# Hedonic products for you, utilitarian products for me

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#### Abstract

Consumers make trade-offs when they choose between utilitarian and hedonic products. The former is practical, instrumental, and functional, whereas the latter is sensational and experiential. Prior research shows that people feel more guilt when they contemplate on engaging in hedonic consumption than engaging in utilitarian consumption. The current research investigates the effect of decision targets (i.e., making decisions for oneself or another person) on preferences for utilitarian and hedonic products. Consumers deciding for others were more likely to choose hedonic over utilitarian options than were consumers deciding for themselves. Utilitarian/hedonic was manipulated either through attributes of similar products (Study 1) or through different products (Study 2). Anticipatory guilt accounted for such self–other difference (Study 2). In particular, anticipatory guilt triggered by contemplating hedonic consumption is less for consumers who made choices for others than for those who made choices for themselves. In sum, preferences for utilitarian and hedonic products depend on decision targets. Keywords: self–other decision making, utilitarian consumption, hedonic consumption, anticipatory guilt, mental accounting

## **1** Introduction

Previous research has suggested that consumers face a dilemma when either selecting between necessities and luxuries (Kivetz & Simonson, 2002a, 2002b) or selecting between highbrow and lowbrow products (Kronrod & Danziger, 2013). Typically, necessities and highbrow products are distinguished by utilitarian attributes that provide instrumental, functional, or practical utilities. By contrast, luxuries and lowbrow products are distinguished by sensations or experiences from using the products (May & Irmak, 2014; Voss, Spangenberg & Grohmann, 2003). For example, consumers will gain knowledge by watching a documentary, whereas they will have fun by watching a comedy. In this case, watching a documentary is *utilitarian consumption*.

However, preferences for utilitarian and hedonic consumption are unstable. Preference reversals are prevalent even for the same consumer. Research has identified several factors in determining such preference reversals, including the language style of consumer reviews (Kronrod & Danziger, 2013), attribute quantity (Sela & Berger, 2012), and number of decision stages (Bhargave, Charkravarti & Guha, 2015).

We consider two headsets as examples: one is utilitarian (i.e., with durable batteries and a traditional design), whereas the other is hedonic (i.e., with less durable batteries and a sleek design). Will you prefer the same headset if you buy for yourself or for another? In this research, we investigate how deciding for oneself or another person (i.e., *decision targets*) can influence preferences for utilitarian and hedonic consumption.

# 2 Anticipatory guilt and consumption type

Consumers benefit from both utilitarian and hedonic consumption. Utilitarian products are effective, helpful, functional, necessary, and practical, whereas hedonic products are fun, exciting, delightful, thrilling, and enjoyable (Dhar & Wertenbroch, 2000; Voss et al., 2003).

The utilitarian-hedonic distinction is not limited to the product level. This concept also applies to attributes. In this sense, certain products have both utilitarian and hedonic characteristics (Chernev, 2004; Dhar & Wertenbroch, 2000). For example, a pair of athletic shoes has utilitarian attributes because it provides protection and enhances performance. This item has hedonic attributes as well, that is, wearing brand-name athletic shoes is enjoyable and exciting (Voss et al., 2003). Therefore, whether a product is perceived to be utilitarian or hedonic is determined by its salient features.

In general, consumers perceive that engaging in hedonic rather than utilitarian consumption is not completely nec-

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essary (Dhar & Wertenbroch, 2000). Utilitarian consumption is considerably linked to necessities, whereas hedonic consumption is substantially linked to luxuries (Kivetz & Simonson, 2002a, 2002b). For this reason, utilities of utilitarian products are more practical and basic than those of hedonic products. Engaging in or even contemplating hedonic consumption triggers more guilt than engaging in or contemplating utilitarian consumption (Kiveta & Simonson, 2002b; Zemack-Rugar, Rabino, Cavanaugh & Fitzsimons, 2016). In sum, anticipatory guilt is more easily induced by hedonic consumption than utilitarian consumption.

Consumers will give up purchasing hedonic products if they feel a strong sense of anticipatory guilt (Zemack-Rugar et al., 2016). The stronger the level of anticipatory guilt induced by contemplating hedonic consumption, the less likely consumers will decide to buy hedonic products.

