



The effect of an environmental claim on consumers' perceptions about luxury and utilitarian products[☆]



Yael Steinhart^{a,*}, Ofira Ayalon^{b,2}, Hila Puterman^{b,3}

^a Recanati Graduate School of Business, Tel-Aviv University, Ramat Aviv, Tel Aviv 69978, Israel

^b Department of Natural Resources & Environmental Management, Graduate School of Management, University of Haifa, Israel

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ABSTRACT

This research examines how an environmental claim - an eco-label with a message about a product causing less damage to the environment - differently affects consumers' evaluations of utilitarian products and of luxuries. The results of two online studies show that consumers perceive an environmental claim as being a utilitarian aspect of a product, and, therefore, such claims may enhance consumers' evaluations of utilitarian products, especially when the content of the claim emphasizes global-environmental benefits. In addition, the environmental claim may improve evaluations of luxury products by providing available justification to indulge and use luxuries. The latter effect is enhanced when the content of the environmental claim emphasizes personal-social benefits, related to the user's social status.

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1. Introduction

In recent years, information regarding the environment and climate change has an impact on the daily behavior of consumers, seeking for more environmentally friendly products (Roberts, 1993; Durif et al., 2011; Lin and Huang, 2012; Tandberg Group, 2007). On the supply side, along the product manufacturing, use and disposal chain, firms are endeavoring to minimize environmental hazards, while on the demand side, studies show that consumers are making more environmentally friendly decisions (Buenstorf and Cordes, 2008; Gray, 2007). To communicate with consumers about their environmentally friendly efforts, some companies affix eco-labels to their products, assuming that the presence of these

labels will elevate consumers' preference toward the products and positively influence their buying decisions (Van Birgelen et al., 2009; Lin and Huang, 2012).

The current research provides insight into the power of eco-labels in determining consumers' perceptions of products. Specifically, the present research integrates the eco-labeling trend, which emerges from increased awareness of environmental considerations (D'Souza et al., 2007; West, 1995), with consumers' decision processes concerning utilitarian products and hedonic products (Dhar and Wertenbroch, 2000; Voss et al., 2003). Utilitarian products are defined as necessities essential to achieve a goal or complete a practical task; detergent and toilet paper, for example, fall into this category (Dhar and Wertenbroch, 2000; Khan and Dhar, 2006). Hedonic products, in contrast, are defined as luxuries, which provide pleasure and fun; perfume and flowers are examples of hedonic products (Dhar and Wertenbroch, 2000).

We propose that a consumers' perception of an eco-label varies as a function of the type of product bearing the label. The research explores this proposition using two online studies consisting of controlled experiments where we created different experimental conditions to explore our hypotheses. In the first (Study 1), the four different experimental conditions were based on the presence (or absence) of an environmental claim and the product type (utilitarian or luxury). The study examines how consumers' perceptions of eco-labels, affixed to products, differ according to whether the products are utilitarian or luxury. In the second study (Study 2), the

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* Corresponding author. Tel.: +972 3 6409959; fax: +972 3 6406321.

E-mail addresses: ysteinhart@post.tau.ac.il (Y. Steinhart), aofira@gmail.com (O. Ayalon), hila_p@netvision.net.il (H. Puterman).

¹ Dr. Steinhart is a senior lecturer of Marketing at the Business School in Tel-Aviv University.

² Prof. Ayalon is the director of The Natural Resources and Environmental Research Center. Professor at the Department of Natural Resources & Environmental Management, Graduate School of Management, University of Haifa. Prof. Ayalon is the head of the Environmental Policy Division at the Samuel Neaman Institute, Technion, Israel. Tel.: +972 4 8288542; fax: +972 4 8249971.

³ Ms. Puterman is a graduate student in the Department of Natural Resources & Environmental Management. Tel.: +972 4 8288542; fax: +972 4 8249971.

four experimental conditions were based on the product type (utilitarian or luxury, as in study 1) but the content of the environmental claim strengthened a different scope (global or personal). This study investigates possible ways to increase the influence of such labels on consumers' evaluations of specific products, by adjusting their content to the type of product.

2. Theoretical background

2.1. Eco-labels

Environmental considerations, such as the energy required to extract raw materials and produce products, as well as the air, water and land contamination associated with products' life cycle (e.g. Ayalon et al., 2000; Finnveden and Moberg, 2005), may play a role in the consumers' decision-making process regarding purchases (D'Souza et al., 2006; Stone et al., 1995; TGI, 2008), especially in developed countries. By choosing the types of goods they consume, consumers play a critical role in efforts to protect the environment (Buenstorf and Cordes, 2008). According to recent research, consumer perceptions are changing, and issues of sustainability and climate change associated with a product are becoming more important and relevant to consumers' purchasing decisions (Berghoef and Dodds, 2013; Tandberg Group, 2007). These perceptions were found to be changing both in a general perspective, when examining more than 16,000 people across 15 markets such as China, France and United States (Tandberg Group, 2007), and in a specific manner when examining a specific industry (i.e. Wine Industry) in a specific country (i.e. Canada) (Berghoef and Dodds, 2013). In addition, Van Birgelen et al. (2009) and Lin and Huang (2012) have shown that when two products are perceived as identical, the environmental aspect may be critical in the consumer's product choice.

The environmental (or eco-) label (seal or certification) is a symbol used to provide confirmation that a product complies with environmental standards and that the product is, at least, as good as other products in the same category (D'Souza et al., 2007; West, 1995). Hundreds of certifications are available worldwide: For example, Nilsson et al. (2004) have reviewed 58 types of eco-labels for food products alone; The Ecolabel Index (<http://www.ecolabelindex.com>) is a directory listing 433 eco-labels in 246 countries, in 25 industry sectors. Different eco-labels convey different information; for example, a label may focus on the product's carbon footprint, its water footprint, the use of natural materials in the production process, etc. In addition, labels vary in terms of the standards according to which they are awarded, as well as the verification processes used to determine whether a product meets the standard. As a result, for a given eco-label, the validity and verifiability of the certification process, the credibility of the label, the meaning of the label and the exact information it conveys are not always clear (Pedersen and Neergaard, 2006).

The present research examines the impact of the presence of an environmental claim (Carlson et al., 1993) – a message conveyed within an eco-label – on consumers' attitudes towards and perceptions of products. In order to avoid the possible concerns of consumers regarding the variability in content, certification criteria and credibility associated with different eco-labels, in our study we define an "environmental claim" – as a general indication that the associated product causes relatively less damage to the environment compared with other similar products, but its quality is not inferior and its price is compatible (following Carlson et al., 1993; Lavallée and Plouffe, 2004).

