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The Downsides of Status Consumption

A dissertation presented

by

Jeffrey Kwok-wai Lee

to

The Marketing Unit, Harvard Business School

in partial fulfillment of the requirements
for the degree of
Doctor of Business Administration
in the subject of
Marketing

Harvard Business School
Boston, Massachusetts

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The Downsides of Status Consumption

ABSTRACT

While research on status consumption has largely focused on consumer desire for goods that are associated with high social status, the essays featured in this dissertation will broadly explore instances where consumers might prefer to avoid high-status products. Essay 1 seeks an explanation for the recently documented consumer tendency to mix high and low-status goods (a behavior referred to as "omnivorousness"). The results of four studies suggest individuals high in need for self-expression desire omnivorousness, because this behavior expresses cultural expertise. Furthermore, agency (the ability to control one's choices) and high status are essential for the self-expressive benefits of omnivorousness, and brand collaborations that pre-fabricate omnivorous choices can yield reactance from omnivorous consumers.

Essay 2 explores the role of imagination in influencing desire for status goods ownership. Although imagining product ownership can often increase consumer interest in a product, the results of this essay suggest that backfire effects can occur when imagining status goods ownership. Specifically, the results of five studies suggest that in this product category, imagining ownership can make self-presentation concerns salient (as well as negative audience reactions), thus tempering any initial interest in seeking status-goods ownership as a means of self-promotion. Finally, Essay 3 explores product categories where consumers seek functional performance benefits from product use (ex. language learning or brain training software). The results of three studies suggest that while high-status branded products may be desired by

consumers, when consumers use these products they actually experience performance deficits due to the high-standards and intimidation created from product use.

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DEDICATION

For:

Leksa, who has changed my life,

and

My family, who has given me the love, encouragement and support to make this possible.

Thank you for believing in me.

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The process towards completing this dissertation has been an incredible journey, and I owe my gratitude to many people who have made a huge difference along the way. First, I would like to thank the members of my dissertation committee - Dr. Rohit Deshpandé (Chair), Dr. Renée Gosline and Dr. Anat Keinan — for their guidance on these projects and support in my development as a researcher. Along these lines, I would also like to thank Dr. Breagin Riley and Sachin Banker, whom I have worked closely with over the years. It is an honor to work with both of you, and thank you for letting me have the opportunity to learn from you.

I owe a special thanks to the Doctoral Program for its belief in me, as well as its efforts in organizing a multitude of learning experiences that will have a lasting impact on my life. Particularly, I would like to thank Jen Mucciarone for her kindness and overall support in helping me navigate through my time in the program. I am also especially thankful for all the wonderful friends that I've made here at HBS. To my friends: I have spared most of you the misfortune of having to proofread this dissertation, but that does not mean I have not counted on you in other important ways.

Finally, I want to thank my fiancé, Leksa, and my parents and sister, to whom this dissertation is dedicated. Hopefully, we can start talking about non-dissertation related topics once again. You mean the world to me, and I hope you know this. Again, none of this work is possible without your love and encouragement.

Essay 1: Omnivores, Status Consumption and Self-Expression

RENÉE GOSLINE

JEFFREY K. LEE

ABSTRACT

Previous sociological research has explored the role of social status in structuring taste, while consumer research has examined how self-expression serves as a driver of choice. This essay builds a bridge between these streams of literature by exploring the mediating role of self-expression in preferences among individuals who mix high and low-status goods (a behavior referred to as "omnivorousness"). We find that individuals who are high in need for self-expression are more likely to cross status boundaries by engaging in omnivorous brand consumption (Study 1). Furthermore, we find that a sense of agency – the ability to control one's choices – moderates the role of self-expression in omnivorous behavior (Study 2). Additionally, we find that high-status consumers are more likely to prefer omnivorous brand consumption relative to low-status consumers, because omnivorousness is more distinctive for them (Study 3). Finally, we find that not only do omnivorous consumers seek to exercise agency when they consume lower-status items, they also react negatively to brands that attempt to pre-fabricate high and low-status co-branding bundles (Study 4). We discuss the managerial and social implications of this relationship between self-expression and omnivorousness.

Consumer omnivorousness, defined as the tendency to consume both high and low-status goods (oftentimes simultaneously), is a perplexing, yet real and growing phenomenon. Sociologists studying music preferences among highbrow (ex. opera, classical) and lowbrow (ex. country, blues) consumers have documented an increased shift in highbrow interest in lowbrow music genres (Peterson & Kern, 1996). Similarly, marketing research has uncovered the preference of some high-status luxury consumers to intentionally consume counterfeit items. Marketers too have recently spun out fashion collaborations between brands like Versace and H&M, or Neiman Marcus and Target, reflecting new consumer openness toward status mixing in fashion. Perhaps more broadly, all consumers, regardless of socio-economic status, may be increasingly likely to prefer more status variety (ex. mixing high and low-status items) among the goods they consume, as suggested by recent books such as *Trading Up* (Silverstein et al., 2008).

Though the recent rise of omnivorous consumption is well-documented, less well understood are the motivations which underlie the preference for consumption omnivorousness. If consumers prefer to signal status or status-related identities, why would they intentionally consume lower-status items alongside high-status signals? In this essay, we explore one possible motivation for this preference: self-expression. Recent research on behavioral choice has demonstrated that the need for self-expression can also serve as a strong driver of consumer choice (Berger & Heath, 2007; Chernev, Hamilton & Gal, 2011; Richins, 1994). Yet questions involving the role of self-expression on omnivorous behavior remain unexplored.

Through four studies, we show that consumers' preferences for omnivorous consumption are mediated by their need for self-expression (Study 1). Furthermore, our findings suggest that a sense of agency – the ability to control one's choices (Bandura, 1986) – moderates the role of

self-expression in omnivorous behavior (Study 2). Additionally, consistent with the sociological literature on omnivorousness, we find that omnivorousness is distinctive for higher-status, as opposed to lower-status consumers (Study 3). Finally, we extend these findings to co-branding phenomena, particularly where high and low-status brands collaborate (Study 4). Our results suggest that high status owners of both brands devalue pre-fabricated high and low-status co-branding bundles because self-expression and personal agency become obviated.

The rest of this essay is organized as follows: a brief exposition of the literature that led to our predictions, and a discussion of four experimental studies that suggest a theoretical model of the role of self-expression in omnivorous consumption.

LITERATURE REVIEW

The Emergence of Omnivorousness

Past research on social status has shown that taste and consumption serve as means for consumers to engage in conspicuous consumption (e.g. by buying expensive, publically-visible items) in order to signal their social position (Duesenberry, 1949; Frank, 1985; Leibenstein, 1950; Veblen, 2006) or differentiate from low-status others and other undesirable, dissociative out-groups (Belk, 1988; Berger & Heath, 2007; Escalas & Bettman, 2003; Holt, 1998; White & Dahl, 2007). From this signaling perspective, it is assumed that consumers would *consistently* seek to signal higher-status identities in domains ranging for the arts, fashion, real estate, the law, and cuisine as a means of achieving social class distinctions (Bourdieu, 1984; Johnston & Baumann, 2007; Phillips & Zuckerman, 2001).

Yet recently, an alternative view on status consumption has emerged, which provides some evidence that consumers might intentionally mix high and low-status items, or in other

words, practice *omnivorousness* (Peterson & Simkus, 1992). For instance, recent shifts in the General Social Survey indicate that some Americans are more likely to consume both the fine arts and a wide range of low-status activities (Peterson, 1992; Peterson, 1997). Additionally, other research suggests that both high and low-status service firms may engage in more status variety when it comes to their offerings (e.g. practicing a lower-status field of law, or providing more unconventional investment advice), relative to middle-status service firms (Phillips & Zuckerman, 2001). These findings contradict the idea that status and taste are strongly coupled and that consumers shun cultural expressions that are linked to dissociative groups. Rather, the research on omnivorousness suggests the emergence of new democratic rules for governing symbolic boundaries (Lamont & Molnar, 2002).

Why is this shift toward omnivorousness taking place? Previous research has explained this change as a function of structural shifts (Erickson, 1996; Johnston & Baumann 2007; Peterson & Kern, 1996). For instance, workplaces now necessitate the interaction and coordination of people from different status groups. This organizational influence has contributed to diverse social networks and the need for common ground during "watercooler" discussions. Values and generational changes may also have contributed to this shift, particularly among the Boomer generation. Finally, the industries and organizations that produce these products have cultivated bridges between high and low-status groups in an effort to gain further market penetration. Marketers increasingly combine their products with those of other companies and engage in "co-branding" to combine or bundle two well-known brands into a joint product. For instance, fashion brands have witnessed a growing high and low-status co-branding phenomenon: luxury brands (such as Jimmy Choo, Karl Lagerfeld, Stella McCartney,

Roberto Cavalli, and Vera Wang) have entered into collaborations with lower status companies (like Target, Kohl's, J.C. Penney, Wal-Mart, and Payless Shoes).

Omnivorousness and Need for Self-Expression

Though research on omnivorousness has framed it as a function of changes in social structure, this explanation does not fully illuminate the motivations of consumers to partake in such behavior. We suggest that the utility from omnivorous behavior is derived not solely from networking benefits, but also from more personal needs for self-expression. The literature on status and taste remains largely silent on this issue, perhaps due to a focus on a macro or structural level of analysis that may be less beneficial in understanding personal and individual-level reasons for omnivorousness. We seek to shed more light on the motivations for omnivorousness, by exploring one possible motivation for this preference: self-expression.

Traditionally, self-expression has been considered a fundamental motivation in consumer behavior (Belk, 1988; Richins, 1994). Researchers have highlighted the importance of freedom of choice, individualism and unconventionality as components of self-expression (Aaker & Schmitt, 2001; Iyengar & Lepper, 1999; Kim & Drolet, 2003). Additionally, recent marketing research has characterized the desire for self-expression as a function of three motivations: the need for uniqueness, the need for distinction, and the desire to express one's identity (Chernev, Hamilton, & Gal, 2011). Given this conceptualization of self-expression, it is logical that symbolic brands, particularly those that signal status identities, may be used by consumers to fulfill such distinction and uniqueness-driven needs.

Beyond traditional status consumption, omnivorousness can be seen as consumer behavior that is self-expressive. Indeed, the mixing of different status levels can be seen as both

unique and unconventional, because it violates symbolic status boundaries (Lamont & Molnar, 2002) that demarcate membership in distinct status groups. Furthermore, we believe omnivorousness allows self-expressives to signal that they have the acquired knowledge and expertise – the cultural capital (Bourdieu, 1984) – to transgress these status boundaries and mix brands or products of varying status levels. Thus, we predict a correlation between self-expression desires and preferences for omnivorous options. Further we predict that this preference by self-expressive consumers is fully explained by the knowledge and expertise (or "cultural capital") embedded in these omnivorous choices.

H1a: An increased desire for self-expression is predictive of increased omnivorous preferences.

H1b: The relationship between desire for self-expression and omnivorous preferences is explained by preferences for the expression of knowledge and expertise.

Additionally, we propose that agency, or the ability to control one's own choice, is an important component of omnivorousness. Consistent with previous research documenting the relationship between self-expression and choice (Aaker & Schmitt, 2001; Iyengar & Lepper, 1999; Kim & Drolet, 2003), self-expressives prefer omnivorousness more when they actively choose it.

H2: Self-expressives prefer omnivorousness more when they are provided agency (i.e., choice) in their omnivorous consumption.

The previous hypotheses propose that all consumers who have a strong desire for self-expression would prefer to intentionally mix both high- and low-status products. However, we also propose that omnivorousness is more likely to occur among high-status self-expressives,

given that the extant literature on omnivorousness has generally focused on this behavior among high-status groups (Peterson & Kern, 1996; Peterson & Simkus, 1992; Phillips & Zuckerman, 2001). While we believe that all consumers, regardless of status-level, may enjoy the self-expressive benefits of omnivorousness, high-status self-expressives may be able to distinguish themselves through this symbolic boundary-crossing behavior. Among low-status self-expressives, omnivorousness would be driven by an increased consumption of high-status items. This behavior however, could be confused with typical status-seeking behavior; as a result, it may yield limited expressive benefits. By contrast, high-status omnivorousness is surprising and unconventional, because these consumers choose to consume downwardly when they do not have to. Thus, omnivorousness more clearly reflects a high-status consumer's acquired knowledge and expertise – or "cultural capital"– to transgress status boundaries and engage in status mixing. Thus we propose the following:

H3: Omnivorous behavior is more likely to occur among high-status self-expressives than low-status self-expressives.

Finally, given our previous hypotheses, we propose a managerial implication for co-branding phenomena involving brands of varying status levels. Consider a product co-branding venture (called "Brand AB"), between a high-status brand (ex. "Brand A") and a low-status brand (ex. "Brand B"). For the sake of this example, we have three types of consumers: one already purchases Brand A (but not brand B), another already purchases Brand B (but not Brand A), and the third already purchases both brands A and B. Which consumer group would place the greatest value on the product of this brand collaboration, Brand AB?

If our previous hypotheses are valid, then consumers of both Brand A and Brand B may have chosen these brands for self-expressive needs, and therefore value their agency and personal creativity in combining these brands. Our prediction, then, is that when high and low-status companies create pre-fabricated co-branding products, omnivorous consumers who own both of the partnering brands will react most negatively to the collaboration.

H4: In co-branding involving a high and low-status brand, the group who reacts most negatively to the co-branding is the previous consumer of both brands.

In short, across four studies, we seek to test the mediating role of self-expression in preferences for omnivorousness, and the moderating role of personal agency in preferences for managerial offerings. Our hope is to introduce a new point of view on this status-based omnivorousness, and suggest that it is employed by people who are seeking self-expression. Bridging the literatures on omnivorousness and self-expression, we propose that omnivorous consumption is a form of self-expression, and that consumers prefer omnivorousness because it signals cultural capital.

In the next section we will discuss the tests that provide the findings for these conclusions. We will follow with a discussion of the managerial and social implications of the relationship between self-expression and omnivorousness.

STUDY 1: OMNIVOROUSNESS AND SELF-EXPRESSION

We begin by examining whether a desire for self-expression is correlated with increased liking of high and low-status brand mixing (i.e. omnivorousness), even after controlling for

income effects, as well as ownership of the brands involved. Additionally, we assess whether the expression of cultural capital explains why self-expressive consumers might like omnivorousness.

Procedure

105 participants at a major northeastern university laboratory completed a survey on fashion outfits. At the beginning of the survey, participants were asked to complete three items measuring self-expression adapted from previous research (Chernev, Hamilton, & Gal, 2011). However, in this study, we framed these three items in a fashion context. Specifically, participants indicated the extent to which their fashion choices were influenced by (1) their unique, personal individual style, (2) their trying to be different, and (3) their need to express themselves (1 = Not influenced, 7 = Highly influenced). These self-expression items were correlated (α= 0.71); thus, we averaged these three items to form a single variable capturing the desire for self-expression.

For our dependent variable, participants were asked to rate eight different pairs of clothing items (ex. a dress and a pair of shoes, a blazer and a pair of jeans), one pair at a time. Four of the pairs featured men's clothing items, while the other four featured women's clothing items. All clothing items were selected from the Fall/Spring 2011-2012 co-branded collections between H&M and Versace; thus, the fashionability and aesthetic design of the clothing items were very similar. However, we informed participants that each item was designed by *either* H&M or Versace (when in fact, the items were designed by both companies), to make some of the clothing pairs omnivorous. Note that because the H&M-Versace co-branding was an actual,

publicized collaboration, some participants may have been aware of this partnership and therefore more suspicious of our manipulation. Indeed, 15 participants indicated that they had heard of a partnership between H&M and Versace prior to the survey. However, inclusion of these participants does not change the results of our experiment – thus, they are included in the sample in all subsequent analysis.

We created "omnivorous" and "univorous" clothing pairs by telling participants either that one item was produced by H&M and the other by Versace (omnivorous pairing), or that both were produced by Versace (univorous pairing). For all participants, we ensured that exactly two men's and two women's clothing pairs were omnivorous, while the remaining pairs were univorous. We randomized whether a given clothing pair was presented as omnivorous or univorous; furthermore, within omnivorous pairs, we randomized the designer of each clothing item (ex. for an omnivorous blazer and jeans pairing, each item has an equal probability of being framed as "designed by Versace" or "designed by H&M").

For both omnivorous and univorous clothes pairings, we asked all participants to rate (1) the attractiveness of each pairing, and (2) their liking of the pairing, both on 9-point scales (1 = Very low, 9 = Very high). Additionally, to test our prediction that it is this expression of cultural capital that underlies preferences for omnivorousness among self-expressives, we also asked participants to rate the fashion knowledge and expertise reflected in each clothes pairing (1 = Very low, 9 = Very high). After participants had rated all eight clothing pairs, they were asked to answer demographic questions as well as questions relating to their ownership of items from each brand.

