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Choice between Abstract Hedonic and Concrete Utilitarian Alternatives

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Acknowledgments

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ABSTRACT

Items that are consumed primarily for the experiential and/or sensory enjoyment are called “hedonic” goods, and those that are consumed primarily for the practical and/or functional utility are called “utilitarian” goods. How do people make choices between hedonic and utilitarian goods? I present a theoretical framework linking hedonic (utilitarian) goods to abstract (concrete) thinking styles and demonstrate that activating abstract (concrete) thinking promotes hedonic (utilitarian) choice.

The literature suggests that simple actions activate abstract thinking, while complex actions activate concrete thinking. Choice is an action, so I present that making the action of choosing simpler should activate abstract thinking and promote hedonic choice. In one study participants completed a choice task and marked their responses on a standard survey. This was the “simple” choice context condition. In the “complex” choice context condition, participants completed the same choice task, but they used their non-dominant hands to mark their responses, thus making the action of choosing more complex. I also use different marketing mix variables to operationalize the simplicity of choice context. In another study I designed the Place as a virtual shop. Virtual shoppers had varying levels of ability to navigate through the

virtual shop, those who had higher abilities to navigate, for whom the choice context would be simpler, purchased more hedonic items. In the last study I presented the Price in a simple versus complex format, and showed that the relative preference was higher for the alternative that excelled in a hedonic attribute when the price was presented simply as an all-inclusive price.

My theoretical contribution is to link hedonic choice to abstract thinking based on the defining characteristic of hedonic goods. I present the managerial implications of my theoretical framework by exploring how businesses can design their marketing mix variables to promote hedonic choice.

INTRODUCTION

It's fun to have fun, and consumers seem to know how. They savor premium ice cream, play video games in 3D, and enjoy vacations at ski resorts. Such consumer choices are made primarily for the purposes of experiential and/or sensory enjoyment, and savory foods, toys, and recreational sports are examples of hedonic goods. What makes consumers more likely to choose fun toys versus useful tools, and tasty versus nutritious foods? With that understanding, how can marketers shape the choice context to promote or limit hedonic purchases? My research examines those questions through the lens of the construal level framework.

My theoretical contribution is to build on the defining characteristics of hedonic versus utilitarian goods (Batra and Ahtola 1991) and make a link to differential levels of construal (Vallacher and Wegner 1987). The goal of experiential and sensory enjoyment is more abstract, while the goal of practical and functional utility is more concrete. I present that activating abstract thinking style should promote hedonic choice.

My substantive contribution builds on the literature that suggests that simpler actions tend to be construed more abstractly at higher levels, while more complex

actions tend to be construed more concretely at lower levels (Vallacher and Wegner 1987; Wegner, Vallacher, Macomber, Wood and Arps 1984). Choosing is an action, so I present that a simpler choice context should activate abstract thinking and promote hedonic choice.

Activating differential construal in a separate task first, then seeing the effect in a subsequent choice task is a useful experimental methodology for understanding the causality between constructs. But it may not be practically relevant when marketers reach their consumers. My substantive contribution is to integrate the activation of differential construal levels into the choice context. I suggest that simplifying the marketing mix of Product, Price, Place, and/or Promotion should streamline the choice context, activate more abstract thinking, and promote hedonic choice.

HEDONOCITY AND ABSTRACT THINKING

Products that are consumed primarily for the experiential and/or sensory enjoyment are called hedonic goods, and those that are consumed primarily for the practical and/or functional utility are called utilitarian goods (Batra and Ahtola 1991). My theoretical contribution is to link hedonic choice to abstract (versus concrete) thinking based on the intrinsic characteristics of hedonic goods.

Actions can be identified in a variety of ways (Vallacher and Wegner 1989). For example, "doing research" can be understood in terms of lower-level identities such as "collecting data" or higher-level identities such as "making discoveries." Lower-level identities are more concrete: they convey the details of the action and how it is done. Higher-level identities are more abstract: they convey a more general understanding of the action and why it is done.

The existing literature demonstrates how the activation of higher abstract versus lower concrete thinking styles influences consumer choice and behavior. When abstract (concrete) thinking is activated by placing the decision in the future (the present), people tend to choose options that are more desirable (feasible) (Liberman and Trope 1998). When abstract (concrete) thinking is activated through a promotion that

describes *why* (*how*) one should recycle, people actually recycle more when they are exposed to a positive (negative) message frame (White, MacDonnell and Dahl 2011). When abstract (concrete) thinking is activated by reflecting on *why* (*how*) one should keep a regimen, people tended to be more positive about exercise (diet) (Okada, in print). This literature stream collectively suggests that differential activation of more abstract versus concrete thinking shifts the focus from one set of features to another, resulting in a higher likelihood of choice for alternatives that are higher in features that gain in importance.

I extend on the literature to propose that when abstract thinking is activated, abstract features become more important. Hedonic goods are characterized by hedonic features, which are inherently more abstract. I offer two explanations. First experiential and sensory enjoyment enhances general well-being and is more abstract, compared to the practical utility of a product which is more context-specific and concrete. The literature suggests that abstract, high level construals consist of essential generalities, while concrete, low level construals consist of contextualized specifics (Trope and Liberman 2003). One would benefit from having a hedonic item such as a nice photo in a nice picture frame for a more general goal of experiencing pleasantness,

but one would benefit from having a practical item such as a nice knife for a more specific goal of cutting something. Thus higher level construal, which is characterized by more abstract thinking (Vallacher and Wegner 1987) would enable consumers to better appreciate hedonic value, which matches in the level of abstraction. Lower level construal, which is characterized by more concrete thinking would better match with utilitarian items.

Second, experiential and sensory enjoyment is by nature more imagery-evoking (MacInnis and Price 1987). Imagery is the product of imagination, which is a form of abstract thinking. I propose that when abstract thinking is activated, more imagination should arise, and make hedonic choice more likely.

Hedonicity in the literature

The existing literature characterizes hedonic items as being more salient (Dhar and Wertenbroch 2000), more difficult to justify for choice (Okada 2005), and having higher anticipated utility (O'Curry and Strahilevitz 2001) than comparable utilitarian alternatives. However, those are secondary characteristics, in that such qualities do not make an item hedonic *per se*. In contrast, my theoretical framework builds on the

definition of hedonicity, as items that are consumed primarily for experiential and/or sensory enjoyment.

In this research, I adopt the conceptualization of hedonic versus utilitarian alternatives both as "goods," in the sense that both offer benefits but of different types, and neither is expected to cause any obvious future harm. Experiential/sensory enjoyment and practical/functional utility are both beneficial. This aligns with the conceptualization in the work by Dhar and Wertenbroch (2000), Okada (2005), and Voss, Spangenberg and Grohmann (2003). My premise is that payoffs from both hedonic and utilitarian consumption lie primarily in the gain domain, and any harm that may ensue in the future is speculative, ambiguous and indirect.

When items with hedonic qualities are positioned as "vices," and their long-term detriments are emphasized (Wertenbroch 1998; Liu, Haws, Lambertson, Campbell and Fitzsimmons 2015) abstract thinking style should strengthen self-control (Fujita, Trope, Liberman and Levin-Sagi 2006; Trope and Fishbach 2000), and curb rather than promote hedonic choice, which is the opposite of my prediction. However, being detrimental in the long run is the not a defining characteristic of hedonic versus utilitarian products.