# **3** Decision targets and anticipatory guilt

In daily life, individuals make purchase decisions not only for themselves but also for others (Baskin, Wakslak, Trope & Novemsky, 2014; Steffel & Le Boeuf, 2014). Individuals who make choices for others prefer more ideal options (Danziger, Montal & Barkan, 2012), products with higher desirability (Lu, Xie & Xu, 2013), and larger choice sets (Polman, 2012) than those who make choices for themselves. However, research on the relationship between decision targets and preferences for utilitarian and hedonic consumption is generally limited. Accordingly, we develop our hypothesis regarding these two variables via anticipatory guilt.

People assign different expenditures to different mental accounts (Thaler, 1985, 1999). For example, money for food and entertainment are put into specific accounts. Similarly, products purchased for oneself and another person (usually in the form of gifts) are also put into two accounts (Thaler, 1985, 1999). Money in different accounts would be spent in different ways.

Mental accounting inhibits the impulse to engage in hedonic consumption for the money in the account of paying for oneself (Cheema & Soman, 2006; Kivetz, 1999). Hence, contemplating hedonic consumption induces anticipatory guilt as aforementioned because hedonic consumption is not essential. However, for the money in the account of paying for another person, contemplating hedonic consumption induces less anticipatory guilt (Kivetz, 1999).

Therefore, preferences for utilitarian and hedonic products shift on the basis of decision targets. We hypothesize that consumers who make choices for others would prefer hedonic products to utilitarian ones more than those who make choices for themselves. Laran (2010) provided initial evidence for our predictions. He found (in Study 5) that supermarket consumers who made choices for themselves were less likely to choose indulgent items than those who made choices for others. However, he failed to find an effect on the first purchase in a laboratory study, although he did find that later items in a sequence of purchases were used to "atone" for earlier indulgence, for self more than for others. Our research substantially analyzes the relationships among decision targets, anticipatory guilt, and hedonic consumption.

# 4 The present research

The present research tests the effect of decision targets on preferences for utilitarian and hedonic products. Accordingly, our hypotheses are as follows.

H1: Consumers who make decisions for others would be more likely to choose hedonic consumption over utilitarian consumption than would consumers deciding for themselves.

Moreover, hedonic consumption makes people who decide for others feel less guilty than those who decide for themselves. The difference in anticipatory guilt between making decisions for oneself and another person leads to different preferences for utilitarian and hedonic products.

H2: The anticipatory guilt level induced by contemplating on engaging in hedonic consumption would be responsible for the self-other difference in tradeoffs between utilitarian and hedonic consumption.

We conducted two studies to test our hypotheses. In Study 1, we investigated the relationship between decision targets and preferences for utilitarian and hedonic products. The participants, making decisions either for themselves or others, indicated their purchase likelihood for four pairs of products. The manipulation of utilitarian and hedonic characteristics was at an attribute level (Chernev, 2004; Dhar & Wertenbroch, 2000). In each pair, one option featured dominant utilitarian attributes and the other had dominant hedonic attributes.

In Study 2, we explored the role of anticipatory guilt in which the participants made choices either for themselves or others. A total of 11 pairs of products were provided. The manipulation of utilitarian and hedonic characteristics was at a product level (Kronrod & Danziger, 2013). Each pair included a utilitarian option (e.g., documentary) and hedonic option (e.g., a comedy). The participants rated their anticipatory guilt and indicated their preferences thereafter.

# 5 Study 1

Study 1 was designed to test whether consumers who decided for others were more likely to engage in hedonic consumption than those who decided for themselves (H1). The participants were asked to make choices either for them-

Products	Options	Attributes	Attribute 1	Attribute 2
Headset	А	Utilitarian	High compatibility	Long battery life
		Hedonic	Traditional design	Low music indulgence
	В	Utilitarian	Low compatibility	Short battery life
		Hedonic	Sleek design	High music indulgence
Foaming cleanser	А	Utilitarian	Effective exfoliation	Excellent spots fading effect
		Hedonic	General smell	General experience
	В	Utilitarian	Modest exfoliation	Modest spots fading effect
		Hedonic	Gorgeous smell	Pleasurable experience
Laptop	А	Utilitarian	Large hard drive space	Long battery life
		Hedonic	Non-configurable colors	Traditional design
	В	Utilitarian	Small hard drive space	Short battery life
		Hedonic	Configurable colors	Sleek design
Chocolate	А	Utilitarian	Effective energy supplements	High control of cholesterol
		Hedonic	Fair taste	General experience
	В	Utilitarian	Modest energy supplements	Modest control of cholesterol
		Hedonic	Smooth taste	Pleasurable experience

Table 1: Products in Study 1.

selves or for others. Four pairs of products were shown. In each pair, we provided an option with utilitarian attributes superior to its hedonic attributes. By contrast, the other option featured superior hedonic attributes but inferior utilitarian attributes (Bhargave et al., 2015; Chernev, 2004; Roy & Ng, 2012; Sela & Berger, 2012; Yeung & Wyer, 2004). The participants rated how likely they would purchase each option.