Results

For each participant, we combined average liking and average attractiveness scores for all omnivorous outfits, in order to construct an overall omnivorous preference score (α= 0.951). We repeated this exercise for all univorous outfit ratings to construct an overall univorous preference score (α= 0.962). Finally, we averaged the knowledge/expertise ratings across omnivorous clothes pairings to create an overall omnivorous cultural capital rating; similarly, we averaged knowledge/expertise ratings across univorous clothes pairings to create an overall univorous cultural capital rating.

We separate our discussion of these results by omnivorous and univorous clothing pairs. First, we regressed attractiveness ratings of univorous (Versace only) pairings on our three-item measure of self-expression. Once again, we include income as a covariate in the regression, since the ability to afford fashionable clothing could influence the liking of both expensive (ex. Versace) and inexpensive (ex. H&M) fashion brands. Additionally, we included whether participants owned any items from Versace as a covariate in the model. Our results suggest that income does not predict preferences for univorous pairings (β = -0.149, t(100) = -0.859, p = NS). Interestingly, ownership of Versace items was correlated with a decrease in preference for the Versace only outfits (β = -1.199, t(100) = -2.819, $p < 0.01$). This result may be due to partial evidence that the Versace non-owners in our sample were less wealthy than our Versace owners (β = 0.461, t(104) = 1.947 , $p < 0.10$), and perhaps more impressed by the Versace-labeling on outfits. Finally, differing from our predictions, self-expression did predict preferences for univorous clothes pairings, although this relationship was only marginally significant (β = 0146,

t(100) = 1.702, $p < 0.10$). This partial finding may suggest that our self-expressive participants might prefer fashion (and specifically, the outfits we presented) relative to non self-expressive participants. An interesting follow-up study might assess whether self-expressive individuals would similarly prefer univorous-labeled outfits (ex. H&M only outfits) relative to non self-expressive individuals.

STUDY 1: PREFERENCES FOR OMNIVOROUS CLOTHES PAIRINGS

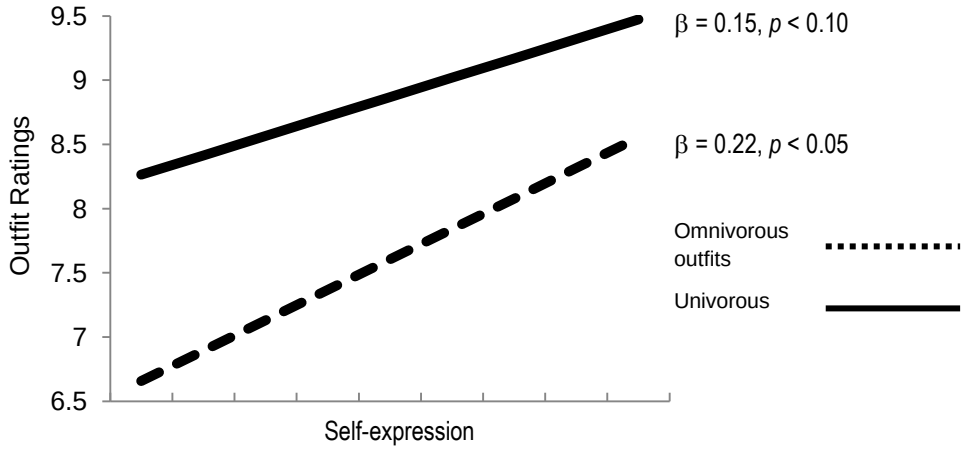


Figure 1. Increased self-expression is associated with preferences for omnivorous outfits, and to a lesser extent, univorous outfits.

Next, we regressed attractiveness ratings of omnivorous outfits on our three-item measure of self-expression, again including income as a covariate. Additionally, we included variables capturing whether participants owned either H&M items or Versace items, as well as an interaction term capturing whether participants owned items from both brands. Our results suggest that income does not predict preferences for omnivorous pairings (β = 0.001, t(100) = 0.005, p = NS), nor does ownership of H&M items (β = -0.336, t(100) = -0.938, p = NS), ownership of Versace items (β = -0.188, t(100) = -0.251, p = NS), or ownership of items from both brands (β = 0.791, t(100) = 0.883, p = NS). At the same time, consistent with our

predictions, desire for self-expression predicted attractiveness ratings for omnivorous clothes pairings ($\beta = 0.221$, $t(100) = 2.671$, $p < 0.01$).

To test the idea that the expression of cultural capital underlies self-expressive preferences for omnivorousness, we then added each participant's overall cultural capital rating for these pairings to the model. Again, higher scores on the cultural capital rating suggest the participant rated the omnivorous pairing as reflecting greater fashion knowledge and expertise. First, consistent with previous results, the income variable was not significant ($\beta = -0.039$, $t(99) = -0.386$, p = NS); similarly, neither ownership of H&M ($\beta = 0.015$, $t(99) = 0.068$, p = NS) or Versace items ($\beta = 0.610$, $t(99) = 1.306$, p = NS) predicted preferences for omnivorous pairings. Interestingly, in this model, ownership of both H&M and Versace items led to an increased preference for the H&M-Versace pairing ($\beta = 1.231$, $t(99) = 2.227$, $p < 0.05$). Finally, central to our predictions, when cultural capital ratings were included in the model, they significantly predicted participants' preferences for the pairings ($\beta = 0.755$, $t(99) = 12.810$, $p < 0.001$). At the same time, desire for self-expression no longer predicted preferences ($\beta = 0.062$, $t(99) = 1.194$, p = NS). These results suggest that the expression of cultural capital is an important component of self-expressives' preferences for omnivorous pairings.

Discussion

Our results from this first study suggest that self-expressive individuals exhibit a stronger liking of omnivorous choices. Even after controlling for income and ownership variables, increasing desire for self-expression is correlated with increased ratings of outfits that mixed high and low-status fashion brands. The relationship between self-expression and liking of

univorous, high-status only outfits is also positive; however, this relationship is marginally significant, and the strength of the relationship appears to be smaller as well. Furthermore, self-expressive preferences for omnivorousness appear to be explained by the knowledge and expertise perceived in these omnivorous options. This finding provides support for the idea that omnivorousness is appealing to self-expressives because it allows them to express their uniqueness in having the cultural expertise – or "cultural capital," per Bourdieu (1984) – to appreciate the combination of both high and low-status items.

STUDY 2: AGENCY AND CHOICE IN OMNIVOROUSNESS

For our second study, we test whether agency – defined as the ability to exercise control over one's actions (Bandura, 1989) – is an important part of the benefits of self-expression. Specifically, do self-expressives like omnivorousness more when they get to create the omnivorous pairings (as opposed to a company or another person creating it for them)? Previous research has suggested that the individual desire to self-express and to process choices in self-relevant and meaningful ways is associated with desire for agency (Vallacher & Wegner, 1989), and that the ability to choose is a fundamental component of self-expression (Kim & Drolet, 2003; Kim & Sherman, 2007). Based on this literature, our prediction is that preferences for omnivorous options should increase when the self-expressive consumer is afforded agency in creating that omnivorousness.

To test this possibility, we extend our analysis to music. Previous research (Bryson, 1996; Peterson & Kern, 1996) has suggested that certain music genres are seen as highbrow (for example, classical and opera), whereas others are seen as lowbrow (for example, country and

bluegrass). Given these findings, we designed an experiment in which participants evaluated a music channel bundle that featured one highbrow music genre and one lowbrow genre. In a between-subjects design, we manipulated both need for self-expression as well as the ability to select genres within the music channel bundle. Our prediction is that because agency is an important component of omnivorousness, participants with a higher need for self-expression would rate omnivorous music bundles higher when they were provided with the opportunity to actively construct the bundles.

Procedure

132 participants from a national online sample completed our survey on music channel bundles in exchange for a small monetary reward. Participants were randomly assigned to one of four conditions in a 2 (self-expression needs: high vs. low) x 2 (agency provided: yes vs. no) between-subjects design. To manipulate self-expression needs, we employed a need for self-expression priming task adapted from previous research (Chernev, Hamilton, & Gal, 2011). We began the survey by asking all participants to indicate their preferences among a variety of topics (favorite color, sport, movie, academic subject, and ice cream flavor) such that we could estimate how similar or different they were to other respondents. For each topic, participants selected from 10-14 commonly preferred options. In the high self-expression needs condition, participants were told that our analysis estimated that they are "very similar" to the other respondents completing the survey. Conversely, in the low self-expression needs condition, they were told that they are "very different." As previous research has suggested, this task activates a

need to self-express among the participants who were told they were very similar, while lowering self-expression needs for those who were told they were very unique.

After the self-expression manipulation, all participants were asked to indicate their personal ranking of two highbrow music genres: classical and opera music. Then, participants indicated their ranking of two lowbrow music genres: bluegrass and country music. Following this ranking task, participants were then asked to imagine themselves on a 2-hour airline flight that was selling music channels for entertainment. At this point, participants were randomly assigned into either an "agency" condition or a "no agency" condition, as described below.

Participants in the "agency" condition were told they could select one music genre from "Group 1" which consisted of opera and classical music, and one genre from "Group 2" which consisted of bluegrass and country music. By contrast, participants in the "no agency" condition were merely given a music bundle that featured their highest ranked highbrow and lowbrow genres as inferred from the ranking questions earlier in the survey. Our goal was to have all participants evaluate a music bundle that essentially featured their top ranked highbrow and lowbrow music genres, while providing some participants with the bonus of being able to construct this bundle. To this end, we eliminated ten participants in the agency condition who selected music genres for their bundle that did not match their genres ranking at the beginning of the survey.

Finally, we asked all participants to rate their liking of, and interest in purchasing the omnivorous (highbrow and lowbrow) music channel bundle on a 1-9 scale (1 = Very low, 9 = Very high). The liking and interest in purchase scores were highly correlated ($\alpha = 0.867$); thus, we averaged these scores for each participant to construct a measure of overall preference for the

bundle. We also asked participants to indicate whether they regularly consumed each of the four music genres in the survey on a 1-5 scale (1 = Definitely no, 5 = Definitely yes). To control for intrinsic music preferences, we added each participant's self-reported consumption of the highbrow and lowbrow music genre in their bundle as a co-variate in our model.

Results

Participants' omnivorous preference was analyzed using a 2 (self-expression needs: high, low) x 2 (agency: yes, no) between-subjects ANCOVA, with participant consumption of the relevant music genres as a co-variate. No main effects emerged for our self-expression manipulation ($F(1, 126) = 1.901$, p = NS), or our agency manipulation ($F(1, 126) = 1.901$, p = NS), suggesting that participants did not prefer omnivorousness more in general when they were primed self-expression, nor did they prefer agency in general.

However, as hypothesized, the interaction between our agency and self-expression measure was significant ($F(1, 126) = 4.279$, $p < 0.05$). Among consumers who did not have a need to self-express, there were no difference in preferences for the omnivorous music bundle between participants who were given agency in their bundle construction (M = 3.80) and those who were not (M = 4.02; $F(1, 64) = 1.067$, p = NS). At the same time, among consumers who did have a need to self-express, participants who were given agency rated the omnivorous music bundle higher (M = 4.80) than those who were not given agency (M = 3.82; $F(1, 60) = 4.858$, $p < 0.05$). Figure 2 summarizes the results of this study.

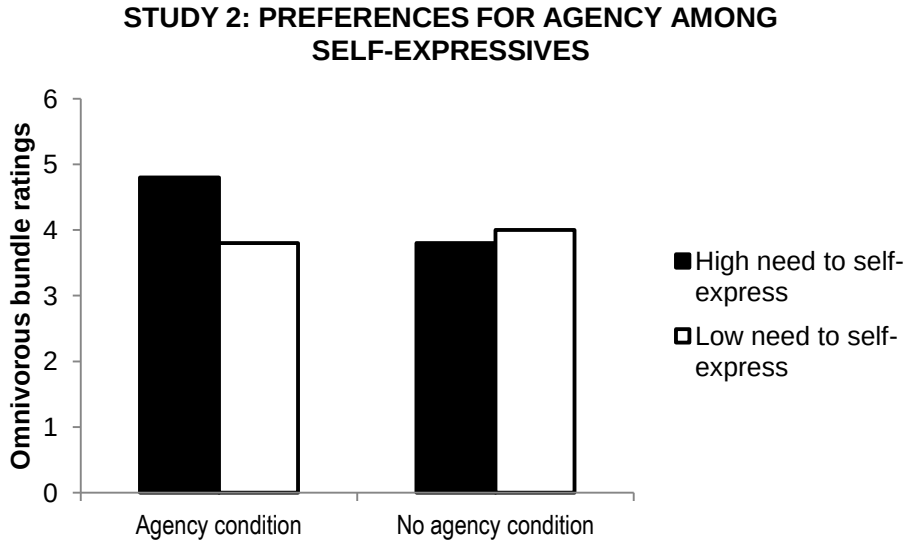


Figure 2. Self-expressives prefer omnivorousness when they are provided with agency

Discussion

As predicted, we find that agency is an important component of preferences for omnivorousness. Specifically, it appears that there is a positive relationship between self-expression and preferences for omnivorousness (consistent with Study 1). However, this was only the case when self-expressives were given agency in their omnivorousness. When high self-expressives were not given the ability to actively choose their music bundle, they did not exhibit preferences for the omnivorous bundle.

These results may appear inconsistent with the findings of Study 1, where self-expression is generally associated with an increased preference for omnivorous outfits, even when participants did not have the opportunity to construct the outfits themselves. One possible explanation is that our self-expression prime is weak relative to the chronic self-expression measured in Study 1 in capturing self-expression; thus, distinctions between high and low self-expressives may not have been fully utilized in our experimental design. Nevertheless, as our

self-expression prime is borrowed from previous research (Chernev, Hamilton, & Gal, 2011), our results still support the idea that agency is a unique ingredient in the enjoyment of omnivorousness among self-expressives.

STUDY 3: THE ROLE OF STATUS IN OMNIVOROUSNESS

In our third study, we wanted to explore whether the relationship between omnivorousness and self-expression is moderated by the status level of the consumer considering the omnivorousness. Specifically, do higher-status consumers see the mixing of high and low-status items differently than lower-status consumers? For a higher-status consumer, engaging in omnivorousness would involve seeking lower-status items to mix in with one's typical higher-status goods. By contrast, for a lower-status consumer, omnivorousness involves seeking higher-status items to mix in with one's typical lower-status goods. This leads to a fundamental question: are these different activities ("downwards" omnivorousness versus "upwards" omnivorousness) seen as equally self-expressive by the consumers engaging in them?

Our prediction is that downwards omnivorousness is more self-expressive than upwards omnivorousness. Indeed, all consumers, regardless of their status position, should be able to gain self-expressive benefits from omnivorousness, as it is distinctive and violates expectations. Our first study confirms this assertion; even *after* controlling for income, we found that the more self-expressive consumers were the ones who preferred the omnivorous outfits. Yet at the same time, if consumers use omnivorousness to express cultural capital, then perhaps it is more likely that higher-status consumers would prefer omnivorousness. Specifically, higher-status consumers might find downwards omnivorousness to be an expression of their cleverness in mixing status-

levels, since this interest in lower-status goods violates expectations (ex. that one should consume superior goods when possible). At the same time, lower-status consumers might not see upwards omnivorousness as being particularly self-expressive. Specifically, since many consumers in their strata might want higher-status goods (ex. due to aspirational concerns), consuming omnivorously does not violate expectations as much for lower-status consumers as it might for higher-status consumers.

Thus, we predict that when primed to self-express, high-status consumers would be more inclined to engage in omnivorous behavior. At the same time, low-status consumers, when primed to self-express, would not exhibit an increased tendency to mix high and low-status items. To test these ideas, we employed a 2 (status: high, low) X 2 (self expressive: high, low) experimental design in which we manipulated both the status level of each participant as well as his or her need for self-expression.

Procedure

123 male participants from a national, online sample completed a task on magazine choices. Participants began the survey by completing the need for self-expression priming task as in Study 2. After receiving feedback that they were either "very similar" or "very unique" relative to our other respondents, participants were then told to imagine they had won a subscription to a magazine of their choice. Specifically, participants were told they could choose from one of four initial options (which we will describe below). Then, participants were told to consider a second magazine, either from the remaining three magazines on the original list, or

from a list of four additional magazines; this yielded seven possible choices for the participant's second selection.

We randomly assigned participants to high and low-brow conditions by varying the order of the magazines they chose from. The highbrow participants began the task by selecting one of four highbrow magazines (The Economist, National Geographic, The New Yorker, and Time Magazine). To increase the sense of ownership for the magazine, we asked participants to elaborate on, and write a few sentences on why they chose their selected magazine. Then, highbrow participants were told they could consider both the previous three unselected choices as well as four new lowbrow options (Esquire, GQ, Men's Health, and Sports Illustrated) for a second magazine. The lowbrow participants, by contrast, elaborated on and selected from the lowbrow magazines first. After describing why they selected one of the lowbrow magazines, the lowbrow participants then considered both low and high-brow magazine options for their second selection. A manipulation check at the end of the survey confirmed that high-brow magazines were rated as more prestigious (M = 5.61) than low-brow magazines (M = 4.83; $F(1, 123) = 49.790$, $p < 0.00$), supporting our highbrow-lowbrow classification of these options.