In a choice between a more hedonic chocolate cake and a more utilitarian fruit salad, the chocolate cake comes out as being more attractive at a greater temporal distance, while the fruit salad appears more attractive at a closer temporal distance (Kivetz and Keinan 2006), which is consistent with my basic model that links hedonicity to abstract thinking. Greater psychological distances activate higher level construal (Trope and Liberman 2010), and high level construal shifts the focus to greater psychological distances (Semin and Smith 1999). However, in a separate study where the same binary choice is juxtaposed to some strongly suggestive wording in an experimental scenario where the decision maker has just emphatically "resol(ved) not to eat fattening food," then the cake ends up having a negative high construal (Trope and Liberman 2000), which is contrary to my theory. Items that are primarily vices but also have hedonic qualities lie outside of the scope of my research.

A rationale for existing theories

To the extent of my knowledge, the theoretical framework that I present is the first to contrast hedonic versus utilitarian items in terms of varying levels of abstraction in thinking style by building on the most basic definition of hedonicity. My simple

framework offers a basis for understanding some existing theories as well. Hedonic items become more attractive when the probability of receiving the item is lower, because hedonic items are higher in anticipated utility, as compared to comparable utilitarian alternatives (O'Curry and Strahilevitz 2001). My framework offers some insight as to *why* anticipated utility would be higher for hedonic items: anticipation is intrinsically more abstract. The literature also finds that regret for consuming hedonic items attenuates over time, while the regret for consuming utilitarian items increases, which suggests a tendency for people to under-consume hedonic items (Kivetz and Keinan 2006). My framework offers a reason *why* people under-consume hedonic goods: hedonic goods are construed more abstractly so they may appear more attractive from greater psychological distances, but less so in the instance when choices are made.

Alternative explanations for existing findings

Recent work has included the construal level construct as a moderator for self-control to study how consumers regulate their hedonic consumption, and find that when the self is brought into focus people make more hedonic choices after answering a series

of *why* questions, compared to a neutral control in which they make more hedonic choices after answering a series of *how* questions (Mehta, Zhu and Meyers-Levy 2014). The authors' theoretical explanation rests on assumptions about (1) there being some ideal level of hedonic consumption, (2) people realizing that they tend to under-consume hedonic products relative to that ideal level, and (3) people using self-control as a mechanism for correcting the bias to move closer to the ideal level. Their two-part account is that the *why* versus *how* questions activate high-level construal (Freitas, Gollwitzer and Trope 2004), which in turn heightens self-control (Fujita et al 2006). When the self is brought into focus, consumers realize that they are under-consuming hedonic items, and use the self-control to increase hedonic consumption, but in a neutral (no self-focus) condition they use self-control to lower hedonic consumption.

Though I admire the work by Mehta et al (2014), my theory differs on three principals. First, I apply varying levels of construal directly to hedonic versus utilitarian choices, while Mehta et al (2014) use construal level as a moderator. Second, my theory makes one basic assumption; that hedonic choice is associated with abstract high level construal, while the other theory involves at least three assumptions. Finally, my theory can offer an alternative explanation for their findings. Mehta et al

(2004) brought the self into focus intending to make people realize their tendencies to under-consume hedonic items, but I point out alternatively, that bringing the self into focus sharply decreases psychological distance (Liberman and Trope 1998), which would in fact activate low level construal (Trope and Liberman 2003). I also find that their use of *why*/*how*, which they intended to manipulate construal level, would introduce a confound: a heightened need for justification in the "why" condition. In the more neutral condition, as represented in the two "how" conditions where participants were not primed to think about *why*, hedonic consumption was higher in the "control" condition, compared to the "self" condition in which a shorter psychological distance and thus lower level of construal were activated. By comparison in the two "why" conditions, participants got practice in answering *why* questions, i.e. providing justifications for things, and their need for justification was heightened. Utilitarian choices do not need justification, but good justification would promote hedonic choice. Effective justifications, whether it be for academics propounding their theory, or legal counsel presenting their case in court, are more concrete rather than abstract. In this case, the heightened need for justification was added as a new factor, and introduced another force working in the opposite direction from our basic model.

In the literature, the contrast between hedonic versus utilitarian goods has also been conceptualized in terms of affect versus cognition-based choice (Shiv and Fedorikhin 1999). In the sense that affect is more abstract than cognition: one may feel general pleasantness, but one's thoughts are object-specific; there are some similarities between our theoretical framework that links hedonic choices to higher levels of abstraction, and theories that link hedonic choices to affect. There are three points that distinguish my theory from the affect-based. First, my construal-based model is about making mental (i.e. cognitive) representations and does not include affect *per se*. Second, while the affect-based theory assumes a two-step process of first an automatic affective response, followed by a more cognitive deliberation, my construal-based theory does not involve assumptions about timing or order. Third, my construal-based theory can offer an alternative explanation to the findings of Shiv and Fedorikhin (1999), in which they gave their study participants a task to memorize either a 2-digit or 7-digit number, then interrupted that task with a choice between a chocolate cake and a fruit salad, and found that those who memorized 7-digit (2-digit) numbers were more likely to choose the chocolate cake (fruit salad). Their affect-based explanation was that in the "7-digit" condition the task was cognitively more challenging, so the choice of the chocolate cake reflected people's automatic affective

responses, because they were unable to progress to the next step of cognitive deliberation which would have resulted in the choice of the fruit salad.

I make no a priori assumptions about which choice is cognitively superior, based just on the higher utility and/or lower hedonicity of the alternatives. I build on the assumption that the chocolate cake and fruit salad are comparably attractive; but the former is superior in the more hedonic and abstract attributes, and the latter in the more utilitarian and concrete attributes. I also look at the 2 versus 7-digit tasks from a different angle. Though I agree with Shiv and Fedorikhin (1999) that the latter is more cognitively demanding, I suggest more relevantly that people would employ different cognitive strategies in the two conditions. Two-digit numbers can be remembered by rote, but people tend to commit 7-digit numbers to their memories in chunks. We see such examples in our daily lives: 7-digit local telephone numbers are broken up into a 3-digit exchange, and then the rest. People do their own chunking in ways that make sense to them to help them remember, which requires imagination and abstract thinking. In other words, the "7-digit" condition would activate high level construal, which increases the perceived hedonic value. The goal of this paper is not to rule out Shiv and Fedorikhin's (1999) affect-based explanation. I admire their work for shedding

light on how the heart and mind together influence consumer choice when there are tradeoffs between short versus long term payoffs. I present my theory to further understand how the mind part influences people's choices more broadly between alternatives that are superior on hedonic dimensions, and those that are superior on utilitarian dimensions.

Simplify the choice context to promote hedonic choice

I consider some practical implications of my theoretical framework by exploring how the simplicity of the choice context would activate abstract thinking and promote hedonic choice. One of the principles of action identification theory (Vallacher and Wegner 1987) is that simple tasks tend to be construed more abstractly at higher levels, while complex ones tend to be construed more concretely at lower levels. The theory holds that people carry out and monitor their action with respect to the identity that stands out in consciousness, prefer to think about their behavior at the highest level maintainable, and shift to lower-level identities when higher levels cannot be maintained. For example, a pianist in practice may set out to "bring delight" at the

piano, but if "playing the piano" is not easily accomplished, s/he may have to rethink the action in lower-level terms such as "reading sheet music."