As noted above, consumers may be aware of the presence of an environmental claim but may not be familiar with the claims' specific source or know how to interpret its content. Therefore,

consumers may be confused about the meaning and nature of the environmental claim, independent of product type. The current research proposes that the meaning consumers ascribe to an environmental claim may change when it is attached to different types of products. Specifically, as we elaborate in the next section that recent research conducted by Dhar and Wertenbroch (2000) and by Voss et al. (2003) have suggested that consumers decision-making processes with regard to luxuries are different from those concerning utilitarian products. These differences may lead consumers to perceive environmental claims associated with different products in different ways.

2.2. Utilitarian and luxury products

Products can be characterized by the goals they fulfill. According to this classification, one can refer to hedonic products as items that are consumed primarily for pleasure, whereas utilitarian products are intended to meet more essential goals (Kivetz and Simonson, 2002; Strahilevitz and Myers, 1998). Hedonic products are defined as ones that affect the sensory, aesthetic experience or produce fantasy and fun (Dhar and Wertenbroch, 2000; Mano and Oliver, 1993; Voss et al., 2003). In this research we will focus on one example of hedonic products: luxuries (Khan and Dhar, 2006). The motivation to purchase a luxury is based on fun and pleasure (Khan and Dhar, 2006). Purchasing luxuries can be also regarded as self-indulgent (Strahilevitz and Myers, 1998). Examples of luxuries include flowers, designer clothes, music, sports cars, luxury watches, and chocolate. A utilitarian product, in contrast, is defined as functional, an essential tool that enables the owner to achieve a goal or complete a practical task (Dhar and Wertenbroch, 2000; Khan and Dhar, 2006). When choosing to purchase a utilitarian product, consumers perceive the choice as beneficial and easily justified (Kivetz and Simonson, 2002; Sela et al., 2009). Examples of utilitarian products include toilet paper, detergents, microwaves, home security systems, and personal computers.

The classification of products as luxury or utilitarian is based on relative rather than on absolute terms. A given product can have both luxury and utilitarian attributes at the same time. For example, a luxury watch may be both functional, by showing the time, and self-indulging, owing to its unique design. Thus, as indicated by Okada (2005), the difference between the definition of a product as a luxury or as utilitarian is a matter of perception. According to Batra and Ahtola (1990), the decision of how to classify a product depends on the degree to which the product fulfills luxury versus utilitarian goals. Hirschman and Holbrook (1982) further suggest that some product components are likely to highlight a luxury or a utilitarian dimension more strongly, influencing the consumers' general perception of the product as either luxury or utilitarian. Accordingly, rather than classify products in a binary manner as either hedonic (luxury) or utilitarian, it is more accurate to classify them according to whether consumers *perceive* them as primarily hedonic or utilitarian (Pham, 1998).

When considering the purchase of a product that is primarily a luxury, the consumer is more likely to apply an emotional decision-making process. This process is influenced by the peripheral properties of the product, such as design, color, shape, and expected pleasure (Dhar and Wertenbroch, 2000; Mano and Oliver, 1993; Voss et al., 2003). Conversely, when considering the purchase of primarily utilitarian products, the consumer usually applies a more intensive, cognitive, and systematic decision-making process, examining the products' main properties and practical benefits (Mano and Oliver, 1993; Voss et al., 2003).

Because different types of products may elicit different decision processes, consumers' evaluations of different products may be differentially influenced by the presence of environmental claims.

In the next section we elaborate on ways in which the presence of an environmental claim may influence consumers' evaluations of luxuries and of utilitarian products.

3. Consumer perceptions of an environmental claim when applied to utilitarian or luxury products

The present research examines consumers' perceptions of environmental claims, as a function of the type of product bearing the claim (utilitarian or luxury), and the consequent impact of these perceptions on consumers' evaluations of the products.

The present research proposes that the perceived utilitarian dimension of the environmental claim is greater than the perceived hedonic dimension. This proposition relies on prior research in which participants mainly referred to the functionality of an environmental claim rather than to the emotional messages conveyed by the environmental claim (Carlson et al., 1993; Shiluv Research Group and SII, 2007). However, as yet, there is no systematic and comprehensive evidence about the ways in which environmental claims are perceived, in terms of their utilitarian and hedonic features, and how such perceptions contribute to the overall evaluation of products. This research aims to shed light on these perceptions.

We propose the following:

H1. Consumers perceive an environmental claim more as a utilitarian feature of a product than as a hedonic feature.

Different studies have examined the impact of environmental claims on consumers' evaluation and consumption of utilitarian products. Their results suggest that the presence of such a claim can enhance the consumers' evaluation of utilitarian products such as printer paper, toilet paper, and paper towels (AKF, 2002; Bjørner et al., 2004; TemaNord, 2001). There are also indications that the addition of an environmental claim to a utilitarian product can contribute to consumer preference of that product over a similar utilitarian product that does not bear the environmental claim. For example, a study conducted by Shiluv Research Group and SII (2007) showed that the presence of an eco-label impacts the tested consumers' overall perception of a product, by enhancing their perception of the quality of the product, compared to products without a label. Carlson et al. (1993) have also shown that the presence of an environmental claim may influence consumers' overall perceptions of a product by reinforcing their perception of the functional, essential aspects, of a product.

In our research we focus on the overall evaluations of the products, given that their actual quality is identical. We propose that an environmental claim positively influences consumer evaluations of primarily utilitarian products since it reinforces the consumers' perception that the utilitarian product serves its functional purposes. In turn, the weight that the consumer gives to the functionality of the product is expected to increase the consumers' perception that the product is primarily utilitarian and ultimately leverage the products' overall evaluation.

The present research also addresses consumer perceptions of environmental claims attached to luxury products. To our knowledge, no systematic research has investigated this issue. We suggest that the presence of an environmental claim, which is proposed to enhance the utilitarian aspect of products, is less likely to increase the products' perceived overall functionality (as when attached to utilitarian products) but is more likely to simplify the purchasing decision for consumers and morally justify the choice of a desired luxury product. This proposition is based on earlier studies that have shown that it is easier to justify the choice of utilitarian necessities and virtues as opposed to hedonic indulgences and vices (Bazerman et al., 1998; Kivetz and Keinan, 2006; Kivetz and Simonson, 2002; Sela et al., 2009). In other words, when forming

evaluation towards a utilitarian product the consumer may value the products' attributes and overall benefits based on their functional aspects. Luxury consumption is harder to justify, in part, because it is often associated with guilt (Kivetz and Simonson, 2002; Strahilevitz and Myers, 1998). In addition, according to Sela et al. (2009), it is harder to construct reasons to justify luxury consumption. The benefit of luxuries lies in enjoyment, which is harder to quantify than the more concrete benefits that utilitarian goods often provide. Sela et al. (2009) show, that when consumers are offered available justifications for usage of luxuries, they are more likely to use them.