To assess participants' overall interest in omnivorousness via the second magazine choice, we asked participants to make repeated choices between a remaining highbrow magazine and a remaining lowbrow magazine (ex. 1 = Definitely The Economist, 9 = Definitely Sports Illustrated) for their second magazine choice. We asked this question for all possible pairings, yielding a total of twelve different highbrow-lowbrow choice scenarios for each participant. Finally, to control for intrinsic magazine preferences due to education, we added each participant's self-reported years of education as a co-variate in our model.

Results

Participants' omnivorous choice was analyzed using a 2 (self-expression needs: high, low) x 2 (consumer status: high, low) between-subjects ANCOVA, with participant years of education as a co-variate. A main effect emerged for our self-expression manipulation ($F(1, 118) = 2.830$, $p < 0.10$), although this effect was only marginally significant. This partial finding suggests that our high self-expressive participants were more likely to select low-brow magazine choices relative to our low self-expressive participants. Also, a significant main effect emerged for our status manipulation ($F(1, 118) = 14.215$, $p < 0.00$). This finding suggests that our high-brow participants were more likely to select low-brow magazine choices relative to our low-brow participants.

Additionally, consistent with our hypotheses, the interaction between our status and self-expression measure was significant ($F(1, 118) = 5.459$, $p < 0.05$). Among high-status consumers, those with a need to self-express were more likely to prefer a lowbrow second choice ($M = 5.76$) than those without this need ($M = 4.35$; $F(1, 60) = 8.365$, $p < 0.01$). In other words, the highbrow participants were more interested in omnivorous (simultaneous high and low-brow) magazine choices when self-expressive needs were activated. By contrast, no differences existed between low-status participants who were primed with self-expressive needs ($M = 3.62$) and those who were not ($M = 3.87$; $F(1,57) = 0.146$, $p =$ ns). Figure 3 provides a summary of these findings.

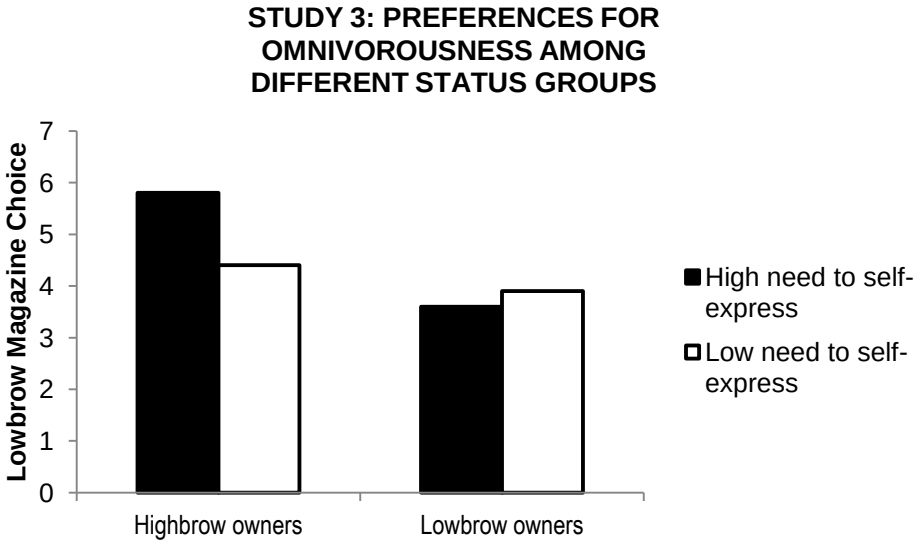


Figure 3. Omnivorousness satisfies self-expressive needs among highbrow participants, but not lowbrow participants.

Discussion

In this experiment, we find that the relationship between self-expression and omnivorousness can be moderated by the status level of the consumer. Our results suggest that for highbrow primed consumers, the desire for downwards omnivorousness is greater when self-expressive needs are salient. At the same time, for low-brow primed consumers, upwards omnivorousness does not appear to be valuable when self-expression is important. In short, it appears that not all omnivorousness is created equal, and that downwards omnivorousness appears to be more self-expressive than upwards omnivorousness.

STUDY 4: OMNIVOROUSNESS IN CO-BRANDING

The previous study suggests that high-status self-expressives prefer and engage in omnivorous behavior to express their distinct cultural capital, and Study 2 suggested that agency is an important component of this preference for omnivorousness. These results imply an

interesting managerial implication – that consumers with a high need for self-expression might react negatively to co-branding that explicitly pairs the high and low- status brands that they currently combine to signal their uniqueness. Negative reactance to this type of co-branding, which we term "hi-lo co-branding", might occur among self- expressives simply because the omnivorous behavior that made them unique has been appropriated, commodified and made available to the masses.

Hi-lo co-branding partnerships have recently become prominent, particularly in the fashion industry. For instance, H&M has partnered with a variety of luxury brands such as Versace (as mentioned in Study 1), Jimmy Choo, Karl Lagerfeld, Stella McCartney and Roberto Cavalli; other iconic designers (ex. Anna Sui, Isaac Mizrahi, Vera Wang, and Christian Siriano) have also signed off on collaborations with companies like Target, Kohl's, and Payless Shoes. Thus far, co-branding research considering high and low-status brand pairings has yet to reveal any negative effects of such co-branding from a brand equity perspective (Vaidyanathan & Aggarwal, 2000; Washburn et al., 2000; Washburn et al., 2004).

In this study, we assess the possibility of negative reactance to hi-lo co-branding by self-expressives by creating a hypothetical collaboration between a high and low-status brand. We surveyed consumers who owned items from either the high-status brand, the low-status brand, or both brands. Given that self-expresses are more likely to mix both high and low-status brands (Study 1), consumers who own both high and low-status brand items are more likely to be self-expressives than consumers who only own the high or low-status brand. Thus, we predict that among different ownership groups (only owning the high-status brand, the low-status brand, or both), consumers who own both brands are more likely to react negatively to hi-lo co-branding than consumers who do not own both brands.

Procedure

We recruited 85 students enrolled in a branding course to complete our survey on a hypothetical co-branding initiative between Prada (a higher-status brand) and Banana Republic (a lower-status brand). Our survey design is borrowed from previous research on brand extension evaluations by different ownership groups (Kirmani et al., 1999), which also utilized hypothetical branding scenarios. Specifically, participants were told to imagine that Prada created a regular collection for Banana Republic called "Prada for Banana Republic". Further, participants were told that the collection would be designed by Prada, but feature lower-cost materials relative to those in typical Prada products. Participants were also told that the collection would sell at Banana Republic stores, at prices halfway between those of current Banana Republic and Prada prices.

We asked participants whether they owned items from either the Prada or Banana Republic brands; this measure allowed us to separate participants into a Prada-only ownership group, a Banana Republic-only ownership group, and an omnivorous ownership group that owned items from both brands (a fourth group – those who did not own items from either brand – was excluded from the analysis due to an insufficient sample size of eight participants).

To assess negative reactance to the hypothetical hi-lo co-branding, we asked all participants to rate the prestige ("How would you rate the prestige level of the new Prada for Banana Republic collection"; 1 = Low prestige, 7 = High prestige) and status ("How would you rate the status level of the new Prada for Banana Republic collection"; 1 = Low status, 7 = High status) of the new Prada for Banana Republic collection. These measures were derived based on previous research assessing reactance among different ownership groups to marketing actions by a luxury brand (Kirmani et al., 1999). Once again, our prediction is that relative to

owners of only Prada or Banana Republic items, owners of both brands will dislike the initiative the most and therefore rate the collection lower in status and prestige.

Results

We constructed an index averaging participant responses on the prestige and status questions, which yielded a Cronbach's alpha of 0.94. A one-way ANCOVA analysis with gender as a co-variate revealed a marginally significant main effect of the three ownership groups ($F(2, 73) = 2.988$, $p < 0.10$). Planned contrasts confirmed that owners of both brands rated the co-branded collection as being of lower prestige and status ($M = 3.08$) than owners of only the high-status brand ($M = 4.33$; $t(73) = 2.177$, $p < 0.05$). Similarly, owners of both brands rated the co-branded collection as being of lower prestige and status than owners of only the low-status brand ($M = 3.94$; $t(73) = 2.089$, $p < 0.05$). No differences were observed between the univorous ownership groups (who owned either items from the high-status or low-status brand, exclusively; $t(73) = -0.777$, p = NS). Figure 4 provides a summary of these findings.

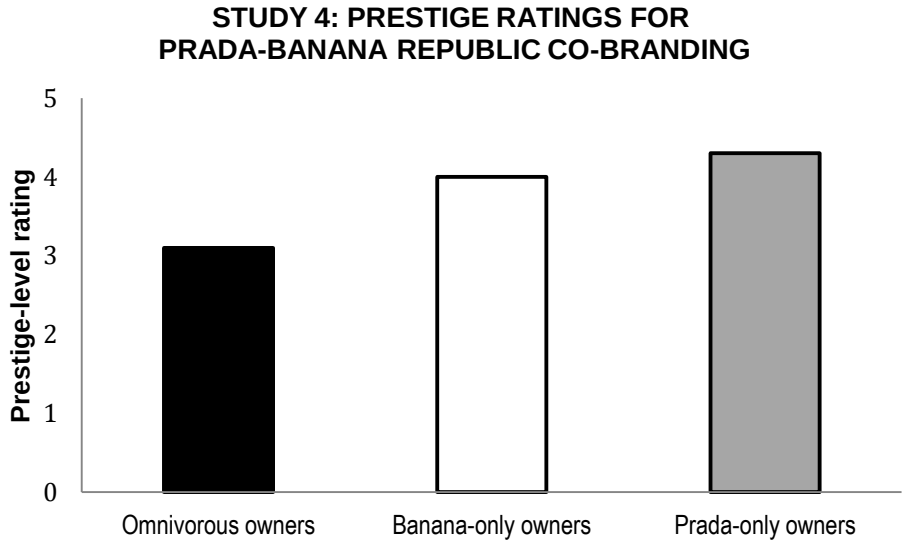


Figure 4. Omnivorous consumers rate the prestige of a co-branding more negatively than univorous consumers when it involves the brands they own

One possible explanation for the observed differences among ownership groups could be the differences in status levels across the three types of owners. For instance, it could be argued that owners of both the high and low-status brands are aspiration consumers who consume the high-status brand as a means of conspicuous consumption, rather than consuming the low-status brand as a means of self-expression. In other words, these consumers are the lower-status, upwards omnivorous participants from Study 3, rather than the higher-status, downwards omnivorous participants from the same study. Thus, introducing co-branding between the aspirational brand that they own and the non-aspirational brand that they own could cause reactance among these consumers, because it compromises their attempts to signal status (through the aspirational brand).

A way to test this alternative explanation is by considering whether participants differ in their ability to afford Prada items. If the omnivorous ownership group comprises aspirational consumers, we should expect their ability to afford Prada products to be lower than the Prada-only group, but higher than the Banana-only group. To examine this possibility, we asked for each participant to rate his or her ability to afford Prada items ("How would you describe your ability to afford typical Prada products," 1= "Very unable," 7 = "Very able"). Appendix C provides a summary of the differences among groups in the ability to afford the high-status brand.

A one-way ANCOVA analysis revealed a significant main effect of the three ownership groups ($F(2, 74) = 4.968$, $p < 0.01$) in terms of their ability to afford the high-status brand's products. However, comparing ownership groups directly, we find that owners of both brands did not differ in their ability to afford typical Prada items ($M = 4.28$) relative to owners of only Prada items ($M = 4.28$; $t(73) = -0.332$, p = NS). At the same time, omnivorous owners differed

from owners of only Banana Republic items (M = 3.08; t(73) = 2.892, $p < 0.01$). Similarly, Prada-only owners differed significantly from Banana Republic-only owners (t(73) = -1.997, p = 0.05) in their ability to afford Prada items. In short, it appears that the differences among the three ownership groups are driven by the Banana Republic-only consumers, who consider themselves less able to afford typical Prada products relative to the other two groups.

Discussion

In summary, the results of this survey support the idea that individuals who engage in omnivorous behavior (by consuming specific high and low-status brands) may react negatively when their unique behavior is made less unique by co-branding efforts between the high and low-status brands that they own. Compared to consumers who exclusively own products from a high or low-status brand, these omnivorous consumers may find the products to be more undesirable. This reactance occurs even among omnivorous consumers who do not otherwise differ from other univorous, high-status brand owners in their ability to afford these high-status products.

CONCLUSION

Across four studies, we find evidence suggesting that consumers with a high need for self-expression are more likely to prefer omnivorous behavior (Study 1) than those with a low need for self-expression. Furthermore, these self-expressives prefer omnivorous pairings due to the expression of cultural capital that the omnivorous pairing affords. Additionally, self-

expressives also prefer to have agency over their omnivorous consumption (Study 2), and it appears that high-status consumers are more likely to engage in omnivorous behavior than low-status ones when self-expression needs are activated (Study 3). Finally, individuals who engage in omnivorous behavior react more negatively than other consumers when the omnivorous brands that they own decide to engage in collaboration (Study 4). We suggest this latter finding is due to the fact that omnivores enjoy their choices because they express distinct cultural capital. When co-branding takes away the distinctive value of their omnivorous choices (by making the omnivorousness explicit and therefore available to the masses), omnivorous consumers are more likely than other consumers to respond negatively to the collaboration and its products. Appendix D illustrates the overall experimental paradigm and the contribution of individual experiments to testing our theory of omnivorousness.

These studies have several limitations. First, although some of our findings suggest that self-expressives prefer omnivorous pairings, it is unclear whether the preference for these pairings stems from the possibility that self-expressives generally prefer variety. We believe that status variety (mixing high- and low-status brands) is an inherent part of the appeal of omnivorous behavior; thus it is difficult to disentangle general preferences for general variety from preferences for status-based variety. Nevertheless, it might be helpful to research whether self-expressives also prefer the mixing of high-status brands (ex. an outfit consisting of both Prada and Versace items) more than non-self-expressives. If self-expressives do not prefer multiple high-status brand pairings more than non-self-expressives, it would imply that status-variety offers unique value to self-expressives relative to variety in general.

Additionally, it would be beneficial to explore the boundary conditions of the value of omnivorousness. For instance, while we have attempted to study the combination of high and

low-status brands, or high and low-brow products, there may be more nuances among brand status-levels. Thus, exploring the appeal of different combinations of status levels (ex. mixing expensive and mid-priced brands, versus expensive and low-price brands) to self-expressives could be intriguing. Similarly, expanding the analysis to consumer collections (ex. of dresses, shoes, or playlists) could be a fascinating research topic, as considering more than just pairings of items or brands could yield insights into how much omnivorousness is desired among self-expressives, and whether too much omnivorousness (ex. an overly large gap in status level between brands, or a disproportionate amount of low-status items to high-status items in a pairing) is ever possible.

Also, is the desire for self-expression via omnivorous consumption motivated internally or externally? Particularly, do self-expressives care to signal to others that they are engaging in unique and distinct status mixing, or is it enough that they themselves know that that they are engaging in such omnivorousness? Our results connecting preferences for omnivorousness to cultural capital ratings (Study 1), as well as the negative reactance by omnivores to the appropriation of their omnivorous choices (Study 4), suggest that self-expressives are externally motivated. Over-signaling their omnivorousness could cause self-expressives to be imitated by others, which would then make their omnivorous choices (as well as their cultural capital) less unique. At the same time, some of our studies (Study 2 and 3) seem to suggest that self-expressives can be motivated to engage in omnivorousness even when there is no signaling of this behavior to a public audience. We believe that a better understanding of the differences between internal and external motivations for omnivorousness would be a fruitful area of inquiry.

Finally, from a managerial perspective, it would be beneficial to continue research on the negative effects of co-branding for the brands involved in the collaboration. Our current findings suggest that it is the owners of both brands who react most negatively to these collaborations, but in what ways might they react? For instance, do they punish the high-status collaborator, the low-status collaborator, or both by considering other brands for their self-expression? Conversely, the positive effects of co-branding would also yield valuable insights. Beyond increasing brand awareness via such collaborations, do both low- and high-status brands signal "brand omnivorousness" in a way that is attractive to self-expressives who do not own either brand?

To summarize, omnivorousness is an underexplored phenomenon, and we consider this research on the role of self-expression to be a valuable first step in better understanding this behavior. While we have shown in this research that self-expressives may prefer omnivorousness due to the expression of cultural capital, agency, and status, more research is needed to understand the preference for omnivorousness and its managerial applications. Additional knowledge on omnivorousness would advance our understanding of the types of consumers who might be more open to status variety in the brands and products they consume, as well as the type of consumers who are more likely to react negatively to branding initiatives such as co-branding between high- and low-status brands. Finally, research on this topic might lead to more general insights into the many ways that consumers seek to express themselves, and the beneficial role that brands and products can play in this self-expression.