In a series of experiments Wegner et al (1984) took actions such as eating Cheeto's and drinking coffee and made the execution more complex by instructing subjects to eat using chopsticks and to drink from unwieldy mugs, which lowered their construal of the respective actions. People who drank their coffee from regular cups thought about their actions in more abstract terms, such as "enjoying the aroma," while those who drank from the unwieldy mugs thought in more concrete terms, such as "drinking and swallowing."

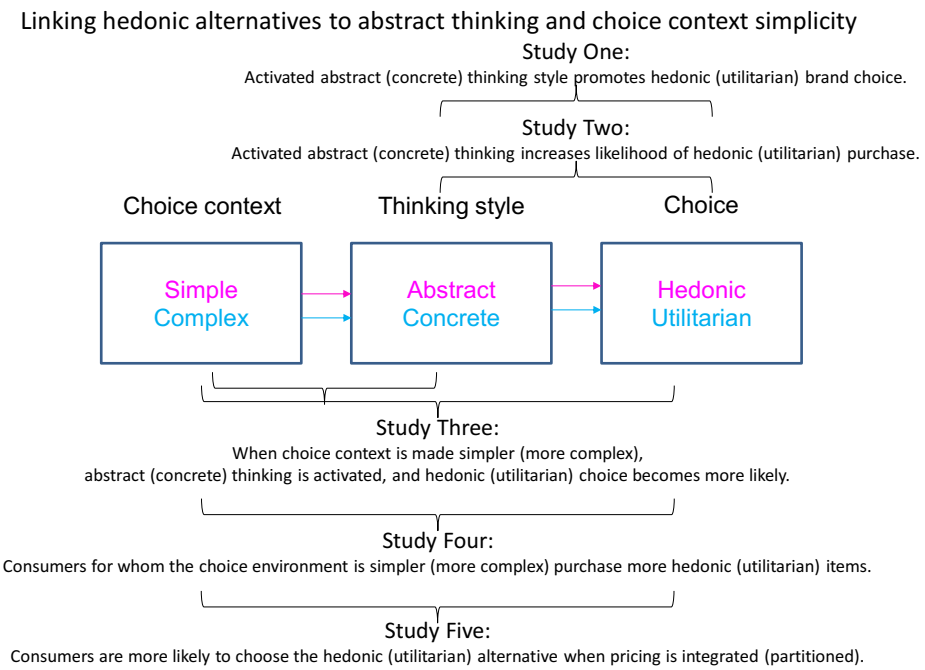
As simple actions tend to be construed more abstractly, they should activate abstract thinking, while complex actions tend to be construed more concretely and should activate more concrete thinking. I extend those findings to present that a simpler choice context should invoke more abstract thinking and promote hedonic choice, while a more complex choice context should invoke more concrete thinking and promote utilitarian choice.

I further suggest that the marketing mix can be designed to simplify the choice context. In this research, I look at Place and Price, and show that hedonic choice

becomes more likely when Place (in Study Four) and/or Price (Study Five) are streamlined.

STRUCTURE OF THE STUDIES

Figure 1: Structure of the Five Studies



I present my theoretical framework graphically in Figure 1. Studies One and Two test the link between thinking style and choice, which is the basic building block of my theoretical framework. Study One experimentally activates abstract versus concrete thinking style and measures its effect on the choice of a hedonic and utilitarian alternative, respectively. Study Two experimentally activates abstract versus concrete thinking using a different methodology of asking *why* versus *how*, and measures its

effect on likelihood of choosing a more hedonic versus utilitarian alternative in a binary choice set. Studies One and Two test the hypothesis:

H1: Activated abstract (concrete) thinking should increase the likelihood of hedonic (utilitarian) choice.

In Study Three I examine the entire theoretical framework and introduce choice context simplicity/complexity. Rather than activating abstract versus concrete thinking in a separate task first, then seeing its effect on a different subsequent choice, I now integrate the activation of abstract versus simple thinking into the choice context. In Study Three I create a simple choice context by giving study participants a choice task in a standard format. I create a complex choice context, in contrast, by giving the participants the same choice task, but by having them use their non-dominant hands for marking their choices, thus making the action more complex. The prediction is that the simpler (more complex) choice context would activate more abstract (concrete) thinking and promote hedonic (utilitarian) choice. Study Three tests the hypotheses:

H2: A simpler (more complex) choice context should activate more abstract (concrete) thinking.

H3: A simpler (more complex) choice context should promote hedonic (utilitarian) choice.

To enhance the managerial relevance of my proposed theoretical framework, I introduce the marketing mix variables as tools for making the choice context simpler versus more complex in Studies Four and Five. In Study Four, I design the Place as a virtual store. Shoppers have different levels of ability to navigate through the virtual shopping trip. The shopping trip should be simpler (more complex) for those with higher (lesser) navigating abilities, and they should purchase more hedonic (utilitarian) items. In Study Five, I design the Price. I present the same total price either more simply as an all-inclusive price, or in a more complex manner as partitioned into pre-tax price, taxes, fees, and other components. When the price is presented more simply (in a more complex manner), the alternative that excels in hedonic (utilitarian) attributes should gain choice share. Studies Four and Five test the hypothesis:

H4: A set of simpler (more complex) marketing mix variables should promote hedonic (utilitarian) choice.

STUDY ONE: ABSTRACT THINKING AND HEDONIC CHOICE

I designed Study One to test my basic theoretical link between hedonic choice and abstract thinking. The study demonstrates that people tend to choose the more hedonic alternative when abstract thinking is activated and the more utilitarian alternative when concrete thinking is activated.

Design

Study One was a behavioral lab experiment conducted with 174 undergraduate students enrolled in introductory business courses at a university in the western US. It consisted of two parts.

The first part activated abstract versus concrete thinking by temporal construal (White et al 2011). A focus on long-term goals activates abstract, high level construal, while a focus on immediate goals activates concrete, low level construal (Forster, Friedman and Liberman 2004; Wakslak, Nussbaum, Liberman and Trope 2008). Half the participants were randomly assigned to the "abstract" group, and they were asked to discuss the long-term benefits of using sunscreen. The other half were in the

"concrete" group, and they were asked to discuss the immediate benefits of using sunscreen. This was an open-ended question.

The second part was a choice task among different brands of sunscreen. I used three actual sunscreen brands for this study. Presumably based on a combination of the respective actual brand names, packaging, and taglines to which they may well have been exposed in their daily lives, the Hawaiian Tropic brand was perceived to be more hedonic and the Neutrogena brand more utilitarian by over 80% of respondents in a pre-test. Based on the pretest I selected the Hawaiian Tropic brand to represent the hedonic alternative, and the Neutrogena brand to represent the utilitarian alternative in Study One. The Coppertone brand was mentioned most frequently in the pretest, and it was not strongly associated with either hedonicity or utility, so I used that brand to represent the neutral alternative in Study One.