Based on these findings, we suggest that an environmental claim attached to a luxury product may constitute an available justification to use the product (Sela et al., 2009). Since the presence of an environmental claim may indicate that the product has a reduced environmental impact, it may provide a license to have favorable feelings towards a product and support to the products' purchase. Thus, a signal that a product does less harm to the environment, may be perceived in a positive manner among consumers, therefore, enhance the positive perceptions of the product and of its potential user and consequently increase the likelihood to buy the product.

A study by Khan and Dhar (2006) provides an additional perspective on the relationship between moral license and the purchase of luxuries. In that study, consumers who were asked to choose a community service activity (such as "teaching children in a homeless shelter" and "improving the environment") and to imagine that they had volunteered for that activity, found that afterwards the decision to choose a luxury product was easier, because the activity had earned them the moral license to enjoy such a product.

Integration of the findings of Sela et al. (2009) and of Khan and Dhar (2006) leads us to propose that the presence of an environmental claim, which is perceived in a positive manner, will provide the consumer the justification of "being good to the environment" and at the same time will facilitate his/her willingness to indulge and use the luxury products (Khan and Dhar, 2006). We, therefore, suggest that the presence of an environmental claim may enhance the value that consumers attach to a product and to themselves when acquiring the product, thus justifying a purchase intended to satisfy luxury desires. In other words, when facing a luxury with an environmental claim, the consumer may feel more "environmentally oriented" (or that he or she is "an environmentalist") than when facing a luxury without a claim, and in this case the presence of an environmental claim on the luxury product enables the consumer to balance two needs – the need for satisfaction and pleasure, and the need to "do the right thing".

As mentioned above, it is easier for consumers to justify their choice of a utilitarian product than to justify their choice of a luxury (Bazerman et al., 1998; Kivetz and Keinan, 2006; Kivetz and Simonson, 2002). Therefore, consumers may be less likely to search for available justification along the decision process of a utilitarian product. Accordingly, consumers are less likely to perceive the environmental claim attached to a utilitarian product as providing moral justification to buy the product. Following this reasoning, since the environmental claim may not elicit an available justification to buy the product, it is also expected to have minor effect, if any, on consumers' perceptions of their own environmental concern. Formally, the study proposes:

H2a. The presence of environmental claims will enhance consumer's overall perceptions of the functionality of utilitarian products but not of luxury products.

H2b. A utilitarian product bearing an environmental claim will be perceived more favorably than a utilitarian product with no claim.

H3a. The presence of an environmental claim will enhance consumer's self-perceptions of being an environmentalist, when attached to a luxury product but not when attached to a utilitarian product.

H3b. A luxury product bearing an environmental claim will be perceived more favorably than a luxury product without a claim.

4. The effects of environmental claims associated with utilitarian and luxury products (Study 1)

The aim of Study 1 was to examine how the presence of an environmental claim attached to utilitarian or luxury products affects consumers' evaluations of those products. We expected that an environmental claim would be perceived as a utilitarian feature (H1), and that the presence of this claim presence would improve consumers' evaluations of both utilitarian and luxury products (H2b and H3b, respectively). However, more favorable evaluations of utilitarian products would be a result of overall enhancement of the perceived functionality of the products (H2a), whereas the more favorable evaluation of luxury products would be the result of the available justification for usage the enhancement of consumers' self-perceptions of being environmentally oriented (H3a).

4.1. Method

4.1.1. Product selection

Study 1 assessed consumers' perceptions regarding two products: toilet paper (a utilitarian product, as confirmed in what follows) and fancy napkins (a luxury). The choice of these products was based on two reasons: First, existing earlier research on the subject of eco-labels on paper products (AFK, 2002; Bjørner et al., 2004) has concluded that toilet paper is a utilitarian product (Crowley et al., 1992). Second, the prices of these products are similar, and relatively low, thus reducing the potential impact of financial considerations as an intervening factor.

4.1.1.1. Pre-test- selection of products. An on-line pre-test among 46 participants ($M_{age} = 30.95$, $SD_{age} = 6.35$; 52% women, 54% married) was carried out. In return for participating, each participant received \$3 USD.

Additional demographic characteristics of the participants in the pre-test are presented in Table 1.

In the pre-test we examined the utilitarian and luxury perceptions of three products: (a) a package of toilet paper- described as containing 32 toilet paper rolls, and has a convenience strip for holding the package, (b) a package of regular napkins- described as containing blank napkins for daily usage, and (c) fancy napkins, described as containing beautifully designed napkins, which induce a great joy just from looking at the package. Participants were randomly assigned to one of the three groups, and participants in each group were asked to rate their perception of the product. Specifically, they were asked to rate on a 7-point scale (1 is the lowest score and 7 is the highest score) the extent to which they find the product to be functional (i.e., essential to daily usage) and the degree to which they find the product to be hedonic (i.e., a luxury product). We used ANOVA to explore the different functional and hedonic perceptions of each of the products.

Table 1
Demographic characteristics of pre-test participants.

Education	25% high school graduates, 15% above high school studies (no academic degree), 22% BA students, 28% BA graduates, 10% MA graduates.
Income	32.6% with income below average, 34.8% with average income, 32.6% with income above average
Family status	54% married, 46% single

The results of the ANOVA indicated that the type of product had a significant effect on the degree to which the product was rated as utilitarian ($F(2,43) = 15.15$, $p < .05$). We relied on the ANOVA results and on post-hoc comparisons of the average ratings of each product and found that toilet paper was rated as significantly more essential to daily life (average rating (M) = 6.0, SD = 1.11) than regular napkins (M = 4.43, SD = 2.02, $p < .05$) or fancy napkins (M = 2.87, SD = 1.64, $p < .05$). Moreover, the regular napkins were also rated as more essential than fancy napkins ($p < .05$). Additional ANOVA on the extent to which products were rated as hedonic also indicated a significant effect ($F(2,43) = 10.79$, $p < .05$). Toilet paper obtained significantly lower ratings in luxury perceptions (M = 2.41, SD = 1.47) compared with regular napkins (M = 3.71, SD = 1.79, $p < .05$) or fancy napkins (M = 5.20, SD = 1.93, $p < .005$). Moreover, the regular napkins were also rated as less luxury than fancy napkins ($p < .05$).