#### 5.1 Method

#### 5.1.1 Participants and design

Seventy university students (27 men, 43 women;  $M_{age} = 20.74$  years) participated in Study 1. They were randomly assigned to a condition in a 2 (decision target: self or other)  $\times$  2 (dominant attribute: utilitarian or hedonic) mixed design where decision target was a between-participant variable, whereas dominant attribute was a within-participant variable.

#### 5.1.2 Procedure and materials

The cover story was that the research would investigate how people make choices in daily life. The participants in the *self* condition were asked to write down their surnames, age, and gender. Those in the *other* condition selected a friend and then wrote down his or her name, age, and gender. This task ensured that the participants in both conditions thought of a specific person.

Thereafter, four pairs of products were shown (Table 1). The participants in the *self* condition were told to consider making purchase decisions for themselves (e.g., "you are going to buy a headset for you"), whereas those in the *other* condition were told to consider making purchase decisions for the friends whose names had been written down earlier (e.g., "you are going to buy a headset for your friend whose name has been written down"). For each pair, one option featured dominant utilitarian attributes (i.e., superior in utilitarian attributes but inferior in hedonic attributes) and the other option had dominant hedonic attributes (i.e., superior in hedonic attributes but inferior in utilitarian attributes).<sup>1</sup> The order of the two options was counterbalanced across

<sup>&</sup>lt;sup>1</sup>We conducted a pilot study to ensure that our manipulations of utilitarian and hedonic characteristics were valid. Thirty-three participants (15 men, 18 women;  $M_{age} = 20.00$  years) who were provided with the definitions of utilitarian and hedonic characteristics rated the extent to which each attribute in Table 1 (e.g., compatibility, battery life, design, and music indulgence) reflected utilitarian or hedonic characteristics (1 = *utilitarian*, 7 = *hedonic*). The manipulation was successful. For each product, the average score of two hedonic attributes (headset, M = 4.18, SD = 1.36; foaming cleanser, M = 4.08, SD = 1.42; laptop, M = 5.89, SD = 1.32; chocolate, M = 5.41, SD = 1.34) was higher than the average score of two utilitarian attributes (headset, M = 2.59, SD = 1.49; foaming cleanser, M = 1.67, SD = 1.06; laptop, M = 2.06, SD = 1.28; chocolate, M = 2.55, SD = 1.43), F(1, 32) = 29.79, p < .001,  $\eta_p^2 = .48$ , F(1, 32) = 57.16, p < .001,  $\eta_p^2 = .64$ , F(1, 32) = 58.07, p < .001,  $\eta_p^2 = .65$ , respectively.

Variables	Dominant attributes	Decision targets		
		Self	Other	
Task difficultly	_	2.77 (1.37)	2.90 (1.14)	
Perceived responsibility	_	5.36 (1.39)	5.19 (1.28)	
Monthly consumption	_	1575.64 (1048.17)	1800.00 (677.74)	
Headset purchase probability	Utilitarian	6.26 (2.27)	6.03 (2.18)	
	Hedonic	5.03 (2.32)	6.58 (1.54)	
Foaming cleanser purchase probability	Utilitarian	6.49 (2.32)	5.94 (1.93)	
	Hedonic	4.33 (2.23)	5.06 (1.97)	
Laptop purchase probability	Utilitarian	7.79 (1.66)	6.87 (1.59)	
	Hedonic	3.44 (2.01)	4.61 (2.14)	
Chocolate purchase probability	Utilitarian	5.18 (2.01)	5.48 (2.25)	
	Hedonic	6.05 (2.06)	6.52 (2.28)	
Average purchase probability	Utilitarian	6.43 (1.26)	6.08 (1.22)	
	Hedonic	4.71 (1.30)	5.69 (1.13)	

Table 2: Means (standard deviations) for control and dependent variables.

the participants. The participants rated their purchase probability (1 = not at all probable, 9 = very probable) for each option.