Essay 2: The Consequences of Imagining Conspicuous Consumption

JEFFREY K. LEE

ABSTRACT

This essay explores how imagining status goods ownership can influence the desirability of these products. While previous literature has suggested the positive effects that imagination can have on purchase likelihoods, the author finds opposite effects for items that convey social status due to self-presentation concerns. Across five studies, the author explores the negative impact of imagining ownership of conspicuous products on willingness-to-pay estimates (Study 1a and 1b), and identifies negative imagined audience reactions as the underlying mechanism for this effect (Study 1b and Study 2). Furthermore, this negative imagination effect is dependent on the brand prominence of the product (Study 3), and can be attenuated when participants focus on hedonic, rather than signaling, benefits of product use (Study 4).

"92 per cent of people have dreamed of owning luxury items such as fast cars, motorized yachts and expensive overseas holidays but only 64 per cent have done anything to turn their dream in to reality…research among 2000 people showed that 90 per cent had not even bothered to find out the cost." - *Association of Investment Trust Companies (Financial Adviser, 2001)*

Dreaming or imagining conspicuous consumption, e.g. the enjoyment of Ferraris, yachts, and luxury clothing – is something that many consumers may find themselves engaging in from time to time. The idea of living the good life, and with it, consuming items that mark one's rise in socio-economic status, is heavily ingrained in global consumer culture. Whether it is through reading about the rags-to-riches protagonists from Horatio Alger's 19th century novels, or listening toTravie McCoy's 2010 lyrics in "Billionaire" ("I want to be a billionaire so freaking bad…buy all of the things I never had"), consumers throughout history have been prompted to imagine themselves owning markers of status and success that may be currently out of reach.

Decades of research in consumer psychology have suggested that imagining product consumption generally increases interest in the product (Babin & Burns, 1997; Bone & Ellen, 1992; Escalas, 2004; Keller & Block, 1997; Keller & McGill, 1994; Krishnamurthy & Sujan, 1999; McGill & Anand, 1989) because consumers elaborate on the benefits of the product (Kisielius & Sternthal, 1984, 1986) and are also less likely to counter-argue during imagination (Petrova & Cialdini, 2008; Schlosser, 2003). Thus, imagining ownership of items such as fast cars and motorized yachts might accelerate interest in these items. Yet, as the above statistic suggests, consumers rarely even bother to follow up on their dream purchases to find out how much they would cost. How can we explain how a 90% dream rate translates into a meager 10% follow-up rate?

This essay explores one explanation – that contrary to the extant literature on imagination as a persuasion tactic, imagining ownership of conspicuous goods can lead to a decreased interest in owning these items. Differing from previous work on imagination, this essay focuses on a product category with uniquely social benefits (e.g. status gains) that can cue imagination processes that are relatively social and reflect one's imagined self-presentation (Cooley, 1902; Goffman, 1959; Mead, 1934). Furthermore, while self-presentation research suggests that consumers may have a default tendency to seek products allowing them to self-promote (Paulhus and Levitt, 1987) – for instance, buying a high-end sports car to signal status and wealth – imagining ownership of these items can cue concerns over negative audience reactions from these conspicuous displays of status (Miller, 1992; Leary, 1995; Schlenker and Leary, 1982; Van De Ven et al., 2011). As a result, imagining status goods ownership can generate backfire effects by decreasing interest in actually owning these goods.

This essay proceeds by examining the effects of imagining conspicuous goods ownership on purchase interest in five studies. The first two studies explore the negative relationship between imagining status goods ownership and purchase interest (Study 1a and Study 1b). Study 2 rules out alternative explanations such as mere elaboration while examining salient social costs as an intervening variable. Study 3 examines the role of brand prominence on the relationship between imagination and interest in status goods, while considering the alternative explanation of increased perceived ownership due to imagination. Study 4 extends previous analyses to advertising, and assesses whether consumers can be directed in their imagination such that the potentially negative effects of imagined ownership are mitigated.

LITERATURE REVIEW

Imagining Consumption

Imagining consumption experiences is a fundamental part of consumer decision-making; thus, it should comes as no surprise that the topic has received substantial attention in the consumer research literature. Generally speaking, the existing body of literature has suggested a positive relationship between imagining the consumption of a product and the likelihood of purchasing it (Babin & Burns, 1997; Bone & Ellen, 1992; Escalas, 2004; Keller & Block, 1997; Keller & McGill, 1994; Krishnamurthy & Sujan, 1999; McGill & Anand, 1989). For instance, a classic field study demonstrated that after merely imagining the benefits of a cable TV package, consumers were more likely to ultimately purchase a subscription, even several weeks after engaging in the brief imagination task (Gregory et al., 1982).

Why does the imagination process positively influence consumption? One traditional explanation is that the process of imagination engages cognitive elaboration (Kisielius & Sternthal, 1984, 1986). Thus, if positive attributes of a product are made salient to a consumer during imagination, consumers will reflect more on these attributes, and eventually become more likely to favor the product. Yet more recent evidence has suggested that elaboration does not fully capture the positive effects of imagining consumption (Petrova & Cialdini, 2008; Schlosser, 2003). Beyond stimulating elaboration, imagination can also reduce counter-arguing, because it produces an enjoyable mental state where consumers prefer to imagine consumption benefits over costs.

This essay considers whether these ideas on imagination can be extended to status goods, a category where consumers are especially likely to dream about or imagine ownership (Dubois

& Paternault, 1995). A venerable, interdisciplinary tradition of research has examined consumer desire for status goods (Bourdieu, 1984; Duesenberry, 1949; Frank, 1985; Leibenstein, 1950; Veblen, 2006), such as items that signal wealth (Berger and Ward, 2010; Griskevicius et al., 2007; Han et al., 2010; Rucker & Galinsky, 2008). Status goods are valued because they signal a high-status social position (Duesenberry, 1949; Han et al., 2010), confer social status via ownership (Ordabayeva & Chandon, 2011) and allow owners to facilitate desirable social outcomes within their social networks (Lin, 1999). As a result, status goods differ from products used in previous imagination research (ex. shampoo, technology, food) in that the benefits from ownership are relatively more social (ex. how someone might react to product use), as opposed to personal (ex. the feeling or experience of product use)[1].

Because the benefits of status goods are largely social, the imagination of ownership in this product category is also likely to be more social relative to that of non-status goods. Specifically, imagining status goods ownership is likely to cue thoughts about imagined audiences and self-presentation. A large body of research in symbolic interactionism has explored this type of imagination, by examining how individuals imagine the reactions of others to determine their appropriate self-presentation (Cooley, 1902; Goffman, 1959; Mead, 1934). Cooley (1902), for instance, developed the notion of a "looking glass self" that reflects how people believe they are perceived and judged in the eyes of others, thus affecting their level of pride or mortification. Similarly, Goffman (1955, 1959) suggested people engage in "face work" to manage their "face" (i.e., image) as well as the faces of others, with the goal of minimizing *gaffes* and *faux pas* in social interactions.

[1] Some research has suggested that images of successful others can increase the desire for luxury products (Mandel et al., 2006). But still unaddressed is the question of what happens when consumers focus on their own potential consumption of status goods.

When imagining self-presentation associated with status goods ownership, people consider whether to engage in self-promotion. While some self-presentation literature suggests that individuals may have a default tendency to self-promote (Paulhus and Levitt, 1987), the literature also portrays individuals as careful in their impression management (Goffman, 1955). Thus, when people consider the decision to engage in self-promotion, research has suggested that people carefully evaluate social disapproval from being perceived as braggarts (Leary, 1995; Schlenker and Leary, 1982), and may seek to minimize embarrassment that may come from conspicuousness and being the object of others' attention (Miller, 1992). While individual differences may cause "aggressive" individuals to always pursue self-promotion (Cooley, 1902), the process of imagining self-promotion may generally temper the desire to engage in it by causing individuals to consider negative audience reactions.

Extending this literature on self-promotion to status goods, consumers may initially prefer to self-promote through these products, but imagining ownership might lead to reduced interest in these products due to impression management concerns. In other words, because status goods inherently involve social signaling, imagining ownership of these goods can result in self-presentation considerations and backfire effects. Recent consumer research supports the idea that backfire effects are possible in imagination – for instance, where product experience is difficult to imagine (Dahl & Hoeffler, 2004; Lee & Labroo, 2004; Petrova & Cialdini 2005). Additionally, recent consumer research also supports the idea that status-goods consumption may generate negative audience reactions such as envy (Ordabayeva & Chandon, 2011; Van De Ven et al., 2011). Drawing on both the self-presentation literature as well as this recent consumer research, this essay suggests the following hypotheses:

H1: A negative relationship exists between the imagination of status goods ownership and product interest in these goods.

H2: The negative relationship between the imagination of status goods ownership and product interest is mediated by self-presentation concerns.

Additionally, if the aforementioned negative relationship can be attributed to perceived audience reactions to self-promotion, then this relationship should be influenced by the conspicuousness of the status product. To test this idea, we can employ Han et al.'s (2010) concept of brand prominence – the conspicuousness of brand attributes such as logo sizes on the brand's products. Specifically, any backfire effects observed in imagining status goods ownership should depend on the level of brand prominence associated with the product:

H3: The negative relationship between the imagination of status goods ownership and product interest should be reduced as the level of brand prominence associated with the status good is also reduced.

Finally, while consumers may be inclined to avoid status goods after imagining audience reactions to ownership, it may be possible to direct imagination away from the social signals associated with the product. Borrowing from Patrick and Hagtvedt's (2009) suggestion that luxury goods that can be framed as offering both hedonic and signaling benefits, this essay tests whether making the hedonic benefits of a status product salient can attenuate the negative relationship predicted in previous hypotheses. More formally:

H4: The negative relationship between the imagination of status goods ownership and product interest is reduced when the hedonic benefits of the status good is salient.

To summarize, this essay explores whether consumers can become less interested in owning a status good when they imagine ownership of the item. It is hypothesized that this possibility might occur because consumers take the perspective of audience members during imagination, and experience lowered desires to self-promote due to self-presentation concerns. Five studies test this possibility, while also considering alternative explanations such as ease of imagination (Study 1b, Study 2), cognitive elaboration (Study 2), and perceived ownership (Study 3). Additionally, the underlying mechanism of self-presentation concerns is examined (Study 1b, Study 2), as well as the role of brand prominence (Study 3). The fourth and final study explores whether this backfire effect extends to advertising scenarios (Study 4).

STUDY 1A – THE DEVIL WEARS PRADA

Study 1a tests the relationship between ownership imagination and interest in purchasing status goods. Based on the previous literature on negative reactions towards status signals, the prediction for this study is that participants will exhibit a negativity bias towards status goods after imagining ownership of the product. Thus, this negativity bias will be reflected in decreased interest and willingness-to-pay for the product.

Procedure

113 participants completed an online survey on designer sunglasses at a university behavioral lab in the Northeast. Participants were told to consider the purchase of a pair of unisex Prada Linea Rossa sunglasses (retail: $250), which featured a distinctive, red-stripe Prada

logo on the arms of the sunglasses. Appendix E provides images of the sunglasses from the experiment. First, participants were asked to indicate their liking of the sunglasses (1= Dislike extremely, 7 = Like extremely). On average, participants marginally indicated that they felt positively about the sunglasses (M = 4.27; t(112) = 1.95, $p < 0.06$). Thus, if participants experience a decrease in interest for the product after imagination, it is unlikely that this would be due to the fact that they initially disliked or felt negatively about the product.

Next, participants were randomly assigned to one of three conditions, in which they either (1) imagined "what would it be like to own this pair of sunglasses" for 30 seconds (imagined ownership condition), (2) imagined "what would it be like to try out this pair of sunglasses at a store" for 30 seconds (imagined browsing condition), or (3) received no imagination instructions (control condition). In the first two conditions, the survey was coded such that participants knew the imagination instruction page would automatically advance after 30 seconds. Furthermore, a laboratory manager monitored participants to ensure that they were not engaging in other tasks (ex. cell phone texting) during this period.

Finally, participants answered questions reflecting their interest in the pair of Prada sunglasses. First, participants indicated their interest in owning the pair of sunglasses (1 = Not at all interested, 5 = Extremely interested). Then, participants indicated their willingness-to-pay for the pair of sunglasses. Following these questions, participants answered a variety of demographic questions before exiting the survey.

Results

Two separate one-way ANCOVAs were conducted on the interest and willingness-to-pay variables; a summary of these results can be found in Figure 5. A one-way ANCOVA revealed a main effect of the imagination conditions on interest in owning the sunglasses ($F(2, 110) = 4.233$, $p < 0.05$). Consistent with predictions, imagining ownership of the Prada sunglasses resulted in a lowered interest in ownership, relative to not imagining ownership (i.e., control condition) or imagining trying on the sunglasses. Comparisons across conditions revealed that participants who imagined ownership of the Prada sunglasses were less interested in owning them ($M = 1.65$) than participants who imagined trying on the sunglasses ($M = 2.31$; $t(110) = 2.507$, $p < 0.05$). Similarly, participants who engaged in imagined ownership were less interested in ownership relative to control participants who engaged in no imagination task ($M = 2.30$; $t(110) = 2.494$, $p < 0.05$). Finally, there were no predicted differences between control condition participants and participants who imagined trying on the sunglasses; supporting this relationship, comparisons between these two groups did not reveal any differences ($t(110) = 0.031$, p = NS).

Additionally, a one-way ANCOVA revealed a main effect of the imagination conditions on willingness-to-pay estimates ($F(2, 110) = 6.605$, $p < 0.01$). Looking across experimental conditions, imagining ownership of the sunglasses resulted in a lowered willingness-to-pay relative to not imagining ownership. Specifically, comparisons across conditions revealed that participants in the imagined ownership condition expressed a lower willingness-to-pay ($M = \$30.79$) than those in the imagined browsing condition ($M = \$72.13$; $t(110) = 3.461$, $p = 0.001$). Similarly, participants in the imagined ownership condition had lower willingness-to-pay estimates than participants in the control condition ($M = \$62.30$; $t(110) = 2.649$, $p < 0.01$).

Lastly, comparisons between the imagined trial group and the control group did not reveal any differences in terms of willingness-to-pay ($t(110) = 0.805$, p = NS).

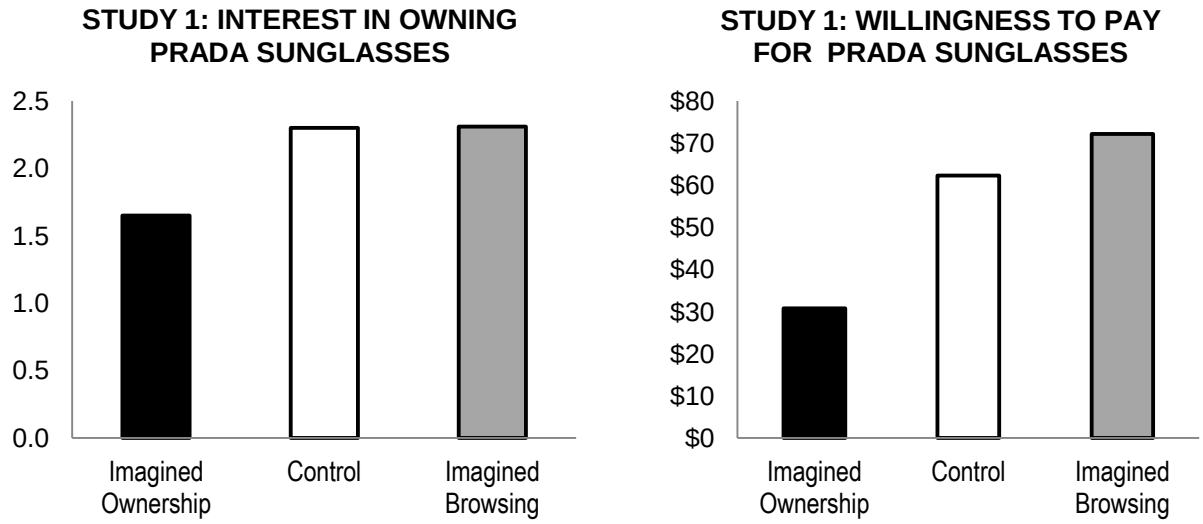


Figure 5. Participants who imagined owning Prada sunglasses exhibited lower interest in owning the product.

Discussion

Combined, these results suggest that imagining ownership hurts consumers' preferences for status good items. Compared to participants who did not receive any imagination instruction, or were asked to imagine trying on the product, participants who imagined ownership of a pair of luxury sunglasses were less interested and less willing to pay for it. Notably, the fact that the imagined ownership group was less interested in the product than the imagined browsing group provides some support for the idea that participants were not merely bored by the luxury item after thinking about the sunglasses. Since participants in both of our

imagination conditions spent the same amount of time thinking about the product, it is unlikely that cognitive habituation to the product (ex. Morewedge et al., 2011) can explain our findings here.

STUDY 1B – STATUS GOODS IN EDUCATION

Study 1b explores the possibility that previous results occurred because items used in these studies were prohibitively expensive, thus making the imagination of ownership difficult. Previous literature suggests that the positivity bias associated with imagination is unlikely to occur when the imagined product or experience is difficult to imagine (Petrova & Cialdini, 2005). Thus, an alternative explanation for our previous results is that the product used in Study 1a – Prada Sunglasses– was difficult to imagine owning because they were considered out of reach from a price standpoint. To test whether our findings generalize beyond luxury goods, Study 1b assesses participants' interest in car decals (retail: $6) from a top-ranked university in the Northeast. Additionally, Study 1b provides participants with the opportunity to report what they imagined when imagining ownership of the decal. Analysis of these responses will allow us to assess the extent to which salient social costs is an underlying mechanism behind the observed negative imagination effects.