Participants were also asked to complete a scale developed by Voss et al. (2003), which addressed both the utilitarian aspects and the hedonic aspects of the product. Specifically, Voss et al. (2003) scale consisted of the following items to describe the utilitarian aspects of the product: effective, helpful, functional, necessary and practical. In addition, the following items describe the hedonic aspects of the product: fun, exciting, delightful, thrilling, and enjoyable. The scale consisted of a differential semantic measure – for each term, participants were asked to rate on a 7-point-scale (1 is the lowest score and 7 is the highest score) the extent to which the term applies to the product. The internal correlation between the utilitarian terms, within the Voss et al. (2003) scale, was high ($\alpha = .93$); as well as the internal correlation between the hedonic-related terms ($\alpha = .90$). Therefore, we used the average score of each group of items to create a 'utilitarian index' and a 'hedonic index'. Analysis of the 'utilitarian index' scores provided additional support to the functionality perceptions of each of the products. ANOVA of the 'utilitarian index' of the three products yield a significant main effect for the type of product ($F(2,43) = 10.49$, $p < .05$). The 'utilitarian index' ratings were significantly higher for toilet paper (M = 5.94, SD = 1.33) than for regular napkins (M = 4.83, SD = 1.33, $p < .05$) or fancy napkins (M = 3.86, SD = 1.39, $p < .05$). Moreover, the 'utilitarian index' ratings were higher for regular napkins than for fancy napkins ($p < .05$). An additional ANOVA of the 'hedonic index' perceptions of the three products also indicated a significant effect of product type ($F(2,43) = 4.67$, $p < .05$). The 'hedonic index' ratings were significantly lower for toilet paper (M = 2.74, SD = 1.09) than for fancy napkins (M = 3.75, SD = 1.54, $p < .05$). These ratings were also significantly lower for regular napkins (M = 2.41, SD = 1.02, $p < .05$) than for fancy napkins. However, there was not a significant difference in the 'hedonic index' perceptions between regular napkins and toilet paper ($p > .1$).

Table 2 summarizes the mean ratings and the standard deviations for each product in the pre-test.

The results of the pre-test confirmed that toilet paper and fancy napkins significantly differ in terms of consumers' perceptions of

Table 2
Mean ratings (on a 7-point scale) and standard deviations of each of the products in the pre-test.

	Toilet paper	Regular napkins	Fancy napkins
Functionality ratings	$M = 6.0$, $SD = 1.11^a$	$M = 4.43$, $SD = 2.02^b$	$M = 2.87$, $SD = 1.64^c$
Luxury ratings	$M = 2.41$, $SD = 1.47^a$	$M = 3.71$, $SD = 1.79^b$	$M = 5.20$, $SD = 1.93^c$
'Utilitarian index'	$M = 5.94$, $SD = 1.33^a$	$M = 4.83$, $SD = 1.33^b$	$M = 3.86$, $SD = 1.39^c$
'Hedonic index'	$M = 2.74$, $SD = 1.09^a$	$M = 2.41$, $SD = 1.02^a$	$M = 3.75$, $SD = 1.54^b$

Note: Cells with unlike superscripts differ at $p < .05$.

their utilitarian and luxury aspects, and therefore we focused on these products in our studies.

4.1.2. Study 1

4.1.2.1. Participants. Study 1 was conducted on-line and included 216 participants who volunteered to take part in the study ($M_{\text{age}} = 35$, $SD_{\text{age}} = 10.88$; 62% women, 45% with income below average, 20% with average income and the rest with above average income). The participants were randomly assigned to a 2 (product type: utilitarian or luxury) \times 2 (with or without an environmental claim) between-subject matrix, comprising four types of scenarios.

4.1.2.2. Procedure and measures. Each participant received a questionnaire presenting one of four types of scenarios describing a product, followed by the same set of questions regarding their perceptions of and attitudes towards the product. The four types of scenarios, presented in Table 3, differed according to the type of product and the presence or absence of an environmental claim.

The dependent measures were the following:

4.1.2.3. Evaluation of the product. Each participant was asked to rate the perceived attractiveness of the product (i.e., “I find the product to be very attractive”) and the extent to which he/she liked the product (i.e., “I am very fond of the product”) on a 7-point scale (where 1 represents a strong disagreement with the statement and 7 stands for strong agreement with the statement), used by Miniard et al. (1990). The two ratings were strongly correlated ($r = .83$, $p < .05$); therefore, the average was used to create an index of ‘product evaluation’.

4.1.2.4. Perceived role of the environmental claim. Participants were asked to rate the extent to which they perceived the environmental claim as a utilitarian or a luxury aspect of the product. The question was identical across products, so the respondents rated the perception of environmental claim for either a utilitarian or a luxury product. To this end, they filled out the 7-point scale developed by Voss et al. (2003), described above (for example, they were asked to rate the extent to which the environmental claim attached to the product is functional). As in the pre-test, we created a ‘utilitarian index’, based on the average scores of the items that describe the perceived functional aspects of the claim, and a ‘hedonic index’, based on the items that describe the perceived luxury aspects of the claim. One has to notice that within the pre-test we relied on the utilitarian and hedonic indices to evaluate product perceptions and within the Study 1 we relied on these indices to evaluate the environmental claim perceptions.

4.1.2.5. Perceived product functionality. Each participant rated the extent to which they perceived the product as functional, according to the measures developed by Tse et al. (1989). Specifically, participants were asked to rate, on a 7-point scale, the extent to which they perceived each product to be practical and essential in their daily lives.

4.1.2.6. The consumer’s self-perceived environmentalism. Participants were asked to rate, on a 7-point scale, the extent to which they perceived themselves as contributing to the environment. Specifically, they rated their agreement (where 1 stands for strong disagreement and 7 for strong agreement), with the following statement: “I perceive myself as someone who helps to protect the environment”. This self-perceived environmentalism was measured using an item developed by Schuhwerk and Lefkoff-Hagius (2001).