Participants were shown images of the product alternatives and asked to choose among the three brands and an "other" option. They were all equivalent in sun protection factor and package size. Please refer to Figure 2. To emphasize its hedonic positioning the Hawaiian Tropic brand was presented with the tagline "Let's enjoy the sun," to highlight the experiential pleasantness. To emphasize its utilitarian

positioning the Neutrogena brand was presented with the tagline "Dermatologist recommended," to highlight the practical health benefits. The neutral Coppertone brand was presented with the tagline "Top selling brand." These taglines were all derived from and captured the essence of the actual taglines respectively. My prediction was that those in the "abstract" group would be more likely to choose the hedonic Hawaiian Tropic brand, while those in the "concrete" group would be more likely to choose the utilitarian Neutrogena brand.

Results

Out of the 174 participants, 44 (25.3%) chose the hedonic Hawaiian Tropic brand, 38 (21.8%) chose the utilitarian Neutrogena brand, 29 (16.7%) chose the neutral Coppertone brand, and 63 (36.2%) chose "other." By condition, there were 89 in the "abstract" group, and 85 in the "concrete" group.

In comparing the two groups, the hedonic brand was chosen by a higher proportion of the "abstract" group than the "concrete" group (32.6% vs. 17.6%; $Z = 2.3$, $p < .05$), but the utilitarian brand was chosen by a marginally higher proportion of the "concrete" group (27.1% vs. 16.9%; $Z = 1.6$, $p = .05$). These findings are supportive

of my theoretical predictions. There was no difference between the groups in the proportions who chose the neutral brand and "other." Please refer to Figure 3.

A binary logit of the choice of the hedonic brand (1 = hedonic brand, 0 = something else) on condition (0 = "concrete," 1 = "abstract") showed that the odds ratio of choosing the Hawaiian Tropic brand over something else was higher in the group that first thought about the long-term benefits of using sunscreen ($\exp(\beta) = 2.25$; $p < .05$). $\exp(\beta) > 1$increases the odds ratio, and $\exp(\beta) < 1$ decreases it. This supported my prediction that people would be more likely to choose the hedonic brand when abstract thinking is activated.

A second binary logit of choice of utilitarian brand (1 = utilitarian, 0 = something else) on condition (0 = "concrete," 1 = "abstract") showed that the odds ratio of choosing the Neutrogena brand over something else was marginally higher in the group that first thought about the immediate benefits of using sunscreen ($\exp(\beta) = .56$; $p = .10$). This directionally supported my prediction that people would be more likely to choose the utilitarian brand when concrete thinking is activated.

STUDY TWO: ACTIVATING ABSTRACT THINKING BY "WHY" AND CONCRETE THINKING BY "HOW"

The proposed link between abstract thinking and hedonic choice is new, and central to my theoretical framework. The purpose of Study Two was to replicate the findings of Study One by (1) activating abstract thinking using a why/how manipulation (rather than by temporal construal as in Study One), and (2) measuring the effect on likelihood of purchase (rather than choice as in Study One).

Design

Study Two was a behavioral lab experiment conducted with 104 undergraduate students enrolled in introductory business courses at a university in the western US. It consisted of two parts.

The first part differentially activated abstract versus concrete thinking style. In the "abstract" condition, participants were asked to list reasons "why you would invest in the stock market." In the "concrete" condition, they were asked to list means for "how you would invest in the stock market." Abstract, high level construal focuses on

the reasons for an action, whereas concrete, low level construal focuses on the means (Trope and Liberman 2003), and in the experimental literature abstract versus concrete thinking has been activated by asking *why* versus *how* questions (Tsai and McGill 2010; White et al 2011).

The second part of the study was a rating task. In a separate pretest, I identified three items each as hedonic and utilitarian, respectively. A chocolate covered strawberry, a massage stick, and a mini potted cactus were all rated to be more hedonic; and a protein bar, a neck pillow, and a coffee cup were all rated to be more utilitarian by over 90% of the pretest participants. Those six items were used as product stimuli in Study Two. Participants indicated how likely they would be to buy the products, each for $1 at a dollar store. The responses were on a 6-point scale from 1 = "absolutely not" to 6 = "definitely." This was the dependent measure. My prediction was that the "abstract" group would be more likely to purchase the hedonic items, and the "concrete" group would be more likely to purchase the utilitarian items. Please refer to Figures 4A to 4F.

Results

Participants were most likely to purchase the mini potted cactus (3.9), followed by the chocolate covered strawberry (3.8), protein bar (3.6), massage stick (3.1), then the neck pillow (3.0). They were least likely to purchase the coffee cup (2.8).

There were 50 in the "abstract" condition, and 54 in the "concrete" condition. In a comparison between the two groups the three hedonic items were more likely to be purchased by the "abstract" group than the "concrete" group: the mini potted cactus ($M_{abstract}$ = 4.3 vs. $M_{concrete}$ = 3.5; t = 2.23, $p < .05$), the chocolate covered strawberry ($M_{abstract}$ = 4.2 vs. $M_{concrete}$ = 3.4; t = 2.12, $p < .05$), and the massage stick ($M_{abstract}$ = 3.5 vs. $M_{concrete}$ = 2.7; t = 2.27, $p < .05$). Two of the three utilitarian items were more likely to be purchased by the "concrete" group than the "abstract" group: the protein bar ($M_{concrete}$ = 4.1 vs. $M_{abstract}$ = 3.0; t = 3.25, $p < .01$), and the neck pillow ($M_{concrete}$ = 3.4 vs. $M_{abstract}$ = 2.6; t = 2.15, $p < .05$). One utilitarian item, the coffee cup, was marginally more likely to be purchased by the "concrete" group ($M_{concrete}$ = 3.3 vs. $M_{abstract}$ = 2.6; t = 1.92, $p < .10$). Please see Figure 5.

A regression of the sum of the ratings of the three hedonic items on condition (0 = "concrete", 1 = "abstract" showed that people were more likely to purchase the

hedonic items after thinking about *why* ($\beta = 2.58$, $SE = .79$; $t = 3.19$, $p < .01$). A similar regression of the sum of the ratings of the three utilitarian items on condition showed that people were more likely to purchase the utilitarian items after thinking about how ($\beta = -.81$, $SE = .38$; $t = -2.15$, $p < .05$). These findings are supportive of my theoretical prediction. When abstract thinking is activated, people become more likely to purchase hedonic items, and when concrete thinking is activated, they become more likely to purchase utilitarian items.

STUDY THREE: CONTEXT SIMPLICITY AND HEDONIC CHOICE

In Studies One and Two abstract versus concrete thinking was activated in a separate task from the choice task. In Study Three I integrate the activation of abstract versus concrete thinking into the choice context. As simple tasks are construed more abstractly while complex tasks are construed more concretely, I manipulate the simplicity/complexity of the choice context.