Procedure

90 students from a top-ranked private university in the Northeast were recruited to one of the university's behavioral labs, to complete a survey on university car decals as part of a

broader set of studies on psychology and marketing. Students were randomly assigned to one of two conditions: an imagined ownership condition and a control condition in which participants imagined grocery shopping.

Participants were told to consider the purchase of a car decal featuring the university's name. Like the sunglasses, the decal is a signal of status; however, as described earlier, it is relatively inexpensive and is unlikely to be considered a luxury purchase. Appendix E provides an image of the decal from the experiment. All participants were randomly assigned to one of two conditions, in which they either imagined (1) what it would be like to have a university car decal on their car (imagined ownership condition), or (2) what it would be like to go grocery shopping (control condition). The grocery shopping imagination prompt has been employed in previous consumer status research as a control condition (Rucker & Galinsky, 2008).

As with the previous study, participants spent 30 seconds on their respective imagination tasks. Both participants in the imagined ownership condition (M = 5.49; ($t(40) = 5.959$, $p < 0.001$)) and imagined grocery shopping condition (M = 5.44; $t(49) = 6.913$, $p < 0.001$)) indicated that they found the imagination tasks to be easy based on independent t-tests comparing condition averages to the mid-point of the scale (1 = Very difficult, 7 = Very easy). This suggests that if imagination decreases preferences for the decal, it is unlikely to be due to the fact that it is difficult to imagine ownership of the product.

After the imagination task, participants were given an open-ended prompt to describe what they had imagined in a few sentences. Then, participants entered their willingness-to-pay for the decal.

Results

Consistent with previous findings, participants who imagined ownership of the decal were less interested in purchasing the decal relative to a control condition, as evidenced by willingness-to-pay estimates. A univariate ANCOVA (with ownership of a decal as a covariate) indicated that participants imagining the ownership of the decal exhibited a lower willingness-to-pay (M = \$2.39) than those in the control condition (M = \$3.48, $F(1, 88) = 4.10$, $p < 0.05$). Figure 6 provides a summary of these results.

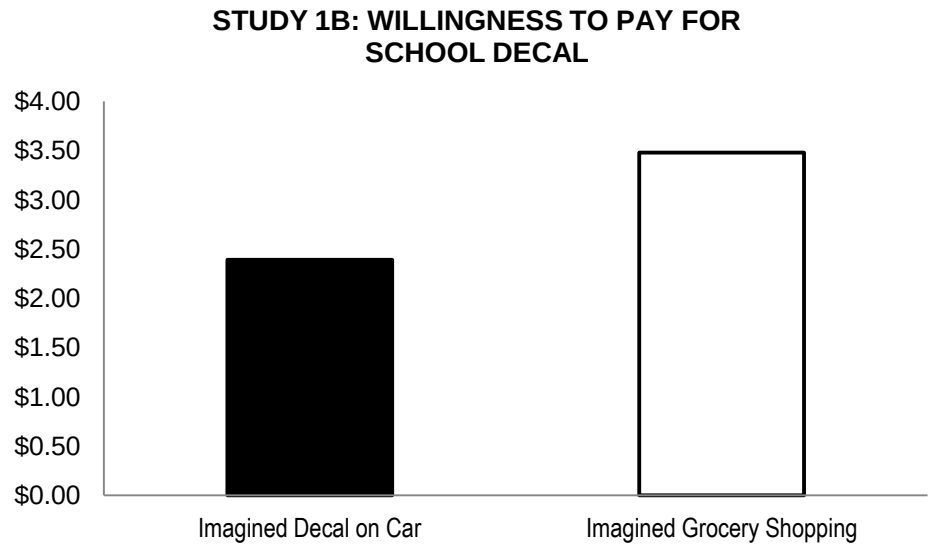


Figure 6. Participants who imagined having a school decal on their car exhibited lower interest in owning the product.

Discussion

The results of Study 1b extend previous findings to a lower-priced product category (car decals), one which is potentially easier to imagine owning given the affordability of the product.

Once again, imagining ownership is associated with decreased willingness-to-pay for the status good. Examining participants' open ended responses in the imagined ownership condition provides a window into the mechanism behind this negativity bias. As described earlier, it is suggested that the process of imagining ownership yields a negativity bias because audience reactions are perceived to be negative. Indeed, 37% of participants expressed a social cost in their open-ended responses. Typical responses included "Terrible—[the decal] would be super show-offy, I would be embarrassed" and "It would show off my status as a student [of this school], which I'm not particularly interested in doing". These results provide initial support for the idea that salient social costs reduce interest in purchasing status goods, and that imagined ownership of these goods may activate these thoughts. The next study directly examines the mediating role of perceived social costs.

STUDY 2 – ELABORATION AS EXPLANATION

Study 2 explored the possibility that the results of Studies 1a and 1b are due to increased mental elaboration in the imagined ownership condition. Specifically, is it merely that participants thought more about the ownership during the imagined ownership prompt and decided that they did not need it? While recent research has suggested that imagination processes are distinct from mere elaboration (Schlosser, 2003), this study assesses whether elaboration explains the relationship between the imagined ownership prompted in the first two studies, and reduced consumer preferences for the status item.

Procedure

87 participants completed an online survey on luxury watches at a university behavioral lab in the Northeast. The experimental design is similar to that of Study 1a and 1b, except this study uses a Rolex watch (retailing at $6,000) in place of the sunglasses and decal. The watch design had both a male and female version; participants viewed an image of their gender-relevant watch, and were once again informed of the retail price of the item for consideration. Appendix F provides an image of the watches from the experiment. As in Study 1a, participants were asked to indicate their liking of the watch (1= Dislike extremely, 7 = Like extremely). On average, participants felt positively about the watch (M = 4.21), although this result was not significant from the midpoint as in the first study (t(86) = 1.33, p = NS). Nevertheless, if imagination leads to decreased product interest, it would not be because the product was initially disliked.

Additionally, participants were randomly assigned to one of three conditions (imagined ownership with high cognitive-load, imagined ownership with low cognitive-load, and a control condition). Cognitive load manipulations have been employed in previous consumer research (Shiv & Fedorikhin, 1999) in order to reduce participants' ability to elaborate. Borrowing from this previous research, this experiment asked participants to either (1) memorize a 7-digit number, then imagine ownership of the watch (high-load condition), or (2) memorize a 1-digit number, then imagine ownership (low-load condition). A third group (control condition) received no imagination instructions, consistent with the control group in Study 1a. In the imagination conditions, participants spent 30 seconds imagining ownership of the watch; subsequently, in all conditions participants entered their willingness-to-pay for the watch.

If elaboration is the key mechanism behind our negative imagination effect, then cognitive loads (which decrease the ability of the participant to elaborate) should attenuate it (i.e., the control group should not differ from the imagination groups). However, consistent with the model in this essay, it is predicted that elaboration is not the key mechanism; rather, it is argued that the negative imagination effect is independent of elaboration, and is driven by imagined social costs associated with product ownership. To test this possibility, this experiment asked participants to assess the negative social utility of the brand, by asking participants to indicate their agreement with the statement "Rolex is a snobbish brand" (1 = Strongly disagree, 7 = Strongly agree). If imagining ownership triggers vivid imagery of audience reactions that is distinct from mere elaboration processes, then participants in the imagination conditions should find the watch to be more snobbish than the control group. Furthermore, this negative social inference after imagination should directly result in a decreased willingness to pay for the status item.

Additional measures were collected to assess alternative explanations. For instance, the cognitive load manipulations should reduce participant ability to elaborate on the product (Shiv & Fedorikhin, 1999). At the same time, it should not reduce the ability to imagine given the recent research suggesting imagination processes are independent of elaboration (Petrova & Cialdini, 2008; Schlosser, 2003). However, if the load manipulation also makes imagining ownership more difficult, then any negative imagination effects could be attributable to lowered imagination fluency, which has been shown to produce backfire effects (Petrova & Cialdini, 2008). To test this possibility, participants were asked to indicate how difficult it was to imagine ownership of the watch (1 = Very difficult, 7 = Very easy). This measure also allows us to consider the relative ease with which participants were able to imagine ownership of the luxury

watch, and eliminate the possibility that participants in general found imagining ownership impossible (ex. because the product is prohibitively expensive).

Results

First, a one way ANCOVA with gender as a co-variate suggested no differences among the conditions in terms of the difficulty imagining ownership of the Rolex watch ($F(1, 83) = 0.602$, p = NS). This result suggests that the cognitive load manipulation still provided participants with the ability to engage in imagined ownership of the product. Furthermore, collapsing across conditions, the average response for this question was positive (relative to the midpoint) and significantly different from the midpoint ($M = 5.05$, $t(89) = 6.626$, $p < 0.001$), suggesting participants generally found it easy to imagine ownership of the watch. Thus, this analysis suggests that fluency effects (i.e., backfire effects due to difficulty imagining) are unlikely to be operating in our experiment.

Second, as predicted, there were significant differences among the three groups in terms of their willingness-to-pay estimates for the Rolex watch. A regression was performed on participants' willingness-to-pay estimates, with two dummy independent variables capturing whether the participant experienced a low cognitive-load, or a high cognitive-load, respectively. Additionally, gender and perceived imagination difficulty were included in the regression as co-variates. First, neither the gender ($B = -164.141$, $t(82) = -0.999$, p = NS) nor the perceived imagination difficulty co-variates ($B = 73.907$, $t(82) = 1.358$, p = NS) were significant predictors in the model for willingness-to-pay. Next, the results of this regression suggest that participants who imagined ownership of the status item were less interested in purchasing the item relative to

a control group, even after experiencing low and high cognitive loads. Contrasts between groups (as captured by the dummy variable coefficients) revealed that participants in the high-load condition entered a lower willingness-to-pay (M = $253.40) than those in the control condition (M = $696.54; B= -458.615, t(82) = -2.281, $p < 0.05$). Similarly, participants in the low-load condition entered a lower willingness-to-pay (M = $364.81) than the control group, although this difference was marginally significant (B = -345.523, t(82) = -1.791, $p < 0.10$). Finally, in a separate contrast analysis, no differences emerged between the low-load and high-load conditions in terms of their willingness-to-pay estimates (B = 113.092, t(82) = 0.540, p = NS). Figure 7 presents a summary of these results.

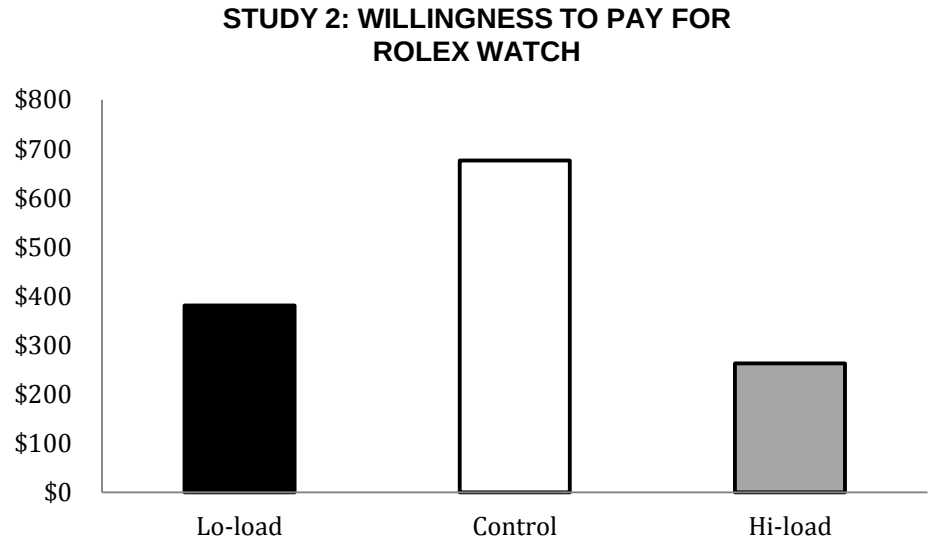


Figure 7. Participants who imagined ownership of the Rolex watch were less interested in it than a control group, even after experiencing cognitive loads during imagination.

Because participants did not differ in their willingness-to-pay estimates across low-load and high-load imagination conditions, the data was collapsed between these two conditions to test the mediating role of imagined social costs (Baron and Kenny, 1986). A regression was

performed on participants' ratings of the snobbishness of the Rolex brand, with a dummy variable capturing whether the participant imagined ownership of the product, in addition to the gender and perceived imagination difficulty co-variates as in the previous analysis. As predicted, participants in the imagination conditions rated the luxury brand as more snobbish (B = 0.709, t(83) = 2.181, $p < 0.05$), consistent with the idea that imagination cues the social costs of conspicuous consumption. Furthermore, when both the perceived snobbism and imagination condition variables were simultaneously included in the regression analysis, the perceived snobbism variable was significant (B = -132.786, t(82) = -2.439, $p < 0.05$), while the imagination condition variable became marginally significant (B = -303.737, t(82) = -1.832, $p < 0.10$). These results suggest evidence for partial mediation of the relationship between imagination and reduced willingness-to-pay estimates via perceived social costs; a Sobel-Goodman mediation test confirms this result (z = -1.708, $p < 0.10$).

Discussion

The results of this experiment suggest that for status goods, negative imagination effects can occur independently of elaboration. Even when cognitive loads are introduced, the negative consequences of imagining luxury ownership persist, suggesting that participants are not merely elaborating away their desires for these products. Additionally, this experiment provides support for the idea that imagining status goods ownership can cause social costs to become salient. Specifically, participants engaging in imagined ownership found the luxury brand in the study to be more snobbish than a control group who did not imagine ownership. Furthermore, this

increased perception of the social costs partially explains the relationship between imagining status goods ownership and lowered willingness-to-pay for the product.

STUDY 3 – THE ROLE OF BRAND PROMINENCE

Given the results of Study 2 suggesting that salient social costs underlie the negative imagination effects observed in Study 1a and 1b, Study 3 attempts to manipulate the conspicuousness of the status good in order to further test this relationship. If salient social costs partially explain this relationship, then by increasing the conspicuousness of a status good, we should increase the public prominence of the product and cue the perceived social costs associated with ownership to an even greater extent. In other words, at higher levels of product conspicuousness, we should expect a stronger relationship between imagination and decreased status goods interest. Recent consumer research has examined the concept of brand prominence in status consumption (Han et al., 2010), suggesting for instance that luxury goods companies often increase product attributes such as logo size in order to amplify the conspicuousness of the brand. We leverage this idea in this experiment, by assessing whether the negative imagination effect is greater at different levels of brand prominence.

Procedure

299 participants from a national online sample completed this survey in exchange for a small monetary reward. Once again, the experimental design is highly similar to previous designs; however, this study uses a Ralph Lauren polo shirt (retailing at $85-$98) in lieu of the

previous stimuli. Currently, Ralph Lauren offers embroidered polo shirts that are identical in design except for the size of their logo. Specifically, Ralph Lauren offers a custom-fit short sleeve polo shirt with a small pony logo on the chest of the shirt, as well as a custom-fit "Big Pony" polo shirt featuring a larger logo on the shirt. The retail prices of the two shirts do not differ substantially (ex. small logo = $85, large logo = $98); thus, the Polo was chosen for this experiment as a product in which brand prominence could be manipulated while controlling for other variables (ex. brand, price, product category). Appendix G provides images of the polo shirts from the experiment.

The experiment employed a 2 (Brand Prominence: high vs. low) X 3 (Imagination: no, low, high) between-subjects design. Participants were randomly assigned to one of two brand prominence conditions, in which they evaluated either the small logo Ralph Lauren polo shirt or the larger logo version of the shirt. As with the watch in Study 2, participants viewed an image of their gender-relevant polo shirt. The experiment provided participants with information on the polo shirt (ex. "This short-sleeved polo is made from breathable cotton mesh and tailored for a trim, modern fit") alongside the image of the polo shirt at the beginning of the survey. Subsequently, participants were randomly assigned to one of three imagination conditions. In the high-imagination condition, participants were told to imagine for 30 seconds what it would be like to own the polo shirt, consistent with previous studies. In the low-imagination condition, the imagination period was reduced to 15 seconds. Finally, in the no-imagination condition, participants directly proceeded to answer the dependent variable questions, as described below.