Next, the participants indicated the difficulty of this task ("How difficult is the task?" 1 = not at all difficult, 7 = very difficult) and perceived responsibility ("Do you feel responsible for the decision outcome?" 1 = not at all responsible, 9 = very responsible). Thereafter, demographic information, including age, gender, and monthly consumption, was collected. Finally, the participants were thanked, debriefed, and paid 15 RMB (renminbi).

#### 5.2 Results and discussion

The participants in the *self* and *other* conditions did not differ from one another in terms of task difficulty, perceived responsibility, and monthly consumption, F(1, 68) = 0.19, p = .662,  $\eta_p^2 < .01$ , F(1, 68) = 0.26, p = .609,  $\eta_p^2 < .01$ , and F(1, 68) = 1.07, p = .306,  $\eta_p^2 = .02$ , respectively (Table 2). Therefore, these variables were excluded from the subsequent analysis.

The average purchase probabilities of the four options dominant in utilitarian attributes and four options dominant in hedonic attributes were computed. To test H1, a 2 (decision target) × 2 (dominant attribute) mixed analysis of variance (ANOVA) on the average purchase probability was conducted. Results revealed a main effect for dominant attribute, F(1, 68) = 19.79, p < .001,  $\eta_p^2 = .23$ , such that the participants were more likely to buy the options dominant in utilitarian attributes (M = 6.28, SD = 1.24) than those dominant in hedonic attributes (M = 5.15, SD = 1.31). The main

effect for decision target was insignificant, F(1, 68) = 3.11, p = .082,  $\eta_p^2 = .04$ .

Crucially, we observed an interaction between decision target and dominant attribute (Table 2), F(1, 68) = 7.91, p = .006,  $\eta_p^2$  = .10. The participants who made decisions for others were more likely to purchase the options dominant in hedonic attributes than those who made decisions for themselves, F(1, 68) = 11.05, p = .001,  $\eta_p^2 = .14$ . However, the purchase probability did not differ in terms of the products dominant in utilitarian attributes between the self and *other* conditions, F(1, 68) = 1.37, p = .247,  $\eta_p^2 = .02$ . From another perspective, the participants in the self condition preferred utilitarian options over hedonic options, F(1,38) = 29.93, p < .001,  $\eta_p^2 = .44$ . However, no difference was observed in purchase likelihood between the utilitarian and hedonic options in the *other* condition, F(1, 30) = 1.19, p = .284,  $\eta_p^2 = .04$ . Notably, this interaction was crossover and nonremovable according to the classification by Wagenmakers, Krypotps, Criss, and Iverson (2012).

In addition, we conducted four 2 (decision target) × 2 (dominant attribute) mixed ANOVAs on purchase probability for the four products, respectively. Generally, the results were consistent across products. The interactions were significant for headset and laptop, F(1, 68) = 5.46, p = .022,  $\eta_p^2 = .07$  and F(1, 68) = 7.94, p = .006,  $\eta_p^2 = .11$ . These two interactions were also nonremovable (Wagenmakers et al., 2012). However, the interations were insignificant for foaming cleanser and chocolate, F(1, 68) = 1.92, p = .170,  $\eta_p^2 = .03$  and F(1, 68) = 0.03, p = .857,  $\eta_p^2 < .01$ . Table 2 shows the means and standard deviations in each cell of each product. The overall results supported H1. Accordingly, consumers who decided for others preferred hedonic consumption over utilitarian consumption compared with consumers who decided for themselves. In the next study, we tested the underlying mechanism of this effect.

# 6 Study 2

The objective of Study 2 was twofold. First, we sought to replicate the findings in Study 1 to provide further evidence for H1. Second, we investigated why consumers who made decisions for others preferred hedonic products over utilitarian products more than those who made decisions for themselves. We explored the role of anticipatory guilt induced by hedonic products. Hence, we tested H2 by analyzing whether the anticipatory guilt level would be responsible for the results found in Study 1.