4.2. Results and discussion of study 1

4.2.1. Perceptions of the environmental claim

We carried out repeated-measures analysis to examine whether participants perceived the environmental claim as utilitarian or hedonic, and whether these perceptions varied according to the type of product. The ‘utilitarian index’ and the ‘hedonic index’ of the environmental claim served as the dependent variables, and the type of product (i.e. toilet paper or fancy napkins) served as the independent variable. The results support our first research hypothesis (H1). A significant difference was found between the average extent to which the environmental claim was perceived as a hedonic aspect of the product ($M = 3.9$, $SD = 1.46$) and the average extent to which the environmental claim was perceived as a utilitarian aspect of the product ($M = 5.3$, $SD = 1.30$, $F(1, 111) = 131.1$, $p < .01$) with no significant effect for product type ($F(1, 111) < 1$). Specifically, the perceived utilitarian aspect of an environmental claim was more prominent than the perceived luxury (hedonic) aspect, for both utilitarian and luxury products.

4.2.2. Perceived functionality of products with environmental claims

In order to test whether consumers’ perceptions of the functionality of each type of product varied according to whether the product was associated with an environmental claim, we conducted two *t*-test analyses. In the first *t*-test analysis, we examined the ratings of participants’ overall perception of the functionality of the utilitarian product as a function of the presence or absence of an

Table 3

The four different scenarios differing as a function of product type and the presence or absence of environmental claim.

Condition	Scenario
Utilitarian product description with an environmental claim	Imagine that you, while doing your regular shopping in the supermarket, notice that on one of the shelves there is a package of toilet paper, which you need. The package contains 32 rolls of toilet paper, and includes a convenience strip for holding the package. An environmental claim is attached to the toilet paper package. The claim, given by a reliable source, indicates that the product generates less harm to the environment compared to similar products, with parallel quality.
Utilitarian product description without an environmental claim	Imagine that you, while doing your regular shopping in the supermarket, notice that on one of the shelves there is a package of toilet paper, which you need. The package contains 32 rolls of toilet paper, and includes a convenience strip for holding the package.
Luxury product description with an environmental claim	Imagine that you, while doing your regular shopping in the supermarket, notice that on one of the shelves there is a package of fancy napkins. You find the fancy napkins to be beautifully designed and greatly enjoy just looking at the package. An environmental claim is attached to the napkin package. The claim, given by a reliable source, indicates that the product generates less harm to the environment compared to similar products, with parallel quality.
Luxury product description without an environmental claim	Imagine that you, while doing your regular shopping in the supermarket, notice that on one of the shelves there is a package of fancy napkins. You find the fancy napkins to be beautifully designed and greatly enjoy just looking at the package.

environmental claim. The results pointed to a significant increase in functionality perceptions due to the attached environmental claim ($M = 4.3$, $SD = .78$ in the presence of an environmental claim vs. $M = 3.9$, $SD = 1.16$ in the absence of a claim; $t(108) = 2.15$, $p < .05$). In the second t -test analysis we explored the ratings of the overall perceived functionality of the luxury product. We found that the overall perceived functionality of the luxury product did not increase significantly as a result of attaching an environmental claim to the product ($M = 2.6$, $SD = 1.04$ in the presence of a claim vs. $M = 2.3$, $SD = .98$, in the absence of a claim $t(101) = 1.63$, $p = .11$). This analysis supports H2a.

4.2.3. The consumer's self-perception as an environmentalist

We conducted ANOVA of the consumer's reported self-perception as an environmentalist as a function of product type (luxury or utilitarian) and presence or absence of an environmental claim. The results indicate a significant interaction effect between the type of product and the presence or absence of the claim ($F(1,205) = 8.43$, $p < .05$). Specifically, the results show that for the luxury product, the degree to which consumers perceived themselves as environmentalists was significantly higher among consumers who were asked to evaluate a product bearing an environmental claim ($M = 5.8$, $SD = 1.57$) than among those exposed to a product without an environmental claim ($M = 4.8$, $SD = 1.85$, $t(101) = 2.97$, $p < .05$). This analysis confirms H3a.

In comparison, among consumers who evaluated the utilitarian product, there were no significant differences in self-perceptions of environmentalism between consumers exposed to a product with an environmental claim ($M = 5.8$, $SD = 1.60$) and those exposed to a product without an environmental claim ($M = 6.0$, $SD = 1.30$, $t(104) < 1$).

4.2.4. Product evaluation

In order to examine whether participants' overall evaluations of each of the products were influenced by the presence of an environmental claim, we conducted ANOVA of the evaluation of the product as a function of product type (i.e., luxury or utilitarian) and the presence of an environmental claim (i.e., with or without). The analysis revealed a significant main effect of the presence of an environmental claim on the evaluation of the product regardless of product type ($F(1,205) = 25.97$, $p < .01$). The average evaluation of a product with an environmental claim was more favorable ($M = 5.6$, $SD = 1.26$) than the average evaluation of a product without an environmental claim ($M = 4.6$, $SD = .78$). These results are consistent with H2b and H3b.

Table 4 summarizes the effect of the presence (or absence) of an environmental claim on evaluations of luxury and utilitarian products.

4.2.5. Underling process

In order to shed more light on the effect of the environmental claim when it is attached to a utilitarian product or to luxury

product, we conducted moderation mediation analyses, using the recommended bootstrapping mediation tests (e.g. Preacher et al., 2007) with 5000 replications. In these analyses, we examined how the presence of the claim predicts product evaluations for each type of product. We used two possible mediators: (a) the perceived functionality of the product, and (b) the consumer's self-perception as an environmentalist. We found that the perceived functionality of the product mediated the increase in product evaluations, only for the utilitarian product (95% CI: .007 to .52) but not for the luxury product (95% CI: $-.02$ to .48). In contrast, the consumer's self-perception as an environmentalist mediated the increase in products' evaluations only for the luxury product (95% CI: .03 to .38) but not for the utilitarian product (95% CI: $-.19$ to .09).

4.2.6. Demographic differences

Additional analysis of the product evaluations as a function of product type, the presence (or absence) of an environmental claim, and demographic measures (such as gender, age and income) reveals a significant two-way interaction between gender and product type ($F(1,194) = 6.36$, $p < .05$). Specifically, men preferred the utilitarian product over the luxury product (average product evaluation ($M = 5.05$, $SD = 1.25$ for the utilitarian product vs. $M = 4.0$, $SD = 1.43$ for the luxury product; $t(77) = 3.23$, $p < .05$); whereas no significant difference among women was found ($M = 5.19$, $SD = 1.25$ for the utilitarian product vs. $M = 4.98$, $SD = 1.26$, for the luxury product, $t(127) < 1$). This interaction took place regardless of the presence or absence of an environmental claim.