For the dependent variable, participants were asked to provide their ratings of the polo shirt on several dimensions reflecting their interest in the product (ex. "Your interest in owning this polo", "Your liking of the polo", "The desirability of the polo"; 1 = Very low, 9 = Very

high). Additionally, we asked participants ownership-related questions to control for alternative explanations. First, we asked participants if they owned any products from Ralph Lauren; this served as a co-variate in our analysis. Second, we asked participants a set of questions capturing their perceived ownership of the polo shirt (ex. "I feel a very high degree of personal ownership of this polo", "I feel like I own this polo", "I feel like this is my polo"; 1 = Strongly disagree, 9 = Strongly agree), adapted from previous research on perceived ownership (Peck and Shu, 2009). This research has suggested that mere interactions with a product that one does not physically own (ex. touch) can still induce a sense of ownership. While Study 2 suggested that social costs are the mechanism behind the negative imagination effect in status goods, it is important to consider whether this effect also occurs because participants experience an increased sense of ownership after imagination and no longer feel a need for the product.

In short, the predicted result is a negative imagination effect (as exemplified by decreased interest in the product) as imagination increases (i.e., from no imagination to 15 and 30 seconds of imagination), particularly when the prominence of the status good is increased (ex. in the high brand prominence condition).

Results

First, an index was constructed to capture participants' interest in the polo shirt using the three-item measures as described above (Cronbach's alpha = 0.953). Similarly, a composite capturing participants' perceived ownership of the polo shirt was also created using the respective three-item measure above (Cronbach's alpha = 0.978). Next, regressions on product interest were separated by brand prominence (low versus high), and consisted of the three

imagination conditions as a continuous predictor variable. Additionally, we added gender, Ralph Lauren product ownership, and perceived ownership as co-variates in our analyses to control for differences among participants as well as the possibility that imagination increases perceived ownership.

Examining participant responses in the low brand prominence conditions, we find no effect of imagination on our product interest index (B = -0.003, t(142) = -0.285, p = NS). Additionally, the gender and brand ownership co-variates were not significant predictors of product interest (B_{gender} = 0.103, t(142) = 0.358, p = NS; $B_{BrandOwner}$ = -0.064, t(142) = -0.199, p = NS), while the perceived ownership co-variate was significant (B = 0.668, t(142) = 10.608, p < 0.001). However, examining participants in the high brand prominence conditions revealed a different pattern. Specifically, consistent with predictions, product interest decreased as imagination increased (B = -0.028, t(148) = -2.297, p < 0.05). Also, males appeared to be more interested in the product relative to females (B = 0.779, t(148) = 2.559, p < 0.05), while brand ownership failed to predict product interest (B = -0.409, t(148) = -1.254, p = NS). Finally, perceived ownership once again predicted interest in the polo shirt (B = 0.693, t(148) = 10.914, p < 0.001). Figure 8 provides a summary of the differences across brand prominence and imagination conditions.

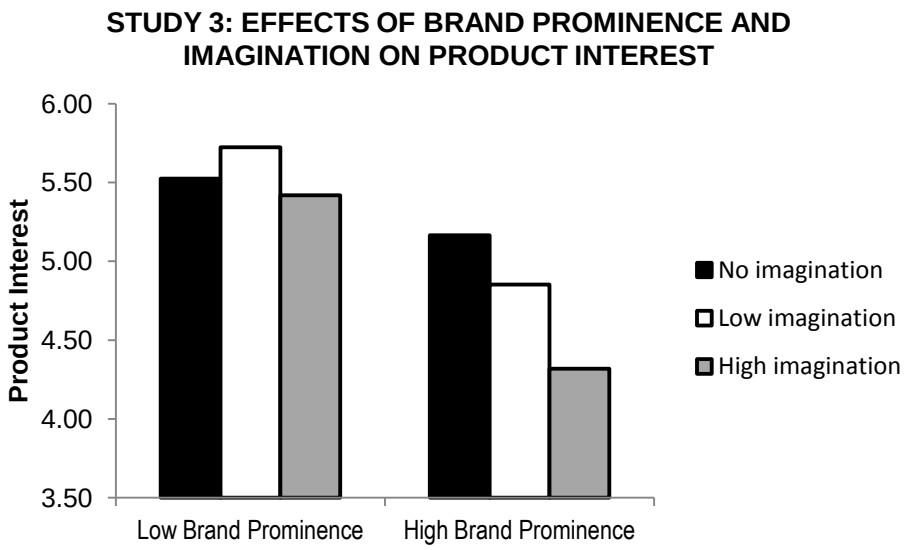


Figure 8. Participants who considered the high brand prominence product were less interested in it as the amount of imagination increased. The same pattern was not replicated for participants who considered the low brand prominence product.

Discussion

The findings of Study 3 provide partial support for the idea that brand prominence can influence the effect of imagining ownership on interest in status goods. While increased imagination did not influence participant liking of the Ralph Lauren polo shirt with the small logo, it decreased liking among participants who imagined the polo shirt with the larger logo. This finding is consistent with the results from Study 2, where perceived social costs were increased after imagining ownership of a luxury watch. Here, we find that by increasing the social signal associated with a luxury product (via brand prominence), we find a significant, negative effect of imagination on product interest.

STUDY 4 – IMAGINATION IN ADVERTISEMENTS

Study 4 tests the external validity and managerial implications of the previous findings. Specifically, it examines whether the negativity bias associated with imagined ownership (of status goods) can be induced through advertising. Furthermore, this study seeks to distinguish two types of ownership imagination processes related to status and luxury consumption: the process of imagined signaling, as well as the process of imagined experience. While imagined signaling should result in a reduced interest in the status good (as demonstrated in previous findings), imagined experience – which focuses attention away from audience reactions – should not result in reduced interest.

Procedure

92 participants completed a survey on a sports car at a university behavioral lab in the Northeast. Participants were randomly assigned to one of three conditions (imagined signaling advertisement, imagined experience advertisement, and a control condition). Participants were asked to view an advertisement for a sports car (Lotus Elise), featuring an image of the car as well as information about the retail price ($47,250). There were three versions of the ad; in two of the versions, a heading asked participants to (1) "Imagine how heads will turn" (imagined signaling condition), or (2) "Imagine the turns you'll make in this" (imagined experience condition); the third was identical to the other ads except without a heading (control condition). Appendix H provides an image of a sample ad from the experiment. To help ensure that participants actually took time to review the ad, the screen with the ad progressed after a 15 second delay in all conditions. Participants then indicated their willingness-to-pay for the car on

a 12-point scale (1 = 10% of retail, 12 = 120% of the retail price), as employed in previous status research (ex. Rucker & Galinsky, 2008).

To ensure that the advertisement headings were not perceived to be different in terms of their level of quality, participants were asked to rate the effectiveness of the advertisement. Across all conditions, there were no differences in perceived effectiveness of the advertisements ($F(2, 95) = 0.728$, p = NS). Similarly, participants were also asked to rate their overall liking of the advertisement, to ensure that any results would not merely be due to differences in the attractiveness of the advertisement. Once again, participants did not differ in their overall liking of the advertisement across conditions ($F(2, 95) = 0.553$, p = NS).

Results

Participants indicated a decreased willingness-to-pay when they were prompted to imagine signaling with the car, relative to imagining the experience of the car or when no prompt was given. A regression was performed on participants' willingness-to-pay estimates, with gender and income as co-variates, and dummy variables capturing the imagined experience condition and the control condition. First, gender was a significant predictor of participant willingness-to-pay estimates ($B = 1.733$, $t(87) = 2.671$, $p < 0.001$), indicating that men preferred the car relative to women. Next, income was not a significant predictor of willingness-to-pay ($B = 0.439$, $t(87) = 1.082$, p = NS). Finally, the imagined signaling group exhibited a lower willingness-to-pay for the sports car relative to the control group ($B = 1.798$, $t(87) = 2.430$, $p < 0.05$) as well as the imagined experience group ($B = 1.346$, $t(87) = 1.847$, $p < 0.10$), although this latter difference is marginally significant. Additionally, in a separate contrast analysis, no

differences emerged between the imagined experience condition and the control group ($t(87) = 0.681$, p = NS). Figure 9 provides a summary of these findings.

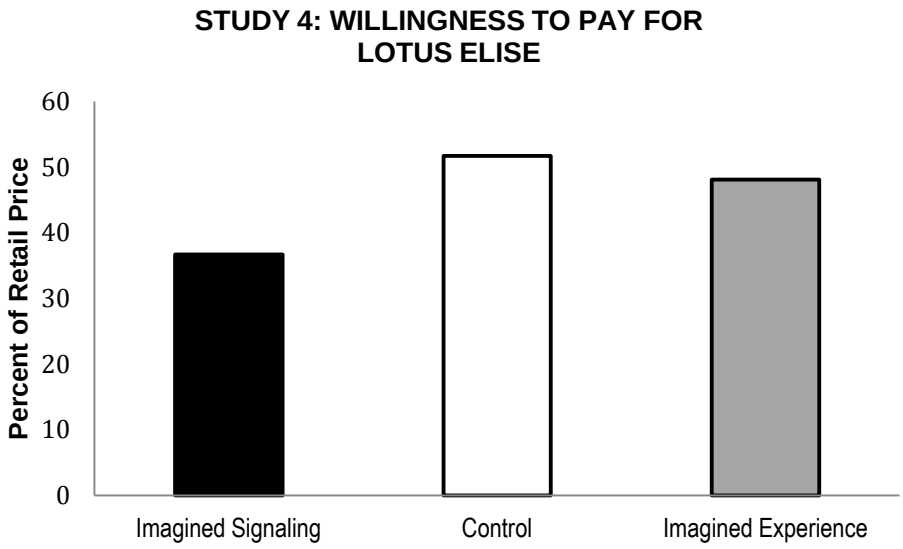


Figure 9. Participants who imagined signaling with the Lotus Elise were less willing to pay for the car relative to a control group and a group that imagined experiences with the car.

Discussion

Overall, these results are consistent with the hypothesis that imagining social consequences reduces the desire for luxury items. Participants who were induced to imagine signaling with the sports car (via an advertisement) exhibited a lower willingness-to-pay for the car relative to participants who received either no such cue, or participants who were directed to imagine an experience with it. The lack of difference between control and imagined experience groups also suggests that other forms of imagination (e.g. imagining experiences with luxury items) might be less harmful than imagination which prompts thoughts about signaling and audience reactions.

CONCLUSION

This research explores the effect of imagining status goods ownership on actual interest in ownership. Contrary to previous research suggesting that imagination can positively impact consumption likelihood, the findings in this essay suggest that imagination can actually have the opposite effect when it comes to imagining conspicuous consumption. While status goods are often dreamed about and desired as a means to signal higher-status identities, the results of five studies indicate that imagining status goods ownership can lead to thoughts related to negative audience reactions to the product. These thoughts may then result in decreased preferences for conspicuousness and ostentation.

Although this research generally suggests potential pitfalls for marketing managers, it also suggests potential remedies for this negativity bias. For instance, the results of this research imply that products lower in brand prominence may not suffer from this bias; thus, practitioners should be more inclined to use advertising appeals in ads featuring less conspicuous luxury goods. On a related note, varying whether a luxury good is imagined in public versus private (ex. a conspicuous school sweater worn at home versus in-public) might also influence the perceived signaling of the product, potentially attenuating the effects observed in the current research. Finally, emphasizing the hedonic benefits of a luxury product might reverse this negativity bias, as personal benefits might become more salient than social costs. This possibility was observed in Study 3; it would be interesting to examine whether imagining other hedonic benefits (ex. the softness of the polo shirt's fabric, the clarity from the designer sunglasses) would lead to similar outcomes.

Interesting extensions for research lie in variations across consumers. For example, are there any differences among consumers that would cause them to respond differentially to the imagining of conspicuous goods? One possibility lies in the distinction between high and low-status consumers. While low-status consumers may seek status goods due to feelings of powerlessness (Rucker and Galinsky, 2008) and desires for compensatory consumption (Wicklund and Gollwitzer, 1982), high-status consumers may be less interested in strong displays of status (Berger and Ward, 2010; Daloz, 2012; Han et al., 2010). Supporting this possibility, self-presentation research has suggested that people who experience failure are more likely to self-promote when they expect social evaluation, whereas people who experience success are subsequently more modest in these scenarios (Schneider, 1969). Thus, it may be possible that low-status consumers may not experience backfire effects after imagining conspicuous consumption, while high-status consumers might be more prone to thoughts about humility and modesty. Findings from this research could suggest differential advertising strategies (ex. the use or avoidance of imagination prompts) to different market segments (high-status versus low-status consumers).

Similarly, cultural differences among consumers could be a fruitful area of inquiry. Some researchers have suggested that cultures can be classified as either individualist (preferring independent relationships with others) or collectivist (preferring interdependent relationships with others), as well as horizontal (valuing equality) or vertical (valuing hierarchy) (Shavitt et al., 2006). Furthermore, these cultural differences can reflect different attitudes towards self-presentation, particularly self-promotion (Lalwani et al., 2006). For instance, it has been suggested that horizontal-individualist societies (ex. Scandinavians, Australians) are especially averse towards conspicuousness and self-promotion, while vertical-individualist societies (ex.

United States) prefer distinction and the signaling of success (Nelson & Shavitt, 2002; Shavitt et al., 2006; Triandis & Gelfand, 1998). These findings suggest that we are likely to observe cultural differences in terms of the effects of imagination on desire for status goods ownership. Given the recent emergence of luxury markets in Asia (Chadha and Husband, 2006), research on culture, status goods and imagined self-presentation may be especially timely and provide managerial implications for international luxury brands.

In summary, it appears that the process of imagination can cause a decreased interest in product ownership when it comes to products that signal status. Because consumers may be naturally inclined to imagine what it would be like to own status goods before purchasing them, it is imperative for marketing practitioners to understand when backfire effects may occur, and how they can be minimized or reversed. This essay provides some ideas towards this end – e.g. when social costs are not salient, when the status brand is less prominent, and when the experiential benefits are emphasized – but more work is needed to understand when imagining status consumption promotes purchases, and when it does not.

Essay 3: Uncovering Reverse Placebo Effects

When Better Brands Lead to Worse Performance

RENÉE GOSLINE

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JEFFREY K. LEE

ABSTRACT

Previous research has suggested that marketing actions alone (ex. price increases of an energy drink) can increase product expectations (ex. perceptions of higher quality) and result in increased product efficacy (ex. improved mental acuity), thus generating placebo effects. In this research, we find evidence of reverse placebo effects when high-status brands are used to increase product expectancies. Across three studies, we find that people compare themselves to high-performance reference groups when using high-status branded products for self-improvement, and can perform worse after product use. We show that these effects can occur despite the fact that people may be willing to pay more for these high-status products and may judge them to be of higher quality. Furthermore, we find evidence that these effects are mediated by the high performance standards cued by reference group comparison, which in turn influence the level of intimidation experienced by participants. Additionally, we find evidence that these effects are moderated by the extent to which individuals take into consideration the standards associated with brands.

Among the many benefits of product consumption, one that may be particularly fundamental to consumers is the improvement of self-efficacy in performance domains that are personally relevant and important. Beyond improving psychological states such as moods or feelings, some products offer measurable improvements to a consumer's ability on dimensions such as mental acuity or communication. Within these product categories, recent research has suggested that marketing actions such as price decreases can influence a person's ability to benefit from the product without actually changing the inherent functionality of the product, akin to the well-known "placebo effects" in medical research. For instance, Shiv et al. (2005a) found that people who consumed marked-down energy drinks performed worse on a diagnostic anagram test relative to people who consumed the drink at retail price.

This essay extends previous marketing placebo research to branding phenomena, with a focus on high-status branding. Similar to pricing increase, brand status increases for performance enhancing products can influence quality expectations (Rao & Monroe, 1989). As an example, consider "brain training" companies such as Luminosity.com that sell access to games claiming to improve cognitive abilities such as memory and thinking speed. As part of their marketing, these companies may claim affiliation with high-status educational institutions such as Harvard, Stanford and Berkeley (e.g. Luminosity.com) in order to generate higher perceptions of quality and product benefits. This raises a question: in instances where the inherent functionality of the product is left unchanged, do high-status brand associations alone generate placebo effects much like high-price associations?

In this essay, we suggest that *reverse* placebo effects can actually occur when using high-status branded products for performance enhancement. While high-status branded products may be associated with high expectations on product benefits, we suggest that they might also be associated with high performing, or high-status reference groups. For example, in the Luminosity.com example, the company's affiliation with Harvard, Stanford and Berkeley may also cause high performing students from these schools to become salient to brain training users. Thus, when using these products, consumers might unwittingly engage in social comparison with high-performing others, a high comparison standard that creates intimidation and a lowered sense of self-efficacy. Because negative self-efficacy beliefs from product use have been shown to generate reverse placebo effects (Storms & Nisbett, 1970), we suggest that high-status branded products can yield similar backfire effects.

The essay is structured as follows. First, we discuss the existing literature on placebo effects in the marketing domain, and describe how high-status brand signals can elicit reference group comparisons that cause intimidation and lowered performance outcomes. Then, we present our hypotheses and provide a conceptual overview of our research approach. Finally, we present the results of three experiments testing our hypothesized relationship between high-status branding and performance deficits, and conclude with a brief discussion of directions for future research.