The participants were asked to make choices either for themselves or for others. A total of 11 pairs of products were shown. In each pair, one option was utilitarian (e.g., a highbrow movie), whereas the other was hedonic (e.g., a lowbrow movie). The manipulation of utilitarian and hedonic characteristics was at the product level. For most pairs of products, we used the highbrow–lowbrow distinction to reflect utilitarian–hedonic distinctions because both highbrow and utilitarian products serve a prudent purpose, whereas both lowbrow and hedonic products purely offer pleasure instead of other benefits. This is a common practice in this field (Kronrod & Danziger, 2013; Sela, Berger & Liu, 2009; Zemack-Rugar et al., 2016). The participants rated their level of anticipatory guilt and specified their preferences thereafter.

#### 6.1 Method

#### 6.1.1 Participants and design

Seventy-five undergraduates (27 men, 48 women;  $M_{age} = 19.89$  years) participated in Study 2. They were randomly assigned to make choices either for themselves or for another person.

#### 6.1.2 Procedure and materials

Similar to Study 1, the participants in the *self* condition wrote down their own surname, age, and gender. Those in the *other* condition selected a friend and then wrote down his or her surname, age, and gender. Thereafter, 11 pairs of products were provided (Table 3), each with a combination of one utilitarian and one hedonic product.<sup>2</sup> The partici-

Products	Option A Utilitarian options	Option B Hedonic options
Movie	Documentary	Comedy
Device	Printer	Stereo
Magzine	Science magazine	Entertainment magazine
TV program	Docudrama	Love drama
Food	Fruit	Cake
Museum	History museum	Art museum
Laptop	Laptop for work	Pad for entertainment
Readings	Science readings	Entertainment readings
Drama	Classic drama	Romance drama
Newspaper	Financial newspaper	Entertainment newsppr.
APP	APP for work	APP for entertainment

Table 3: Products in Study 2.

pants indicated which choice would make them feel more guilty (1 = Option A, 9 = Option B). Thereafter, they rated their preferences (1 = Option A, 9 = Option B) and made their choices.

To assess any effect of individual differences in guiltsensitivity, the participants completed a guilt proneness scale (e.g., "After realizing you have received too much change at a store, you decide to keep it because the salesclerk doesn't notice. What is the likelihood that you would feel uncomfortable about keeping the money?" 8 items; 1 = very unlikely, 7 = very likely) which was used to assess their propensity to experience guilt in daily life (Cohen, Wolf, Panter & Insko, 2011). Next, demographic information, including age and gender, was collected. Finally, the participants were thanked and debriefed.

#### 6.2 Results and discussion

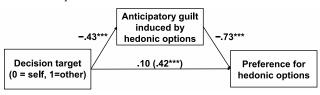
The participants in the *self* (M = 6.02, SD = 0.61) and *other* (M = 5.92, SD = 0.71) conditions did not differ in guiltsensitivity, F(1, 73) = 0.37, p = .548,  $\eta_p^2 = .01$ . Hence, this variable was excluded from the following statistical analysis.

A total of 11 ANOVAs on preference ratings for each pair with decision targets as the independent variable were conducted. A higher score indicates a higher preference for hedonic products. Generally, the results were consistent within

<sup>&</sup>lt;sup>2</sup>A pilot study was conducted to ensure our manipulations of utilitarian and hedonic options were valid. Thirty-seven participants (13 men, 24 women;  $M_{age} = 21.78$  years), who were provided with the definitions of utilitarian and hedonic products, rated the extent to which the options

in Table 3 (e.g., documentary and comedy) reflected utilitarian or hedonic characteristics (1 = *utilitarian*, 7 = *hedonic*). The results showed that the average score of hedonic options (M = 5.51, SD = 0.70) in Table 3 was higher than the average score of utilitarian options (M = 3.04, SD =0.90), F(1, 36) = 130.73, p < .001,  $\eta_p^2 = .78$ . Thereafter, we conducted 11 within-product comparisons. The results showed that for each pair, the hedonic options scored higher than the utilitarian options, ps < .001, thereby indicating successful manipulations.

Figure 1: Mediation model. Standardized coefficients and their significances are reported. The total effect of the decision target on preference for hedonic options is reported in parentheses and the standardized coefficient when the mediator is included in the model is reported above the arrow. \*\*\* denotes p < .001.



the 11 pairs of products, showing that the participants who made decisions for others preferred hedonic products more than those who made decisions for themselves (Table 4). We also calculated the average preference ratings for the 11 pairs of products. An ANOVA on the average preference ratings using decision targets as the independent variable revealed a significant effect for decision targets, F(1, 73) =15.36, p < .001,  $\eta_p^2 = .17$ . The score was higher in the *other* condition than in the *self* condition (Table 4). These results supported H1, thereby indicating that the participants deciding for others preferred hedonic products more than those deciding for themselves.