Design

Study Three was a behavioral lab experiment conducted with 72 undergraduate students enrolled in introductory business courses at a university in the western US. It consisted of two parts. The first part was a choice task, where participants were asked to make a series of choices between a relatively hedonic alternative, and a relatively utilitarian alternative that were comparable in dollar value, and similar in terms of broad product category and/or distribution. The binary choices were between (1) a relatively more hedonic $100 gift card for a restaurant dinner, and a relatively more utilitarian $100 gift card for buying groceries, (2) a relatively more hedonic premium ice cream, and a relatively more utilitarian fruit salad, (3) a subscription to a more hedonic

sports/entertainment magazine and a more utilitarian business/news magazine, (4) a more hedonic digital photo frame to display a changing array of one's favorite photos, and a more utilitarian leather made smart phone case for protection against shocks and scratches, (5) a more hedonic unisex cologne, and a more utilitarian electric toothbrush. The item pairs were selected based on a pilot study that identified the former items in each pair to be more hedonic than the latter by over 80% of the respondents.

The hedonic versus utilitarian alternatives were randomly placed in the left or right position in the side-by-side choices. Participants were asked to make a choice between the pairs of alternatives, by indicating their choice on a 6-point scale anchored at 1 = "definitely the (left alternative) and 6 = "definitely the (right alternative)". Please see Figures 6A to 6E.

The second part of the study was a behavioral identification form ("BIF") questionnaire (Vallacher and Wegner 1987). The BIF is a forced-choice questionnaire that asks participants to choose between superordinate and subordinate representations of 25 focal activities. For example, "making a list" is restated in superordinate form as "getting organized," or in subordinate form as "writing things down," and respondents are asked to choose their preferred restatement of the item. Superordinate restatements

fit the structure "[restatement] by [item]," and subordinate restatements fit the structure "[item] by [restatement]." A respondent's BIF score is the number of superordinate choices s/he makes. It ranges from 0 to 25, and higher numbers indicate higher levels of construal.

There were two conditions of this study. In the "complex" condition, the letters were in italic font printed in dark blue on light blue paper. The study instruments were reasonably legible, but by comparison to the "simple" condition in which more traditional block letters were printed in black on white paper, the font was not as clear, and the contrast between the colors of the letters and the papers was not as stark. The purpose was to make the choice context more complex in the "complex" condition. Furthermore, in the "complex" condition, participants were asked to use their non-dominant hands to mark the surveys. The surveys required only circling numbers, and not writing words, so the participants could reasonably execute the task, but using the non-dominant hand made it more complex. My prediction is that those in the "simple" condition would be more likely to choose the more hedonic alternative in the binary choice task in part one, and indicate higher BIF scores.

Results

To compare the choice patterns between the two groups, I first converted all choice responses so that greater numbers indicated more hedonic choices, and lesser numbers indicated more utilitarian choices. I summed up the responses across all five binary pairs and compared the two experimental conditions. Participants for whom the choice context was made simpler were more likely to make hedonic choices while those for whom the choice context was more complex were more likely to make utilitarian choices (M_{simple} = 19.2 vs. $M_{complex}$ = 15.8; t = 3.51, p < .001). A regression of hedonic choice on experimental condition ("complex" = 0; "simple" = 1) suggests that participants tended to make more hedonic choices when they indicated their choices with their dominant hands on black on white surveys in more traditional block print (β = 3.4, SE = 1.0; t = 3.51, p < .001). This supports my theoretical prediction and suggests that a simpler choice context promotes hedonic choice, while a more complex context attenuates hedonic choice. Please see Figure 7.

The experimental manipulation had a greater effect on hedonic choice, than the presumed mediator construal. BIF scores were marginally higher in the "simple" group (β = 2.4, SE = 1.2; t = 1.97, p = .05), and just barely missed the threshold of

statistical significance. I offer three explanations. One is that construal level, intrinsically, is not a precisely measurable construct. A second explanation is that BIF is an imprecise measure of an imprecise construct. A third is that the experimental manipulation could have had an effect other than through construal level, to affect people's preferences for hedonic versus utilitarian goods. For example, the "complex" group saw a more visually stimulating blue paper versus a plainer white in the "simple" condition. Assuming there to be some ideal level of sensory stimulation, those in the "complex" condition already received a higher level of sensory stimulus from the blue paper and didn't need as much additional sensory stimulus from choosing hedonic items. In comparison, the "simple" group did not get as much visual stimulus from the plain white, and tried to get more sensory stimuli from choosing more hedonic items.

STUDY FOUR: VIRTUAL SHOPPING AT A ¥100 (DOLLAR) STORE

Study Four was an internet-based study conducted entirely in the Japanese language. Foreign residents of Japan with varying levels of Japanese language ability went on a virtual shopping trip at a ¥100 (approximately US$1) store. The shopping environment presumably would be simpler to navigate for those participants who spoke more fluent Japanese, and more complex for those who spoke the language less proficiently. Based on my theoretical framework that links hedonicity to abstract thinking style and choice context simplicity, I predicted that the more fluent speakers would be more likely to purchase more hedonic items.

Design

Foreign (i.e. non-Japanese) residents of Japan were recruited to take part in a virtual shopping trip. The study was posted on a SNS that targeted foreign residents of Japan, and participation was on a volunteer basis. The virtual shopping was all in Japanese, and participants were asked to select items to purchase from a menu of 16 items from a ¥100 store. Eight items were hedonic (party decorations, party hats, scented candles, figurines, decorative ornaments, wall hanging, bath salt, and massage

stick) and 8 were utilitarian (pocket tissues, notepad, utility knife, ceramic cup, grilling tool, cooking pot, kitchen scale, and cushion). The hedonic and utilitarian items chosen for the study were evaluated to be hedonic and utilitarian respectively, by over 80% of participants in a separate pretest. Please see Figures 8A and 8B.

After the shopping trip participants were asked for their basic demographic information. They also indicated their level of Japanese language ability by selecting from "fluent," "advanced," "intermediate," and "beginner."

Results

The 121 participants represented 23 countries. Thirty-six (29.8%) were from the US, 19 (15.7%) from Vietnam, 12 (9.9%) from India, 7 (5.8%) each from the UK and China, 6 (5.0%) from France, 5 (4.1%) from Cambodia, 4 (3.3%) each from Germany, the Philippines and Singapore, 3 (2.5%) from Australia, 2 (1.7%) each from Korea and Myanmar, and 1 (0.8%) each from Canada, Catalonia, Ecuador, Hong Kong, Italy, Mexico, Morocco, Nepal, Russia, and the UAE. Forty-six (38.0%) spoke Japanese fluently, 44 (36.4%) spoke advanced level Japanese, 21 (16.4%) spoke intermediate level, and 10 (8.3%) were beginners.

Participants bought on average 5.0 utilitarian items, ranging from a low from 1 to a high of 8. They bought on average 3.3 hedonic items, ranging from 0 to 7. The top three most popular items were the ceramic cup purchased by 92 (76.0%) participants, the notepad purchased by 89 (73.6%), and the pocket tissues purchased by 86 (71.1%). They were all utilitarian items. The least popular items were the party hat purchased by only 45 (37.2%) participants, the party decorations purchased by 48 (39.6%), and the wall hanging purchased by 53 (43.8%). They were all hedonic items.