LITERATURE REVIEW

Placebo Effects in Marketing

A placebo is defined as "simulation of an active therapy within a psychosocial context" (Price et al., 2008). Thus, when simulated therapy generates a response that is distinct from the

response exhibited by an untreated baseline condition, it can be said that a placebo response or effect is observed. Typically, in medical research, simulated therapy involves the usage of treatment featuring "inert" ingredients such as a sugar pill or a saline injection – ingredients that have no inherent, chemical functionality in terms of influencing the medical symptoms under observation. Placebo effects have an impressive history of research in medicine, as historians have suggested known placebo experiments dating back to 1799 (De Craen et al., 1999).

Borrowing terminology from the medical domain, marketing researchers have recently begun to explore how the notion of medical placebo effects can be extended to marketing actions (Irmak, Block, & Fitzsimons, 2005; Shiv, Carmon, & Ariely, 2005a). Specifically, researchers have suggested that superficial marketing changes (such as price, packaging, or branding) that nevertheless influence performance benefits from a product can be likened to medical placebo effects (Borsook & Becerra, 2005; Wager et al., 2004). Essentially, these marketing changes are viewed as simulated therapy in that they feature an "inert" intervention (ex. a price increase) – one that is unrelated to the actual functioning of the product – that appears therapeutic in that it still raises expectations of the benefits associated with product use. When real performance benefits are generated from marketing changes, it can be said that "placebo effects of marketing actions" are observed (Shiv, Carmon, & Ariely, 2005a).

As an example, Shiv, Carmon, & Ariely (2005a) show that when consuming a price-discounted energy drink, participants solve fewer anagrams than those consuming a full priced drink. The placebo effect of price occurs by activating strong price-quality associations that lead to expectancies about the efficacy of the product, subsequently influencing performance outcomes for consumers after using the product (Shiv, Carmon, & Ariely, 2005b). This effect is stronger when more ingredients are featured (Wright et al., 2013), and when consumers desire

the benefits of the product (Irmak, Block, & Fitzsimons, 2005). Additionally, the price placebo effect can be applied to medical domains; for instance, Waber et al. (2008) find that pain reduction pills are more effective in relieving pain from electric shock when presented to patients at regular-price as opposed to at a discounted price.

Little is currently known about the mechanisms and factors influencing the placebo effects of marketing actions (Berns, 2005; Borsook & Becerra, 2005; Rao, 2005). Shiv et al. (2005a; 2005b) propose a belief-expectancy-outcome framework, but they acknowledge that self-efficacy beliefs could also play an important role in placebo effects. For example, even when a marketing action generates positive expectancies about a product, the use of the product can result in *negative* performance outcomes if consumers form inferences about themselves that lead them to doubt their ability to benefit from the product. Indeed, Storms & Nisbett (1970) find that insomniacs taking placebo pills labeled as "relaxation pills" actually experience a decline in the quality of their sleep. This "reverse placebo effect" occurs because participants experience lower self-efficacy beliefs (ex. "I must have a really serious sleep disorder") when the supposedly active relaxation pill turns out to be ineffective.

Clearly, more work is needed to understand whether some marketing actions can engender self-efficacy doubts, causing reverse placebo effects to occur where forward placebo effects might be expected. In this essay, we contribute to the extant literature by exploring whether high-status branded products can yield such effects. Much like the price-quality belief that generates placebo effects, consumers may hold positive brand-quality association that leads to positive expectancies for branded product use (McClure et al., 2004; Branthwaite & Cooper, 1981). At the same time, high-status products may also be associated with high-status reference groups who when compared to the self, create high standards and possible intimidation.

Consequently, as in the previous reverse placebo findings, consumers may experience lower self-efficacy beliefs when using higher-status products, and therefore negative performance outcomes. Below, we discuss in detail the ways in which high-status brand signals can impede performance through reference group comparisons.

Brands, Reference Group Comparisons, and Self-monitoring

A long tradition of research has explored consumer desire for products and brands linked to high social status (Bourdieu, 1984; Duesenberry, 1949; Frank, 1985; Leibenstein, 1950; Veblen, 2006; Weber, 1978). Consumers seek high-status products to signal association with high-status groups and identities (Berger & Ward, 2010; Han et al., 2010). Like products that are associated with higher prices, products associated with higher-status (ex. "California wine" versus "North Dakota wine") may generate positive expectancies in terms of quality and taste (Wansink et al., 2007). Similarly, brands associated with desirable reference groups (Bearden & Etzel, 1982; Escalas & Bettman, 2003, 2005) can also prime positive psychological changes. For instance, participants subconsciously primed with the Apple brand became more creative (Fitzsimons et al., 2008), and shoppers using a Victoria's Secret shopping bag felt better-looking and more glamorous (Park and John, 2010).

Nevertheless, it is unclear whether consumers will experience any *performance* benefits (i.e. forward placebo effects) from high-status product use, particularly when the status brand is salient and engenders comparisons with high-status or high-performing reference groups. A venerable line of research has established that individuals are prone to comparing themselves to others (e.g. Festinger, 1954), and consumers are especially likely to activate social comparison in evaluative performance scenarios such as quizzes or tests. High-status brand signals can bring to

mind high-status users for comparison; thus, consumers who use high-status products to improve functional performance may inadvertently engage in unfavorable social comparison. As a result, by triggering high-status reference groups as the standard of comparison, high-status brand signals can cause intimidation and lower self-efficacy beliefs, which previous research has suggested can reverse traditional placebo effects (Shiv, Carmon, & Ariely, 2005b; Storms & Nisbett, 1970).

The idea that negative social comparison can reduce performance is well-supported in social psychology, particularly in the stereotype threat literature. Specifically, stereotype threat researchers (Steele and Aronson, 1995) have suggested that salient, negative stereotypes about a person's in-group (for instance, a stereotype directed at an in-group's math abilities) can hinder a person's performance in a stereotype-relevant domain (ex. math tests). This research reflects a broader history of study on text anxiety under social evaluative threats (Ashcraft, 2001; Sarason, 1984), suggesting that challenging performance scenarios can causes performance-reducing stress (Schmader et al., 2008). Our research is broadly consistent with this literature, yet at the same time, our goal is to extend this logic to branding phenomena, product use, and status-based comparisons. Furthermore, we examine reverse placebo effects – situations where higher product expectancies are associated with lower performance outcomes – thus offering a novel, consumer-oriented perspective to social evaluation research that suggests ironic effects of product use.

In summary, we posit that high-status brand products will elicit comparisons to high performance reference groups, thus leading to a negative evaluation of a consumer's own self-efficacy. By generating perceptions of higher external standards through upward social

comparison, the consumer might experience intimidation that interferes with performance, thereby causing reverse placebo effects.

H1a: Controlling for the functionality of the product, higher-status products will be associated with higher external performance standards relative to lower-status products.

H1b: Controlling for the functionality of the product, higher-status products will be associated with higher levels of intimidation relative to lower-status products.

H1c: Controlling for the functionality of the product, consumers exposed to higher-status products will exhibit lower performance outcomes relative to consumers exposed to lower-status products.

Individual differences also impact the tendency to attend to and process brand-related information. A key trait that predicts this propensity is self-monitoring, or the predisposition towards using social cues as behavioral guidelines and exhibiting sensitivity to the presentation of oneself to others (Becherer & Richard, 1978; Snyder, 1974). With greater motivation to respond to social cues, self-monitors are more likely to process brand information (MacInnis, Moorman, & Jaworski, 1991). Thus we expect that the social comparison processes elicited by brand cues that generate negative performance outcomes will be more strongly observed in those individuals that attend to brand cues, or high self-monitors.

H1d: The negative effect of higher-status products on performance outcomes will be strongest among high self-monitors, relative to low self-monitors

OVERVIEW OF THE EXPERIMENTS

We develop two new paradigms involving language learning and brain training to test for placebo effects of branding on product efficacy. In Study 1, we test our hypothesis that the usage of higher status brands can result in negative performance outcomes using a brain-training paradigm and identify the moderating role of social monitoring in generating negative performance effects. In Study 2, we replicate the reverse placebo effect in a language-learning paradigm, and test for the underlying mechanisms behind this effect. Finally, in Study 3, we combine our design with that of Shiv, Carmon, & Ariely (2005a) and attempt to replicate conventional placebo effects in response to price manipulations and reverse placebo effects in response to high-status brand manipulations.

STUDY 1: REVERSE PLACEBO EFFECTS ON MENTAL ACUITY

In our first study, we seek to directly test our hypothesis that the usage of higher status brands can result in negative performance outcomes. While higher status brands may be associated with higher perceptions of quality, we predict that in instances where they increase performance standards, they will cause reverse placebo effects by negatively impacting performance outcomes. Because people differentially attend to and rely on external standards to evaluate their own behavior, we also aimed to explore how the tendency towards self-monitoring influences the reverse placebo effect.

We developed a new paradigm to test the effectiveness of brain training programs. Participants were asked to complete a brief training program adapted from the popular Nintendo game, Brain Age. Advertised as a mental fitness program, the Brain Age software is inspired by the work of the neuroscientist Dr. Ryuta Kawashima (2008) and has claimed to help boost brain

power with minutes of training a day. In our paradigm, participants receive training on a number identification task and subsequently complete a cognitive ability exam to measure the efficacy of the brain training program. While the content of the training program remained identical, we manipulated the branding of the training program to examine whether high-status branding can generate reverse placebo effects.

Procedure

A total of 265 participants from a national online sample completed the study in exchange for a small monetary reward. All participants were told that they would be testing a brain training program, and that previous research had established that spending more time on brain training exercises could improve cognitive abilities and increase performance on a range of everyday tasks. Participants were randomly assigned into one of three conditions: (1) a high-status brand condition, where participants were told that the training was developed for MIT students, (2) a low-status brand condition, where participants were told the training was developed for University of Phoenix students, and finally, (3) a control condition where participants received no information about a target demographic. Note that aside from differences in branding, the training materials did not differ in any other way. To strengthen the brand manipulation, the respective school logos (for the first two conditions) were displayed above and below the training exercise.

The training task involved an adaptation of a high number game from the popular cognitive fitness video game Brain Age, in which participants were repeatedly asked to click on the highest number on the screen while being distracted by the visual size of other numbers (i.e. visual size did not always correspond with numerical size). Participants repeated this exercise

ten times during the training session; see Appendix I for a sample screenshot from the training session. Subsequently, we measured the efficacy of the brain training program by asking participants to complete a cognitive ability exam. This exam consisted of 18 challenging math, verbal, and emotional intelligence questions that were adapted from IQ tests and theory of mind tests (Baron-Cohen et al., 2001). Please see Appendix I for a sample exam question.

Participants were asked to indicate their agreement with statements aimed to probe their tendency towards self-monitoring ("I think about my image in the eyes of others;" "I would like to have greater social status"). Participants indicated their level of agreement or disagreement to the statements on a 7-point scale (1 = Strongly disagree, 7 = Strongly agree). Additionally, as a manipulation check, participants within the two schools conditions were asked to indicate their agreement with statements related to the standards associated with the schools ("It is difficult to be accepted into [name of school]," "[Name of school] is a prestigious institution," and "[Name of school] students are more intelligent than the average person") on a 7-point scale (1 = Strongly disagree, 7 = Strongly agree).

Results

First, the questions relating to school standards were collapsed into a single index with a Cronbach's alpha of 0.92. A manipulation check on this index confirmed that standards at the University of Phoenix were evaluated as lower than standards at MIT ($t(205) = -5.75$, $p < 0.01$).

Scores on the cognitive ability exam were combined into a composite score that weighed each portion of the exam equally. A one-way ANCOVA analysis revealed a significant main effect of the school brand ($F(2, 262) = 3.38$, $p < 0.05$). Comparing conditions directly, we observe that participants in the MIT condition performed significantly worse on the exam than

those in the control condition (mean score = 50% vs. 56%, $t(160) = -2.44$, $p < 0.05$). At the same time, participants in the University of Phoenix condition did not perform worse on the exam relative to participants in the control condition (mean score = 53% vs. 56%, $t(159) = -0.91$, p = NS). These results suggest that relative to an unbranded control condition, differences in exam performance among our participants were driven by participants in the high-status reference group condition. Furthermore, this difference reveals a reverse placebo effect – that is, participants performed worse than the control condition when provided training associated with a higher-standard reference group. Figure 10 provides a summary of these results.

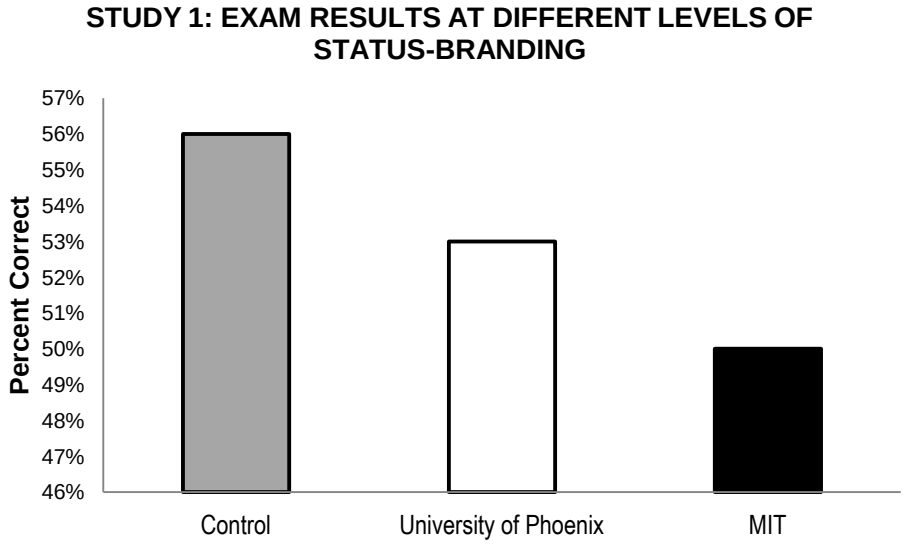


Figure 10. Brands with higher standards result in lower performance.

Again, if performance deficits in the high-status brand tutorial condition are due to reference group comparisons, then our prediction is that reverse placebo findings would be more pronounced among high self-monitors. Furthermore, among high self-monitors, difficult questions should generate more intimidation than easier questions; thus, any differences between

high and low self-monitors should be greater as question difficultly increases. To test these ideas, we began by combining our self-monitoring items into a single index (Cronbach's α = 0.68), and classified participants as high or low self-monitors based on a median split. By examining baseline response accuracy levels in our control condition, we also identified the most difficult questions on the cognitive ability exam, and divided the exam into the most difficult and least difficult halves. Note that results are robust to the choice of difficulty partitioning.

As predicted, we find evidence of an interaction effect between brand and self-monitoring when answering the most difficult questions ($F(1,206) = 4.68$, $p < 0.05$) but no such interaction effect when answering the least difficult questions ($F(1,206) = 0.46$, p = NS). These findings suggest that self-monitoring and question difficulty jointly moderate the effect of performance standards on actual performance. When questions are especially challenging and participants are more likely to attend to brand status, reverse placebo effects are most prominent. Figures 11 and 12 provide a summary of these results.

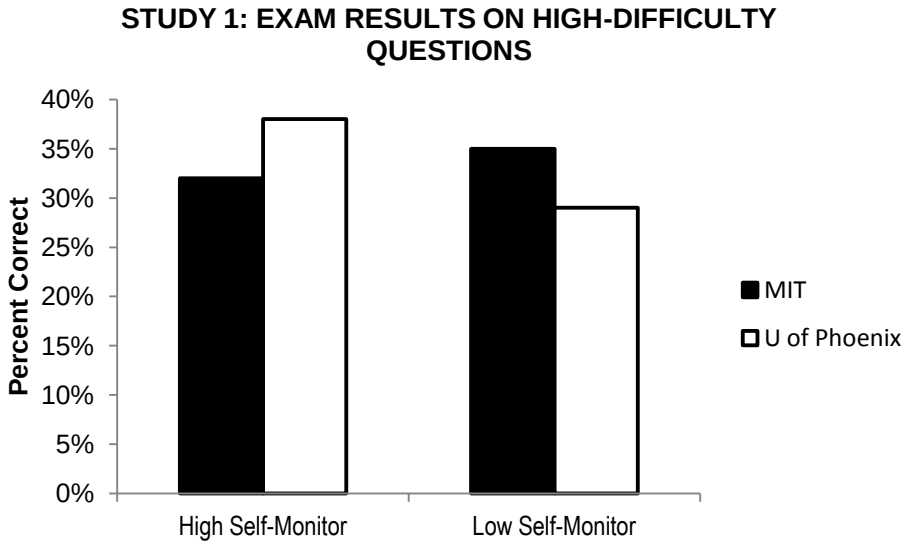


Figure 11. Reverse placebo effects are driven by high self-monitors that exhibit lower performance on the most difficult questions.