In addition, we calculated the percentage of the participants who selected the utilitarian and hedonic options in each pair. The results of 11 chi-square tests were generally consistent, suggesting that making decisions for another person promoted preferences for hedonic options over utilitarian options (Table 5). We also computed the purchase rate of hedonic options among the 11 pairs of products. An ANOVA on the purchase rate of hedonic options using decision targets as the independent variable yielded a significant effect for decision targets, F(1, 73) = 20.91, p < .001,  $\eta_p^2 = .22$ . This rate was higher in the *other* condition (M =66.67%, SD = 15.21%) than in the *self* condition (M =47.55%, SD = 20.38%). These results supported H1.

Next, we conducted a total of 11 ANOVAs on the level of anticipatory guilt for each pair of products using decision targets as the independent variable. A higher score indicates a higher level of anticipatory guilt induced by the hedonic products. The results for all the 11 pairs of products were in the predicted direction, revealing that the participants who made choices for others felt less guilt than those who made choices for themselves (Table 4). Furthermore, we calculated the average anticipatory guilt. An ANOVA on the average anticipatory guilt with decision targets as the independent variable revealed a significant effect for decision targets, F(1, 73) = 16.39, p < .001,  $\eta_p^2 = .18$ . The score was lower in the *other* condition than in the *self* condition (Table 4).

Finally, we tested a mediation model with the decision

target as the independent variable, the average anticipatory guilt induced by hedonic options as a potential mediator, and the average preference for hedonic options as the dependent variable. Anticipatory guilt was influenced by the decision target,  $\beta = -.43$ , p < .001. Additionally, the total effect of the decision target on preference for hedonic options was significant,  $\beta = .42$ , p < .001. However, when both the decision target and anticipatory guilt were included in the regression model to predict preference for hedonic options, the effect of the decision target became insignificant,  $\beta = .10$ , p = .205, while the effect of anticipatory guilt was significant,  $\beta = -.73$ , p < .001 (Figure 1).

The significance of the indirect effect was tested using bootstrapping procedure (Preacher & Hayes, 2008). On the basis of 5,000 bootstrap samples, the analysis generated a 95% confidence interval (CI) around the indirect effect with zero falling outside of the confidence interval (95% CI [0.47, 1.32]), indicating that anticipatory guilt induced by hedonic options mediated the effect of the decision target on preference for hedonic options. Specifically, making decisions for another person decreased the level of anticipatory guilt triggered by hedonic consumption, thereby subsequently promoting preferences for hedonic options. These results provided evidence for H2.

In summary, the findings in Study 2 demonstrated that consumers who purchased products for others experienced less anticipatory guilt from hedonic consumption; thus, they preferred hedonic options compared with consumers who purchased for themselves.

## 7 General discussion

Researchers attempt to identify the factors promoting utilitarian or hedonic consumption. The present study demonstrates an effect of decision targets. Hedonic consumption induces less anticipatory guilt in consumers who make purchase decisions for others than those who make purchase decisions for themselves. Therefore, the former prefer hedonic over utilitarian products, compared with the latter.

#### 7.1 Decision targets and specific emotions

Our study contributes to the research on self-other differences in terms of emotions. For example, people who make decisions for the self experience stronger emotions than people who make decisions for another person (Albrecht, Volz, Sutter & von Cramon, 2013). However, these studies focus on general emotion experiences, thereby ignoring self-other differences regarding specific emotions. To our knowledge, the literature on self-other differences among specific emotions is generally limited.

In the context of utilitarian and hedonic consumptions, we clarify the role of guilt, which is a specific emotion be-

