. Utilitarian products are often characterized by its practicality and don't usually lead to feelings of pleasure or guilt.

1b. Portuguese Version

Produtos Hedónicos

Produtos associados a divertimento, experimentação, entusiasmo, satisfação e prazer. O consumo deste tipo de produtos encontra-se normalmente associado a gratificação emocional. Ao mesmo tempo, a compra ou experimentação de produtos hedónicos pode conduzir a sentimentos de culpa que, por sua vez, podem diminuir o prazer do consumo.

Produtos Utilitários

Produtos adquiridos para o desempenho de uma função ou tarefa especifica. São caracterizados pelo seu aspecto funcional e práctico. A compra de produtos utilitários não conduz, normalmente, a sentimentos de culpa.

Appendix 2

<image><image><form>

Example of Stimulus used for classification of the macro-categories: Dairy products

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Submissão: 23-05-2013

Aceitação: 22-07-2013