I compared the choice patterns of the shoppers of various language abilities by a simple regression analysis of the number of hedonic items purchased on Japanese language ability (1 = "beginner," 2 = "intermediate," 3 = "advanced" and 4 = "fluent"). More fluent Japanese speakers purchased more hedonic items ($\beta = 0.77$, $SE = .23$; $t = 3.27$, $p < .01$), which supported my theoretical prediction. The more fluent speakers for whom the shopping environment was simpler to navigate tended to purchase more hedonic items. Please see Figure 9.

My second simple regression analysis was of the number of utilitarian items purchased on Japanese language ability. More fluent Japanese speakers purchased fewer utilitarian items ($\beta = -0.50$, $SE = .23$; $t = -2.19$, $p < .05$), which also supported my

theoretical prediction. The more fluent speakers for whom the shopping environment was simpler to navigate tended to purchase fewer utilitarian items. These findings suggest that hedonic choice can be promoted by simplifying the choice context.

STUDY FIVE: SIMPLE PRICING AND HEDONIC CHOICE

The purpose of Study Five was to operationalize the simplicity of the choice context using an alternative approach. In Study Four the shopping environment was the same for all, but navigating through the shopping trip was simpler for some people because they had higher language abilities, while it was more complex for others who had more limited language abilities. In Study Five the simplicity/complexity of the shopping environment was experimentally manipulated.

Design

Study Five was a behavioral lab experiment conducted at a university in the western US. The 154 study participants were enrolled in introductory business courses. They were given a hypothetical scenario where they were traveling out of town to attend a conference and had two hotel room options for accommodations. The hedonic alternative was superior on a hedonic attribute: it offered a magnificent view of the city skyline and mountains; but was a 7-minute walk from the conference venue. The utilitarian alternative was superior on a utilitarian attribute: it was conveniently located across the street from the conference venue; but looked out into a parking lot.

The dependent variable was the binary choice between the hedonic alternative and the utilitarian one.

There were two conditions of the study, which differed in the way the price was presented. In the "simple" condition the price was "$120 total including room rate, service charge, sales tax, and occupancy tax." In the "complex" condition, the pricing was partitioned (Hamilton and Srivastava 2008; Morwitz, Greenleaf and Johnson 1998) as "$95 room rate, $10 service charge, $12 sales tax, and $3 occupancy tax." The total price is equivalent in both conditions, but the all-inclusive pricing in the "simple" condition is simpler, and the partitioned pricing in the "complex" condition required addition and is more complex. My prediction was that the preference for the more hedonic hotel room with the nicer view would be stronger in the "simple" group, and the preference for the more utilitarian hotel would be stronger in the "complex" group.

Results

Out of the 154 study participants, 93 (60.4%) chose the more conveniently located hotel, and 61 (39.6%) chose the hotel with the nicer view. Overall, the more utilitarian alternative appeared to be preferable in this pair.

Seventy-six participants were in the "simple" group, and 78 were in the "complex" group. Of the "simple" group who saw the all-inclusive pricing, 39 (51.3%) chose the hedonic alternative, while 37 (48.7%) chose the utilitarian alternative. The pattern was reversed in the "complex" group who saw the partitioned pricing: 56 (71.8%) chose the utilitarian alternative, while 22 (28.2%) chose the hedonic alternative. Please refer to Figure 10.

A binary logit of choice of hotel (0 = convenient location, 1 = magnificent view) on pricing (0 = "complex", 1 = "simple") showed that the odds ratio for choosing the hedonic alternative over the utilitarian one was higher when the pricing was integrated ($\exp(\beta) = .37$; $Z = 2.90$, $p < .01$). This supports my theoretical prediction. Integrated versus partitioned pricing simplifies the choice context, which activates more abstract thinking, and promotes hedonic choice.

While the results of Study Four also supported my proposed theoretical framework, there may have been differences other than language ability that separated the participants who spoke the Japanese language fluently versus less so. The more fluent speakers may have been longer residents of Japan, who already possessed the utilitarian goods offered in the study, while the lesser fluent speakers may have been

more recent arrivals who still lacked the utilitarian goods. In Study Five, participants were randomly assigned to their experimental conditions, so alternative explanations for the choice patterns are mitigated.

BUSINESS IMPLICATIONS

My theoretical contribution is to link hedonic choice to abstract thinking styles. The managerial implications of my theory centers on how businesses can practically promote hedonic choice by designing the marketing mix variables. Studies Four and Five gave some insight into how businesses can design the marketing mix to differentially promote hedonic choice. Study Four suggests that simplifying the Place can promote hedonic choice. For example, in online shopping it may be by streamlining the steps from product selection to purchase. For brick and mortar stores, it may be to declutter the product shelves and streamline SKU's. Study Five suggests that simpler Price may promote hedonic choice. Partitioning the price may reduce the product's net price and attract more attention, but it may make the calculation of the effective price more complex, and shift consumer choice away from hedonic goods. Perhaps similarly for odd pricing: ¥999 may attract consumers' attention because it's under ¥1,000, but odd pricing may also be more complex to process, which would similarly shift consumer choice away from hedonic goods.

Marketers can design their marketing mix variables to help simplify the choice context. The current research examined the Place and Price elements, but the findings

here should generalize to Product and Promotion as well. Simpler product names and/or brands that are descriptive of the product should increase the preference for hedonic items. For example, “午後の紅茶” may be more suitable than “venti macchiato” for hedonic beverages like tea and coffee that are consumed primarily for the taste and aroma. Promotion about the product, such as the description of the ingredients, should likewise be simpler for hedonic beverages. For example, sugar should be labeled simply “sugar,” rather than “sucrose.”

SUMMARY AND FUTURE RESEARCH

Hedonic consumption is primarily for visual, gustatory, olfactory, auditory, and/or haptic enjoyment. The goal is to enhance one’s general well-being and is abstract. When abstract thinking is activated, those abstract goals become more important, and hedonic choice becomes more likely. Utilitarian consumption is primarily for practical and functional purposes, and the goals are more specific and concrete. When concrete thinking is activated, those concrete goals become more important, and utilitarian choice becomes more likely. To my knowledge my proposed

theoretical framework is the first to map hedonic versus utilitarian goods to abstract versus concrete thinking styles, based on the defining characteristic of "hedonic" goods.

In Studies One and Two, I activated high level, abstract versus low level, concrete thinking styles in a separate task, using well established experimental methods, and measured the effect on a subsequent choice. In the studies that followed I integrated the activation of abstract versus concrete thinking styles into the choice task itself, by manipulating the simplicity/complexity of the choice context. In Studies Four and Five I introduced marketing mix variables as tools for creating choice contexts that were simpler/more complex. The goal was to provide some insight into the managerial implications of my proposed theoretical framework.

One limitation of my research may be the lack of precision in the operationalization of hedonicity/utility. Hedonicity is defined by its primary purpose and is consumer-situation specific. A given item may be a hedonic play toy for a child, but a utilitarian learning tool for the parent purchasing it for the child. In this research, I chose stimuli that would be considered by most in most situations to be hedonic versus utilitarian, but I understand there is no universally hedonic or utilitarian item.

Another limitation is that the research focused only on those product types that were characterized by high hedonicity and low utility, and high utility and low hedonicity. But hedonicity is not defined by the lack of utility, and utility is not defined by the lack of hedonicity: the two are independent constructs. Some products are high on both hedonicity and utility, and others are low on both. The findings of this research are not directly relevant to such products.