	×	Director		
Products	Variables	Decision targets		Statistical valus
Movie	Anticipatory guilt	Self	5.28 (2.33)	$F(1, 73) = 4.71, p = .033, \eta_p^2 = .06$
		Other	4.71 (2.10)	
	Preference for the hedonic option	Self		$F(1, 73) = 2.81, p = .098, \eta_p^2 = .04$
		Other	6.92 (2.57)	
Device	Anticipatory guilt	Self		$F(1, 73) = 6.38, p = .014, \eta_p^2 = .08$
		Other	3.86 (2.05)	
	Preference for the hedonic option	Self		$F(1, 73) = 5.20, p = .025, \eta_p^2 = .07$
		Other	7.31 (2.30)	
Magzine	Anticipatory guilt	Self		$F(1, 73) = 5.49, p = .022, \eta_p^2 = .07$
		Other	4.81 (2.18)	
	Preference for the hedonic option	Self		$F(1, 73) = 1.76, p = .189, \eta_p^2 = .02$
		Other	5.67 (2.67)	
TV program	Anticipatory guilt	Self		$F(1, 73) = 4.22, p = .044, \eta_p^2 = .06$
		Other	4.39 (1.99)	F(1, 72) = 0.16 (07) $(2, -2)$ 01
	Preference for the hedonic option	Self	5.69 (2.87)	$F(1, 73) = 0.16, p = .687, \eta_p^2 < .01$
<b>F</b> 4	A	Other	5.94 (2.50)	
Food	Anticipatory guilt	Self	6.36 (1.98)	$F(1, 73) = 5.29, p = .024, \eta_p^2 = .07$
	Dueferrer of family he don's anti-	Other	5.36 (1.76)	
	Preference for the hedonic option	Self		$F(1, 73) = 3.21, p = .077, \eta_p^2 = .04$
Museum	Anticipatory guilt	Other Self	4.42 (2.78)	$F(1, 73) = 0.56, p = .456, \eta_p^2 = .01$
Wiuseum	Anticipatory guint	Other	4.97 (2.13) 4.64 (1.68)	
	Preference for the hedonic option	Self		$F(1, 73) = 4.90, p = .030, \eta_p^2 = .06$
	reference for the nedolite option	Other	4.30 (2.99) 6.00 (2.60)	$\Gamma(1, 75) = 4.90, p = .050, \eta_p = .00$
Laptop	Anticipatory guilt	Self		$F(1, 73) = 11.05, p = .001, \eta_p^2 = .13$
Laptop	Anticipatory guitt	Other	4.78 (1.66)	
	Preference for the hedonic option	Self		$F(1, 73) = 1.47, p = .229, \eta_p^2 = .02$
	reference for the fieldonic option	Other	5.22 (2.67)	
Readings	Anticipatory guilt	Self		$F(1, 73) = 5.22, p = .025, \eta_p^2 = .07$
8	I I J G	Other	5.00 (1.69)	
	Preference for the hedonic option			$F(1, 73) = 12.86, p = .001, \eta_p^2 = .15$
		Other	6.00 (2.53)	
Drama	Anticipatory guilt	Self		$F(1, 73) = 1.22, p = .273, \eta_p^2 = .02$
		Other	4.33 (1.57)	
	Preference for the hedonic option	Self	5.36 (2.67)	$F(1, 73) = 2.08, p = .153, \eta_p^2 = .03$
		Other	6.22 (2.50)	
Newspaper	Anticipatory guilt	Self	5.15 (2.16)	$F(1, 73) = 6.52, p = .013, \eta_p^2 = .08$
		Other	4.06 (1.47)	
	Preference for the hedonic option	Self	5.13 (2.93)	$F(1, 73) = 13.32, p < .001, \eta_p^2 = .15$
		Other	7.14 (1.59)	
APP	Anticipatory guilt	Self		$F(1, 73) = 2.82, p = .097, \eta_p^2 = .04$
		Other	5.31 (1.83)	
	Preference for the hedonic option	Self		$F(1, 73) = 0.60, p = .441, \eta_p^2 = .01$
		Other	4.58 (2.55)	
Average	Anticipatory guilt	Self		$F(1, 73) = 16.39, p < .001, \eta_p^2 = .18$
		Other	4.61 (0.99)	
	Preference for the hedonic option	Self		$F(1, 73) = 15.36, p < .001, \eta_p^2 = .17$
		Other	5.95 (1.24)	

Table 4: Means (standard deviations) and statistical values for anticipatory guilt and preference for hedonic options.