We also found that participants' income had a direct influence on product evaluations, such that higher income was associated with a more favorable evaluation, regardless of product type and the presence (or absence) of the environmental claim ($F(1, 194) = 5.37$, $p < .05$). Participants' age did not influence products' evaluations ($F(1, 194) = 1.14$, $p > .1$).

4.3. Conclusions of Study 1

In general, the results of Study 1 show that a product with an environmental claim was evaluated more favorably than the same product without a claim. The findings further provide supporting evidence regarding the different underlying mechanisms that trigger this effect both for utilitarian and luxury products.

Participants perceived the environmental claim as a utilitarian aspect of the product. This, on the one hand, increased the overall perceived functionality of the utilitarian product, and on the other hand, facilitated justifying the usage of the luxury product. These findings suggest that strengthening consumers' perceptions of an environmental claim as utilitarian will improve their evaluations of utilitarian products and of luxuries. This can be done, for example, by manipulating the content of the environmental claim. We propose, however, that this manipulation should be done in different

Table 4

Means and standard deviations of ratings (on a 7-point scale) of environmental claim perceptions for utilitarian and luxury products, as a function of the presence or absence of environmental claim.

		With environmental claim	Without environmental claim
Perception of the environmental claim	Hedonic perception	$M = 3.89$, $SD = 1.46$	
	Utilitarian perception	$M = 5.28$, $SD = 1.30$	
Product's utilitarian qualities	Luxury product	$M = 2.60$, $SD = 1.04$	$M = 2.27$, $SD = .98$
	Utilitarian product	$M = 4.34$, $SD = .78$	$M = 3.94$, $SD = 1.16$
Consumer's self-perception as an environmentalist	Luxury product	$M = 5.81$, $SD = 1.57$	$M = 4.81$, $SD = 1.85$
	Utilitarian product	$M = 5.75$, $SD = 1.60$	$M = 6.01$, $SD = 1.30$
Overall product evaluation	Luxury and utilitarian product evaluations	$M = 5.65$, $SD = 1.26$	$M = 4.62$, $SD = .78$

manners for utilitarian and luxury products, because of the different mechanisms underlying the effect.

To explore this proposition, we carried out a study to examine whether consumers' perceptions of luxury and utilitarian products bearing environmental claims are differentially affected by the focus of the content of the claims. Unlike Study 1, in which the label was general and was attached to both luxury and utilitarian products, the next study examined whether an environmental claim positioned in a way that emphasizes global benefits, or, conversely, an environmental claim positioned such that it stresses personal benefits, would better enhance consumers' attitudes toward a luxury or a utilitarian product.

5. The influence of the focus of content of the environmental claim on consumer evaluations (Study 2)

The purpose of Study 2 was to focus on the different meanings and contributions that can be conveyed by an environmental claim, and their influence on consumers' perceptions of different product types. This study examined two possible perceptions of the contribution of the environmental claim – i.e., global or personal benefits – and their effects on consumers' overall evaluations of the luxury and of the utilitarian product.

Different factors may motivate consumers to engage in environmental behavior, such as purchasing environmentally friendly products (Clark et al., 2003; Mazar and Zhong, 2010). Studies show that being an environmentally concerned consumer is a combination of gaining global environmental benefits (such as reducing greenhouse gases emissions, conservation of water, energy and alike) as well as gaining personal benefits derived from social status (the distinctive personal advantage of 'being green') (Jamieson, 2007; Thøgersen and Crompton, 2009). Accordingly, in Study 2 we considered specific personal benefits which consist of personal social status or global benefits, emphasizing 'helping the world', as motivations for purchasing products, and examined the impact of each factor on consumers' perceptions of utilitarian or luxury products.

5.1. Global versus personal social benefit

As consumers consider their choices of specific products, they may be influenced by the global benefits or by the personal benefits that a given purchase will promote. Global benefits can be related to the category of broad benefits (Frank, 2003), i.e., benefits that favor general consequences (Moisander, 2007). Consumers who seek to promote global benefits may be motivated by altruism and ethics (Preuss and Dawson, 2009). Therefore, consumers may be motivated to buy a product with an environmental claim (i.e., a product that is considered to be environmentally friendly) due to their desire to help the environment (Van Birgelen et al., 2009).

The desire to achieve a personal benefit, in contrast to a global benefit, may be driven by egotistical motives (Frank, 2003), that is, the desire to promote private interests. Private interests may cover several topics, such as the desire to save money, to improve health or to enhance the personal social status. In the current research we focus on the latter, related to enhancing the consumers' social status. In some cultures there is increasing social pressure to be "green"; thus, personal interests are served by responding to the desired social image of protecting the environment (Dono et al., 2010; Preuss and Dawson, 2009). Indeed, studies have shown that one way in which environmental campaigns emphasize potential personal benefits is to call for adoption of environmental behavior in a way that will promote the consumers' social status (Clark et al., 2003; Straughan and Roberts, 1999; Thøgersen and Crompton, 2009). Dono et al. (2010) further show that there is a

significant relationship between social identity and environmental behavior.

5.2. Type of benefit and type of product

Our predictions regarding the fit between the type of benefit (global or personal) and the type of product (luxury or utilitarian) relies on two factors: The first factor is associated with the findings of Study 1, which demonstrated that the presence of an environmental claim enhances consumers' overall evaluations of both luxury and utilitarian products, and that the enhancement process for each product type is driven by different mechanisms. The second factor is associated with the different motivations to consume luxuries and utilitarian products. As mentioned above, the choice of a luxury product is motivated mainly by self-indulgent desires, such as fulfilling one's dreams and desires (Dhar and Wertenbroch, 2000; Voss et al., 2003). Among the self-indulgent needs we may consider one's desire to possess a product that enhances his or her social status. In contrast, the choice of a utilitarian product is driven by the motivation to fulfill functional and less image related aspects of daily life (Dhar and Wertenbroch, 2000; Voss et al., 2003). Among these practical and general aspects we may consider one's desire to possess an efficient product, with minor damage to environment. Moreover, as found in the Study 1, perceived functionality mediated the product evaluations in case of a utilitarian product but not in case of a luxury product, whereas the consumers' self-perceptions as environmentalist mediated the product evaluations in case of a luxury product but not in case of a utilitarian product.