A direction for future research is to extend the framework from hedonic choice and abstract thinking, to greater psychological distances. Combining the findings of the current research that links hedonic (utilitarian) choice to abstract (concrete) thinking, with the literature that links abstract (concrete) thinking to greater (lesser) psychological distances, I would predict that hedonic (utilitarian) choice should be promoted when the focus shifts to greater (lesser) psychological distances. I have conducted a preliminary study, which suggests that more heterogeneous groups, in terms of gender and approximate age groups mixes, tended to order more hedonic beverages and snacks. This is consistent with the framework that I propose in this research. The focus shifts to greater social distances in more heterogeneous groups, which activates abstract thinking and promotes hedonic choice.

REFERENCES

Batra, Rajeev and Olli Ahtola (1991), "Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes," *Marketing Letters*, 2 (2), 159-170.

Dhar, Ravi and Klaus Wertenbroch (2000), "Consumer Choice between Hedonic and Utilitarian Goods," *Journal of Marketing Research*, 37 (February), 60-71.

Forster, Jens, Ronald Friedman and Nira Liberman (2004), "Temporal Construal Effects on Abstract and Concrete Thinking: Consequences for Insight and Creative Cognition," *Journal of Personality and Social Psychology*, 87 (2), 177-189.

Freitas, Antoni, Peter Gollwitzer and Yaacov Trope (2004), "The Influence of Abstract and Concrete Mindsets on Anticipating and Guiding Others' Self-Regulatory Efforts," *Journal of Experimental and Social Psychology*, 40 (6), 739-752.

Fujita, Kentaro, Yaacov Trope, Nira Liberman and Maya Levin-Sagi (2006), "Construal Levels and Self-Control," *Journal of Personality and Social Psychology*, 90 (3), 351-367.

Hamilton, Rebecca and Joydeep Srivastava (2008), "When 2+2 Is Not the Same As 1+3: Variations in Price Sensitivity across Components of Partitioned Prices," *Journal of Marketing Research*, 45 (November), 450-461.

Kivetz, Ran and Anat Keinan (2006), "Repenting Hyperopia: An Analysis of Self-Control Regrets," *Journal of Consumer Research*, 33 (2), 273-282.

Liberman, Nira and Yaacov Trope (1998), "The Role of Feasibility and Desirability Considerations in Near and Distant Future Decisions: A Test of Temporal Construal Theory," *Journal of Personality and Social Psychology*, 75 (1), 5-18.

Liu, Peggy, Kelly Haws, Cait Lambertson, Troy Campbell and Gavan Fitzsimmons (2015), "Vice-Virtue Bundles," *Management Science*, 61 (1), 204-228.

MacInnis, Deborah and Linda Price (1987), "The Role of Imagery in Information Processing: Review and Extensions," *Journal of Consumer Research*, 13 (4), 473-491.

Mehta, Ravi, Rui Zhu and Joan Meyers-Levy (2014), "When Does a Higher Construal Level Increase or Decrease Indulgence? Resolving the Myopia versus Hyperopia Puzzle," *Journal of Consumer Research*, 41 (2) (August), 475-488.

Morwitz, Vicki, Eric Greenleaf and Eric Johnson (1998), "Divide and Prosper: Consumers' Reactions to Partitioned Prices," *Journal of Marketing Research*, 35 (November), 453-463.

O'Curry, Suzanne and Michal Strahilevitz (2001), "Probability and Mode of Acquisition Effects on Choices between Hedonic and Utilitarian Options," *Marketing Letters*, 12 (February), 37-49.

Okada, Erica Mina (2005), "Justification Effects on Consumer Choice of Hedonic and Utilitarian Goods," *Journal of Marketing Research*, 42 (February), 43-53.

Okada, Erica Mina (in print), "Differential Construal of Exercise versus Diet and Implications for Weight Control," *Journal of Consumer Research*.

Semin, Gün R. and Eliot R. Smith (1999), "Revisiting the Past and Back to the Future: Memory Systems and the Linguistic Representation of Social Events," *Journal of Personality and Social Psychology*, 76 (6), 877-92.

Shiv, Baba and Alexander Fedorikhin (1999), "Heart and Mind in Conflict: The Interplay of Affect and Cognition in Consumer Decision Making," *Journal of Consumer Research*, 26 (3), 278-292.

Trope, Yaacov and Ayalet Fishbach (2000), "Counteractive Self-Control in Overcoming Temptation," *Journal of Personality and Social Psychology*, 79 (4), 493-506.

Trope, Yaacov and Nira Liberman (2000), "Temporal Construal and Time-Dependent Changes in Preference," *Journal of Personality and Social Psychology*, 79 (6), 876-889.

Trope, Yaacov and Nira Liberman (2003), "Temporal Construal," *Psychological Review*, 110 (3), 403-421.

Trope, Yaacov and Nira Liberman (2010), "Construal-Level Theory of Psychological Distance," *Psychological Review*, 117 (2), 440-463.

Tsai, Claire and Ann McGill (2010), "No Pain, No Gain? How Fluency and Construal Level Affect Consumer Confidence," Journal of Consumer Research, 37(5) (February), 807-821.

Vallacher, Robin and Daniel Wegner (1987), "What Do People Think They're Doing? Action Identification and Human Behavior," *Psychological Review*, 94 (1), 3-15.

Vallacher, Robin and Daniel Wegner (1989), "Levels of Personal Agency: Induvial Variation in Action Identification," *Journal of Personality and Social Psychology*, 57 (4), 660-671.

Voss, Kevin, Eric Spangenberg and Bianca Grohmann (2003), "Measuring the Hedonic and Utilitarian Dimensions of Consumer Attitude," *Journal of Marketing Research*, 40 (3), 310-320.

Wakslak, Cheryl, Shiri Nussbaum, Nira Liberman (2007) and Yaacov Trope, "Representations of the Self in the Near and Distant Future," *Journal of Personality and Social Psychology*, 95 (4), 757-773.

Wertenbroch, Klaus (1998), "Consumption Self-Control by Rationing Purchase Quantities of Virtue and Vice," *Marketing Science*, 17 (4), 317-337.

Wegner, Daniel, Robin Vallacher, Gary Macomber, Russell Wood and Kevin Arps (1984), "The Emergence of Action," *Journal of Personality and Social Psychology*, 46 (2), 269-279.

White, Katherine, Rhiannon MacDonnell and Darren Dahl (2011), "It's the Mindset that Matters: The Role of Construal Level and Message Framing in Influencing Consumer Efficacy and Conservation Behaviors," *Journal of Marketing Research*, 48 (June), 472-485.

Figure 2: Study One Sunscreen Choice Task

Neutrogena
Dermatologist recommended

Coppertone
Top selling brand

Hawaiian Tropic
Let's enjoy the sun

Figure 3: Study One Summary

Stronger preference for the hedonic brand in the “abstract” group, and stronger preference for the utilitarian brand in the “concrete” group.