Products	Decision targets	Utilitarian options	Hedonic options	Statistical values
Movie	Self	12 (30.77%)	27 (69.23%)	$\chi^2_{1,n=75}$ = 3.04, p = .081
	Other	5 (13.89%)	31 (86.11%)	
Device	Self	15 (38.46%)	24 (61.54%)	$\chi^2_{1,n=75}$ = 5.78, p = .016
	Other	5 (13.89%)	31 (86.11%)	
Magzine	Self	22 (56.41%)	17 (43.59%)	$\chi^2_{1,n=75}$ = 1.63, p = .202
	Other	15 (41.67%)	21 (58.33%)	
TV program	n Self	13 (33.33%)	26 (66.67%)	$\chi^2_{1,n=75}$ = 0.07, p = .797
	Other	11 (30.56%)	25 (69.44%)	
Food	Self	29 (74.36%)	10 (25.64%)	$\chi^2_{1,n=75}$ = 1.51, p = .219
	Other	22 (61.11%)	14 (38.89%)	
Museum	Self	21 (53.85%)	18 (46.15%)	$\chi^2_{1,n=75}$ = 5.25, p = .022
	Other	10 (27.78%)	26 (72.22%)	
Laptop	Self	24 (61.54%)	15 (38.46%)	$\chi^2_{1,n=75}$ = 0.08, p = .777
	Other	21 (58.33%)	15 (41.67%)	
Readings	Self	25 (64.10%)	14 (35.90%)	$\chi^2_{1,n=75}$ = 8.44, p = .004
	Other	11 (30.56%)	25 (69.44%)	
Drama	Self	16 (41.03%)	23 (58.97%)	$\chi^2_{1,n=75}$ = 2.16, p = .141
	Other	9 (25.00%)	27 (75.00%)	
Newspaper	Self	21 (53.85%)	18 (46.15%)	$\chi^2_{1,n=75}$ = 17.82, p < .001
	Other	3 (8.33%)	33 (91.67%)	
APP	Self	27 (69.23%)	12 (30.77%)	$\chi^2_{1,n=75}$ = 1.50, p = .221
	Other	20 (55.56%)	16 (44.44%)	

Table 5: Purchase percentage of utilitarian and hedonic products.

yond emotions distinguished by their valence. Our findings show that the guilt triggered by hedonic consumption is less among consumers who make purchase decisions for others than among consumers who make purchase decisions for themselves. Future research may focus on other specific emotions that are important in certain decision scenarios.

### 7.2 Decision targets and mental accounting

The current findings are also pertinent to the research on mental accounting. Researchers propose that money is assigned into different mental accounts on the basis of both how it comes (e.g., regular income vs. windfalls; bonus vs. rebate) and goes (e.g., paying for bills vs. paying for leisure) (Epley, Mak & Idson, 2006; Thaler, 1985, 1999). Our research suggests that the money paying for oneself and others are allocated into specific mental accounts. Individuals treat these accounts in different fashions, therefore causing divergent preferences.

Furthermore, recent research reveals that paying by gift cards (vs. cash) shift consumption from utilitarian to hedonic products (Helion & Gilovich, 2014). The present study shows that preferences for utilitarian and hedonic options also depend on decision targets. We speculate that people budget less (vs. more) money to hedonic products in the mental account for money paying for themselves (vs. others).

## 7.3 Other mechanisms for self-other differences in hedonic consumption

Our research tested the role of anticipatory guilt in self-other differences regarding hedonic consumption. However, other mechanisms may also exist. For example, it may be insulting for the participants who made decisions for other people in Study 2 to give someone a lowbrow product.<sup>3</sup>

Another potential reason for our findings is the different goals in self-other decision making. On the one hand, the decisions made for another person are more public than the decisions made for oneself. For this reason, consumers are more concerned with how a certain product would shape

<sup>&</sup>lt;sup>3</sup>We thank Jonathan Baron for raising this possibility.

oneself when purchasing for others than when purchasing for themselves (Wicklund & Gollwitzer, 1981). On the other hand, hedonic products are perceived to express oneself more than utilitarian products (Maimaran & Simonson, 2011). Taken together, consumers who purchase for others would prefer hedonic products more than those who purchase for themselves. Future research may investigate the role of self-expression in self-other differences regarding hedonic consumption.

## 7.4 Practical implications

Effective market segmentation is vital for marketers. Nowadays, new segments are constantly emerging. Our findings support the conclusion that marketers should describe a product using its hedonic features for consumers who make purchase decisions for others (e.g., gift givers). However, they should describe a product by its utilitarian features for consumers who make purchase decisions for themselves.

In addition, the current findings suggest recommendations for marketing hedonic products to consumers who make purchase decisions for themselves. In this case, sellers may encourage customers to share product information with friends via social networks. Thereafter, friends who decide for the customers would have positive attitudes toward hedonic products.

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