Integration of these two factors led us to the prediction that if the content of an environmental claim is better aligned with the consumers' motivations for choosing the associated product, the consumer will evaluate the product more favorably. Specifically, content that relates to the consumers' emotions and to his or her social image is likely to be more congruent with the motivations to choose luxury products than with the motivation to choose a utilitarian product. Conversely, content that emphasizes the global benefits of a product, with a focus on the item's function in reducing environmental damage, is likely to fit more with the motivation to choose a utilitarian product than with the motivation to choose a luxury product.

We therefore hypothesize the following:

H4a. For utilitarian products, an environmental claim emphasizing global benefits will generate a more favorable perception of the product than will an environmental claim emphasizing personal social benefits.

H4b. For luxury products, an environmental claim emphasizing personal social benefits will generate a more favorable perception of the product than will an environmental claim emphasizing global benefits.

5.3. Method

The products in this study, as in Study 1, were toilet paper (utilitarian) and fancy napkins (luxury). An environmental claim was attached to each product. The content of the claim emphasized either personal or global benefits (as we elaborate below).

5.3.1. Participants

Seventy participants ($M_{\text{age}} = 40$, $SD_{\text{age}} = 11.69$; 63% women) took part in Study 2, which was carried out on-line. Additional demographic characteristics of the participants in Study 2 are presented in Table 5.

Participants were randomly assigned to a 2 (product type: luxury or utilitarian) \times 2 (environmental claim focused on global or

Table 5
Demographic characteristics of Study 2 participants.

Education	14.3% high school graduates, 40% BA students, 45.7% BA graduates.
Income	48.6% with income below average, 24.3% with average income, 27.2% with income above average
Family status	71% married, 24% singles, 5% other

personal benefits) between-subject matrix. In return for participating, each participant received \$3 USD.

5.3.2. Procedure and measures

Participants were told that the research was designed to examine consumers' attitudes and perceptions related to everyday products. Each respondent was presented with one of four product descriptions, and was then asked to answer an identical set of questions. The four product descriptions are presented in Table 6.

The list of measures was as follows:

5.3.2.1. Product evaluation. The same measures of product attractiveness and liking as in the Study 1 were used. The two ratings were strongly correlated ($r = .74, p < .05$); therefore, they were averaged to create an index of 'product evaluation'.

5.3.2.2. Perceived role of the environmental claim. As in the Study 1, the participants were asked to rate the extent to which they perceived the environmental claim as a utilitarian or a hedonic aspect of the product. For this purpose we relied, again, on the Voss et al. (2003) scale, in which participants rated the extent to which various utilitarian-related and hedonic-related terms are applied by the environmental claim.

5.3.3. Manipulation checks

To confirm the manipulation of the content of the environmental claim as either promoting global or personal benefits, we

included manipulation check items. Accordingly, participants were asked to rate the extent to which the label focused on global and on personal interests on a 7-point scale (where 1 stands for low scores and 7 for high scores).

5.4. Results and discussion of Study 2

5.4.1. Manipulation checks

We found that participants indeed understood the content of the environmental claim as intended. Participants under the global benefits condition (i.e., who read the scenario in which the content of the environmental claim highlighted global benefits) rated the environmental claim as promoting global benefit ($M = 5.9, SD = 1.01$) more than personal benefits ($M = 5.2, SD = 1.66, t(66) = 2.11, p < .05$). In addition, participants under the personal social benefit condition (i.e. who read the scenario in which the content of the environmental claim highlighted personal social benefits) rated the environmental claim as promoting personal social benefits ($M = 4.0, SD = 1.79$) more than global benefits ($M = 3.1, SD = 1.86, t(66) = 2.22, p < .05$).

5.4.2. Product evaluation

In order to examine participants' overall evaluation of each product as function of product type (i.e., luxury or utilitarian) and the content of environmental claim (i.e., emphasizing global or personal social benefits), we conducted an ANOVA. The results revealed a significant two-way interaction effect between the product type and the content of the environmental claims ($F(1, 64) = 12.58, p < .001$). As expected, for the utilitarian product, participants gave more favorable ratings to the product with an environmental claim emphasizing global benefits ($M = 5.8, SD = .83$) than to the product with an environmental claim emphasizing personal social benefits ($M = 4.7, SD = 1.14$). As for the luxury product, participants gave more favorable ratings to the product with an environmental claim emphasizing personal social benefits ($M = 5.8, SD = .91$) than to the

Table 6
The four scenarios differing as a function of product type and the positioning (content emphasis) of the environmental claim.

Condition	Scenario
Utilitarian product with an environmental claim emphasizing specific global benefits related to broader consequences of "saving the world"	Imagine that you, while doing your regular shopping in the supermarket, notice that on one of the shelves there is a package of toilet paper, which you need. The package contains 32 toilet paper rolls, and has a convenience strip for holding the package. An environmental claim is attached to the package. The claim, given by a reliable source, indicates not only that the product generates less damage to the environment (compared to similar products, with parallel quality), but also that by buying it you can help to reduce deforestation, often resulting in degradation of land and increased global warming.
Utilitarian product with an environmental claim emphasizing specific personal benefits related to social status of "being green"	Imagine that you, while doing your regular shopping in the supermarket, notice that on one of the shelves there is a package of toilet paper, which you need. The package contains 32 toilet paper rolls, and has a convenience strip for holding the package. An environmental claim is attached to the package. The claim, given by a reliable source, indicates not only that the product generates less damage to the environment (compared to similar products, with parallel quality), but also that by buying it you can help to enhance your social status, since the same type of toilet paper is also being used in the president's residence.
Luxury product with an environmental claim emphasizing specific global benefits related to broader consequences of "saving the world"	Imagine that you, while doing your regular shopping in the supermarket, notice that on one of the shelves there is a package of fancy napkins. You find the fancy napkins to be beautifully designed and greatly enjoy just looking at the package. An environmental claim is attached to the package. The claim, given by a reliable source, indicates not only that the product generates less damage to the environment (compared to similar products, with parallel quality), but also that by buying it you can help to reduce deforestation, often resulting in degradation of land and increased global warming.
Luxury product with an environmental claim emphasizing personal benefits related to social status of "being green"	Imagine that you, while doing your regular shopping in the supermarket, notice that on one of the shelves there is a package of fancy napkins. You find the fancy napkins to be beautifully designed and greatly enjoy just looking at the package. An environmental claim is attached to the package. The claim, given by a reliable source, indicates not only that the product generates less damage to the environment (compared to similar products, with parallel quality), but also that by buying it you can help to enhancing your social status, since the same type of fancy napkins is also being used in the president's residence.

product with an environmental claim emphasizing global benefits ($M = 5.3, SD = .73$). These findings support H4a, b.