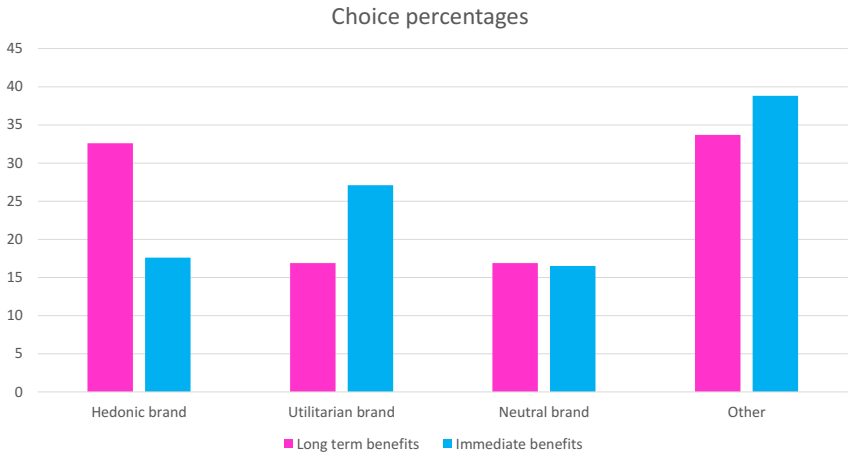


Figure 4A: Study Two Hedonic Chocolate Covered Strawberry

1	2	3	4	5	6
Absolutely NOT					Definitely BUY

Figure 4B: Study Two Hedonic Massage Stick

1	2	3	4	5	6
Absolutely NOT					Definitely BUY

Figure 4C: Study Two Hedonic Mini Potted Cactus

1	2	3	4	5	6
Absolutely NOT					Definitely BUY

Figure 4D: Study Two Utilitarian Protein Bar

1	2	3	4	5	6
Absolutely NOT					Definitely BUY

Figure 4E: Study Two Utilitarian Neck Pillow

1	2	3	4	5	6
Absolutely NOT					Definitely BUY

Figure 4F: Study Two Utilitarian Ceramic Cup

1	2	3	4	5	6
Absolutely NOT					Definitely BUY

Figure 5: Study Two Summary

More hedonic (utilitarian) items are preferred by the abstract (concrete) group.

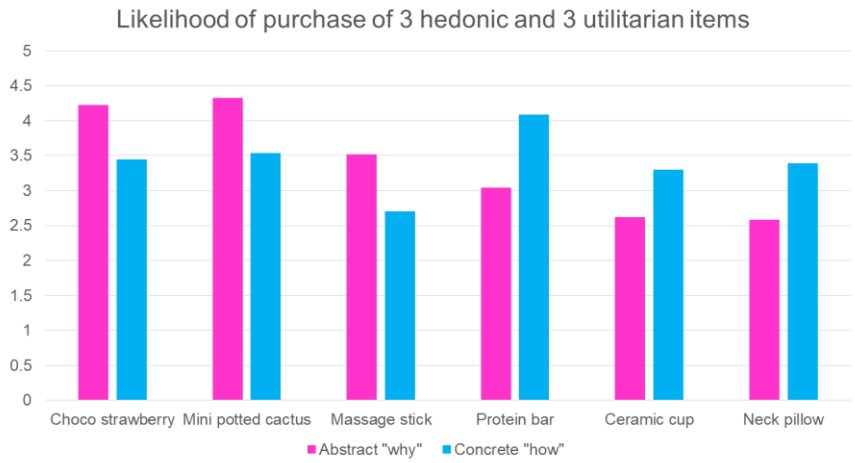


Figure 6A: Study Three $100 Gift Card

1	2	3	4	5	6
Definitely groceries					Definitely restaurant

Figure 6B: Study Three Snack

1	2	3	4	5	6
Definitely fruit salad					Definitely ice cream

Figure 6C: Study Three Magazine Subscription

1	2	3	4	5	6
Definitely sports and entertain					Definitely business and news

Figure 6D: Study Three at the Stationary Store

1	2	3	4	5	6
Definitely phone case					Definitely photo frame

Figure 6E: Study Three at the Drugstore

1	2	3	4	5	6
Definitely cologne					Definitely electric toothbrush

Figure 7: Study Three Summary

Hedonic choice is more likely when the choice context is simpler.

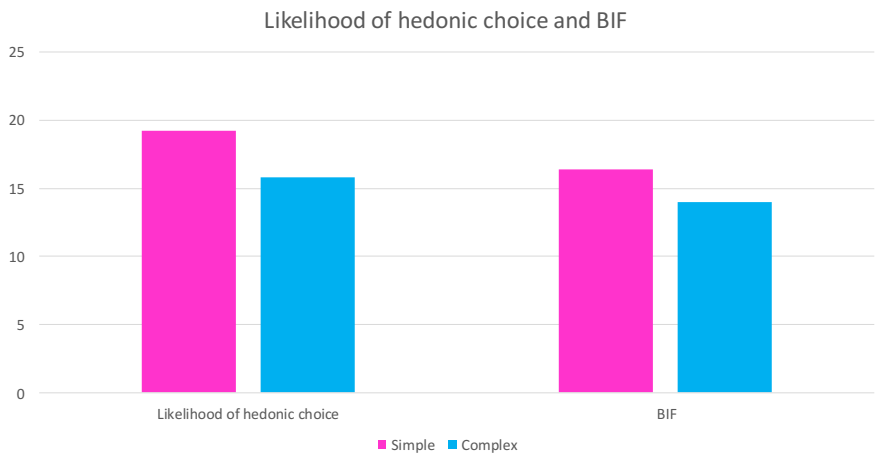


Figure 8A: Study Four Hedonic Items

Figure 8B: Study Four Utilitarian Items

Figure 9: Study Four Summary

More (less) fluent speakers of Japanese, for whom the shopping environment was simpler (more complex) to navigate bought more hedonic (utilitarian) items.

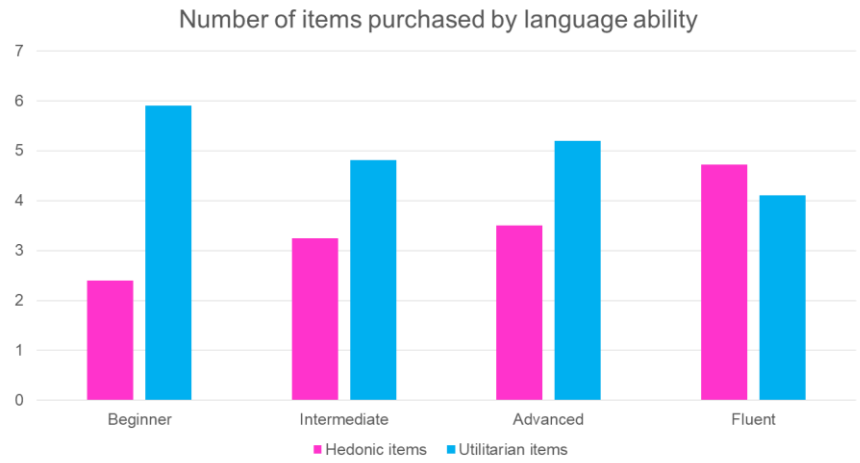


Figure 10: Study Five Summary

Preference for a nice view (convenient location) is relatively stronger when pricing is all-inclusive (partitioned).