5.4.3. Perceived role of the environmental claim

In line with the findings of study 1, and with H1, the environmental claim was perceived to be more strongly associated with utilitarian aspects ($M = 5.0, SD = 1.44$) than with hedonic aspects ($M = 3.9, SD = 1.57, t(67) = 4.55, p < .05$). This effect was found regardless of the content of the environmental claim (i.e., emphasizing global or personal benefits).

5.5. Conclusions of Study 2

The findings of Study 2 show how by emphasizing different content – i.e., global benefits, which relate to broader aspects of “saving the world” versus personal benefits, which relate to social status of “being green” – the presence of an environmental claim differentially influences consumers’ product evaluations of different types of products. When a utilitarian product bears an environmental claim highlighting specific global benefits that describe the broader consequences of “saving the world”, consumers evaluate it more favorably compared with a utilitarian product bearing a claim that highlights personal benefits related to social status aspects. In contrast, an environmental claim emphasizing personal benefits, which highlight the social status aspects, is associated with more favorable evaluations compared with a claim emphasizing global benefits when attached to a luxury item.

6. Summary

The findings of the two studies are summarized in Fig. 1.

As shown in Fig. 1, initial indications to support our proposition were obtained in a set of two studies. The findings of our studies show that participants perceived the environmental claim more as a utilitarian aspect than as a hedonic aspect of a product, regardless of product type. Moreover, for both types of products, the presence of a claim (a claim that was said to have been approved by a reliable accreditation body) enhanced consumers’ evaluations of the products. More interestingly, we demonstrated that the effect of an environmental claim on consumer evaluations of a product may be driven by different mechanisms, depending on whether the product is a utilitarian or a luxury. For utilitarian products, the presence of an environmental claim was found to enhance the consumers’ perception of the overall functionality of the product, and consumers evaluated the product more favorably when the content of the claim emphasized global, rather than personal, benefits, such as contributing to the environment by reducing deforestation and abating global warming. Conversely, for luxury products, the utilitarian perception of an environmental claim may have constituted an available justification to consume a self-indulging product.

Furthermore, consumers evaluated the product more favorably when the content of environmental claim emphasized the enhancement of personal social benefits related to respondents’ social status of ‘being green’, rather than global benefits.

Our research was based on relatively small sample sizes, nevertheless, the findings and indications obtained are indeed promising, and they should be further tested in future large scale research. Moreover, our research focused on consumers’ self-reports of their perceptions and evaluations; we did not observe purchasing behavior in practice. Although some studies have treated product evaluations as a possible predictor of behavior in practice (e.g., Sheeran, 2002), it is possible that some respondents falsely reported the degree of their concern for the environment, because of the social desirability associated with the issue of the environment. Therefore, possibly, some respondents gave higher ratings to products bearing environmental claims than they would have when making actual purchasing decisions. Future research might use field studies, involving actual shoppers, to gain insight into the effects of environmental claims on decisions regarding luxury and utilitarian products in realistic shopping scenarios.

In future research it will be also interesting to examine the impact of different quality levels of eco-labels on consumers’ perceptions of utilitarian and luxury products. For example, Oxera (2006) examined how energy efficiency labeling affects consumers’ preferences for appliances, and found that consumers are inclined to prefer an ‘A’ energy-rated appliance over a ‘B’-rated one, since they perceive the rating as some sort of quality assurance – interpreting A as better than B. Furthermore, future research may consider possible negative outcomes the environmental claim, such as the possibility that a presence of a label indicating higher energy efficiency might influence the consumers’ usage of the product, potentially leading him or her to extensively use the energy saving appliance, a phenomenon known as the “rebound” effect (Hertwich, 2005).

Another recommendation for future research is to explore other aspects of personal and global benefits. In this research we focused on very specific benefits, and in order to be able to generalize our conclusions, it would be useful to further examine a broader range of personal aspects, such as saving money, or improving one’s health by reducing air pollution in your near surroundings, as well as a broader range of global benefits such as increasing biodiversity.

In addition, future research should further explore the effect of gender. Studies from the 1970s and later indicate gender uniformity in individuals’ level of concern for the environment, but they do suggest that men have greater environmental knowledge (Arcury, 1990; D’Souza et al., 2007; Loureiro et al., 2002). In contrast, other studies found overrepresentation of women in a group of people committed to the environment (Roberts, 1993; TGI, 2008). Nevertheless, our current research provided preliminary indications that, regardless of the presence or absence of an environmental claim, men preferred the utilitarian product over the luxury one, whereas

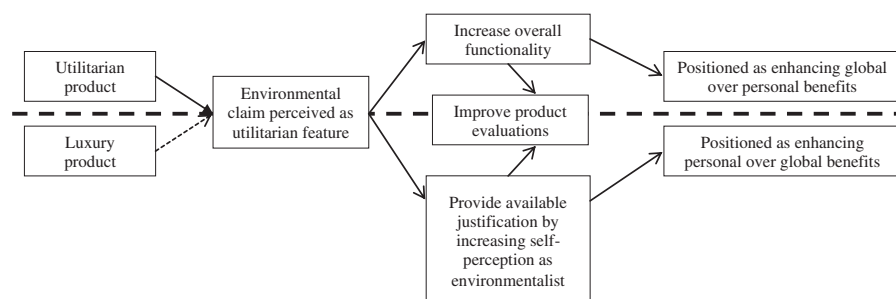


Fig. 1. Differential perceptions and proposed positioning of environmental claim for luxury and for utilitarian products.

women did not significantly prefer one type of product over the other. These are only preliminary indication since the effects may be related to the particular choice of products in this study rather than a broader set of choices of utilitarian and luxury products. Accordingly, it would be interesting to explore the preferences of men and women on a broader range of products, as well as in terms of their perceptions of the importance of global and personal benefits.

Finally, it would also be interesting to examine the role of environmental claims in norm activation (Schwartz, 1977). One can argue that the presence of such claims may induce awareness of the accepted social norms, and this may constitute an additional explanation for the available justification of using a luxury product. Thus, when an environmental claim is attached to a luxury product, it increases the fit with social norms of using such products and, therefore, increases the available justification to purchase these products.

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