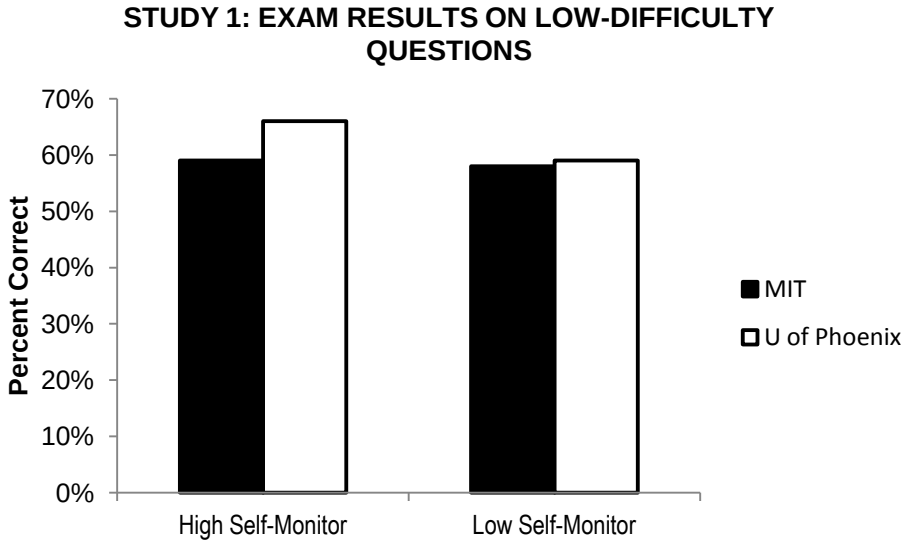


Figure 12. On low-difficulty questions, no differences emerged among the various groups.

Discussion

Consistent with our hypotheses, we find that higher-status brand training is associated with lowered performance on a cognitive ability test, relative to both lower-status brand training as well as unbranded training. These results confirm Hypothesis 1c, and support the idea that reverse placebo effects can occur when higher-status branding cues reference group comparisons. Additionally, we find that high self-monitors are more susceptible to these reverse placebo effects when faced with questions of higher difficulty, supporting Hypothesis 1d. These findings support our proposition that reference group comparison can increase intimidation and decrease performance, as those in our sample who were most attentive to status and social information were the ones most affected by our brand manipulation.

STUDY 2: LEARNING NA'VI

Having discovered reverse placebo effects in our previous study, we aimed next to explore more thoroughly the mechanisms that underlie this finding. In order to extend the generalizability of our findings, we developed a paradigm to assess the efficacy of language learning tutorials. Participants were asked to complete a brief training program to learn a language that most participants were likely to be unfamiliar with: Na'vi, the 1500-word language developed for the movie Avatar. Since most participants should not have prior knowledge of the language, we were able to measure the efficacy of the language learning tutorial by testing participants on their understanding of the language after the training program. While the content of the training remained constant, we manipulated the branding of the tutorial to address whether brand status could influence the amount learned from the training software.

Procedure

137 participants at a northeast university behavioral laboratory completed a language learning task as part of a broader survey session on psychology and marketing, in exchange for a small monetary reward. Participants learned Na'vi, a 1500-word language that was developed for the movie Avatar. While all participants received the same Na'vi learning materials, we manipulated the authors of the material. Specifically, participants were randomly told that the tutorial was produced by students from one of the schools in Study 1: (1) the Massachusetts Institute of Technology (MIT), or (2) the University of Phoenix (Phoenix).

For the Na'vi training materials, all participants viewed a 1-minute beginner video tutorial on the Na'vi language, and were given an additional minute to review a vocabulary list from the tutorial. See Appendix J for a sample screenshot from this video. As in Study 1, the

schools' logos were featured prominently in their respective tutorials (ex. at the beginning of the video, at the corner of participants' vocabulary list) to strengthen this manipulation. After participants reviewed these tutorial materials, they completed a short test assessing their learning from these materials.

To assess participant learning, we gave all participants a 12-question Na'vi translation test, where participants selected the correct English translation for Na'vi words and sentences among multiple choices (see Appendix J for a sample exam question). To ensure we were assessing new language acquisition, we asked all participants whether they knew some Na'vi prior to the survey (three participants indicated "yes" and were excluded from the analysis). Also, in order to measure the effect of the brand manipulation, we measured participants' perceptions of the performance standards associated with the test, by asking them to indicate their agreement with the statement "the standards for this task were high" (1 = Strongly disagree, 7 = Strongly agree). To test our hypothesis that high standards lead to participant intimidation, we also asked participants to indicate their agreement with the statement "I was intimidated by the task" (1 = Strongly disagree, 7 = Strongly agree).

Additionally, we asked participants to indicate the number of years of education they had received (beginning with elementary school), as well as their age; these variables were used as covariates in our analyses. Finally, to see whether participants differed in their perceptions of tutorial quality, we asked participants to indicate how well they thought the tutorial prepared them in Na'vi (1 = Very poorly, 7 = Very well), as well as their willingness-to-pay for a 100-minute series of tutorials similar to the one provided (if it were in a language they would like to learn). These questions were administered immediately after participants experienced the tutorial, but before they began the language exam.

Results

Even though the tutorials were identical in terms of learning material, participants believed they were better prepared and willing-to-pay more for the tutorial in the MIT condition relative to the University of Phoenix condition. A one-way ANCOVA with years of education and age as co-variates revealed that participants felt they were better prepared after receiving the MIT tutorial (M = 3.53) than the University of Phoenix tutorial (M = 2.92; $F(1,133) = 6.15$, $p < 0.05$). Additionally, participants were willing to pay more for the tutorial in the MIT condition (M = $27.00) than the University of Phoenix condition (M = $15.70; $F(1,132) = 3.888$, $p < 0.10$), although this difference was marginally significant. These results provide evidence that participants believed the MIT tutorial was of superior quality to the University of Phoenix tutorial; see Figure 13 for a summary. Yet, would this translate into superior learning and performance outcomes for the MIT tutorial participants?

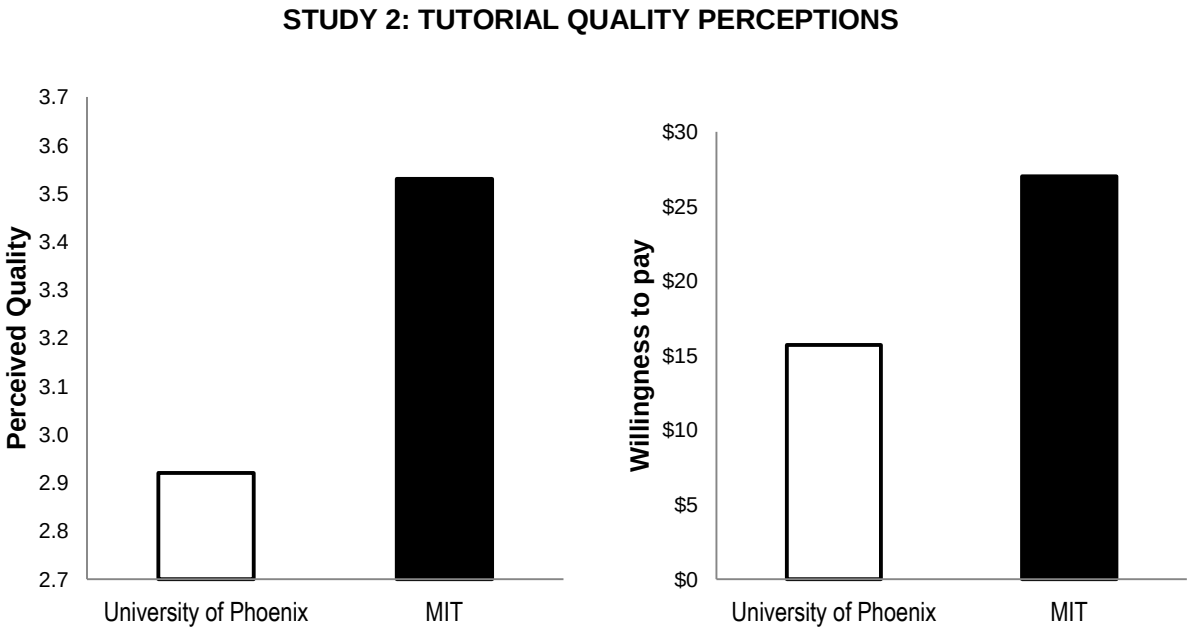


Figure 13. Higher-status brands command favorable quality perceptions

To assess the effect of status-branding on language test performance, we summed each participant's correct answers on the 12-question Na'vi language exam. While the MIT tutorial was perceived to be higher in quality than the University of Phoenix tutorial, we find that performance on the language exam was lower in the MIT condition relative to the University of Phoenix condition. A one-way ANCOVA analysis revealed a significant main effect of the school brand ($F(1, 133) = 4.37$, $p < 0.05$), even after controlling for the effects of age ($F(1, 133) = 14.01$, $p < 0.00$) and education ($F(1, 133) = 10.48$, $p < 0.01$) on performance. Consistent with our predictions, participants performed worse on the language test when the tutorial was framed as an MIT tutorial ($M = 10.10$) than as a University of Phoenix tutorial ($M = 10.90$). Figure 14 summaries these findings.

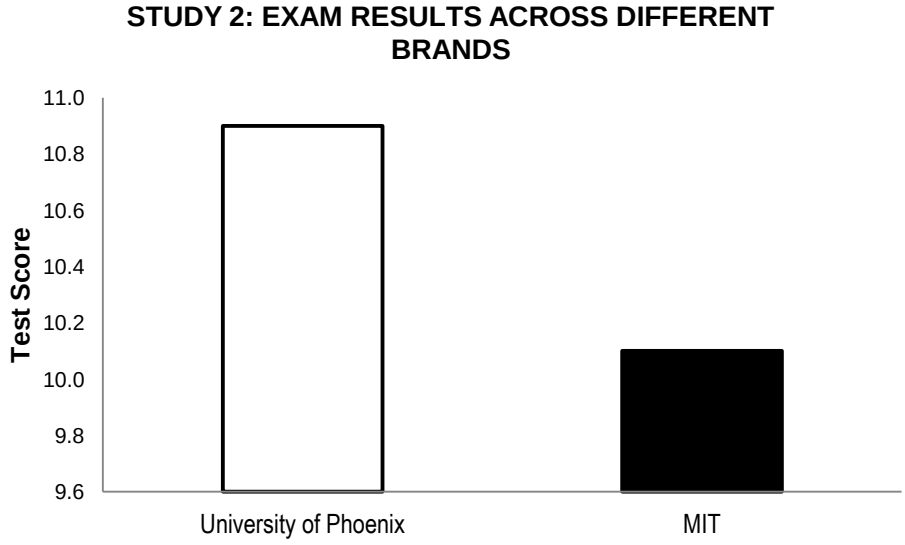


Figure 14. Higher-status brand training is associated with lower test performance

To test the mechanism behind the reverse placebo findings, we assess the role of perceived standards and participant self-reported intimidation on the relationship between brand status and performance via a three-path mediation analysis (Taylor et al., 2008). Specifically, we

suggest that participants in the higher-status brand condition engage in social comparison, causing a perception of higher standards which leads to intimidation. This intimidation directly results in lower performance, i.e. a reverse placebo effect.

Consistent with our predictions, perceived standards for the exam were significantly higher when participants were exposed to the MIT tutorial (M = 4.04), relative to exposure to the University of Phoenix tutorial (M = 2.87, $F(1, 132) = 20.66$, $p < 0.000$). Furthermore, when included in the model, these perceived standards significantly predicted participant levels of intimidation ($F(1,125) = 10.59$, $p < 0.001$). Finally, when school brand, standards and intimidation are included in a model predicting test performance, intimidation predicts test performance ($F(1,124) = 16.17$, $p < 0.000$). At the same time, the effects of the school brand ($F(1,124) = 0.911$, p = NS) and standards ($F(1,124) = 1.745$, p = NS) on test performance fail to reach significance. This pattern of results supports a three-path mediation of the relationship between school brand and performance via the standards and intimidation cued by the high-status brand product. In other words, perceived high standards associated with the school mediated the relationship between the school and self-reported level of intimidation, which then mediated the relationship between perceived high standards and performance on the test. Table 1 summarizes the results of this analysis.

STUDY 2: THREE-PATH MEDIATION ANALYSIS

	Standards (Mediator 1)		Intimidated (Mediator 2)		Performance (DV)	
IV	β	*t*	β	*t*	β	*t*
Constant	0.572	0.656	0.775	0.912	11.233	9.034
Education	-0.103	-1.576	-0.003	-0.053	0.325***	3.509
Age	0.119***	3.334	0.020	0.549	-0.157**	-2.929
School	**1.167*** **	4.545	-0.024	0.090	-0.366	-0.954
Standards			**0.277*** **	3.254	-0.171	-1.321
Intimidated					**-0.524*** **	-4.021

Table 1. Status brands affect performance through perceived standards and intimidation.

Discussion

Consistent with our previous findings, we find that higher-status brand training is associated with lowered performance on a language learning test. Despite the fact that participants in the higher-status brand training felt they received better training than those who received the lower-status brand training, the higher-status brand users experienced performance deficits, once again supporting Hypothesis 1c. Furthermore, we find support for our account of the negative relationship between brand status and performance benefits. Specifically, it appears that higher-status brand training increases perceptions of high task standards (supporting Hypothesis 1a), which subsequently increases intimidation (Hypothesis 1b) and lowers performance.

STUDY 3: LEARNING NA'VI WITH BRANDS AND PRICING

In our third study, we combine our experimental design with that of Shiv et al. (2005a), which demonstrated that higher pricing could result in placebo effects for consumer

performance. Specifically, we utilize the same experimental design from Study 2 (using the same school brands), but introduce full versus discount pricing for the tutorial. Consistent with our previous findings, we once again predict that in instances where branding can increase performance standards, it can also cause reverse placebo effects by negatively impacting performance outcomes. Further, we would expect these reverse results net of any influence resulting from the manipulation of price. At the same time, we predict that price increases should generate forward placebo effects, as shown in previous research. That is, net of any effects of branding on performance, participants should perform better when the tutorial is labeled as a full-priced product rather than as a discounted product. In summary, we predict that while higher-status branding would decrease performance, pricing increases would increase performance.

Procedure

A total of 126 participants from a national online sample completed the language learning task from Study 2 in exchange for a small monetary reward. Two participants indicated affiliation with the University of Phoenix, one participant indicated affiliation with MIT, and two participants indicated they knew Na'vi prior to this survey. To ensure that our analyses only included participants with no prior experience with the schools and languages in the training, we excluded these five participants. As in Study 2, participants completed a tutorial and test on the Na'vi language; once again, we told participants that the tutorial was produced by students at the Massachusetts Institute of Technology (MIT), or the University of Phoenix (Phoenix).

In addition to manipulating the brand associated with the training materials, we also provided participants with fictitious pricing information for the training program. Participants

were randomly told that the program would be offered for $34.95 per month (full price condition), or for $9.95 per month, discounted from the full price of $34.95 per month (discounted price condition). To give participants a sense of the language learning software market, we also provided all participants with the typical costs of several major language programs (ex. Simon & Schuster's Pimsleur, $16.49, Instant Immersion, $16.99, and learn2speak, $17.99). As a result, in the full-price condition, participants inferred that this new training program would be offered at a price above alternative options in the market; conversely, participants in the discounted-price condition inferred the program would be offered at a price below alternative options in the market.

We gave participants a 17-item, multiple-choice test on the Na'vi language similar to the one administered in Study 2. Specifically, this test was identical to the one administered in Study 2, except that it included four additional vocabulary questions and one sentence translation question, all multiple choice. Once again, we included participant years of education and age as covariates in our analyses, and measured perception of standards and intimidation in the same manner as in Study 2.

Results

Figure 15 presents a summary of our results. Contrary to our expectations, a one-way ANCOVA analysis failed to reveal a significant main effect of the price manipulation ($F(1, 113) = 0.76$, p = NS). Specifically, there were no performance differences between participants who were told that the tutorial was discounted (M = 11.75) and participants who were not given this information (M = 11.13). To partially assess why this price manipulation did not influence performance, we recruited a separate group of 189 participants to use an unbranded version of

the training product (i.e. featuring only our price manipulation). Results of this separate analysis suggested no significant difference in test performance between participants in the full-price condition (M = 11.595) and those in the discount condition (M = 11.644; p = NS). Given that an unbranded version of our experiment failed to reveal any effects from our pricing manipulation, it seems that our experimental manipulations is not conducive to generating forward placebo effects, as observed in Shiv et al. (2005a). Future replications of this experiment may benefit from requiring participants to pay the advertised price of the product, consistent with Shiv et al. (2005a). Actual payment (as opposed to mere price descriptions) could increase the effect of the price manipulation by increasing elaboration on the price of the product.

At the same time, consistent with our previous findings, the one-way ANCOVA analysis revealed a significant main effect of the brand manipulation ($F(1, 113) = 4.839$, $p < 0.05$). Specifically, participants once again performed worse when the tutorial was framed as an MIT tutorial (M = 12.21) than as a University of Phoenix tutorial (M = 10.67). Additionally, this main effect was not qualified by an interaction effect between the price and brand manipulation ($F(1, 113) = 0.302$, $p <$ NS). As a result, we combined the discounted and full-priced data within each school condition to allow us to conduct the identical three-path mediation analysis (Taylor et al., 2008) as in Study 2, using the same performance standards and intimidation measures.

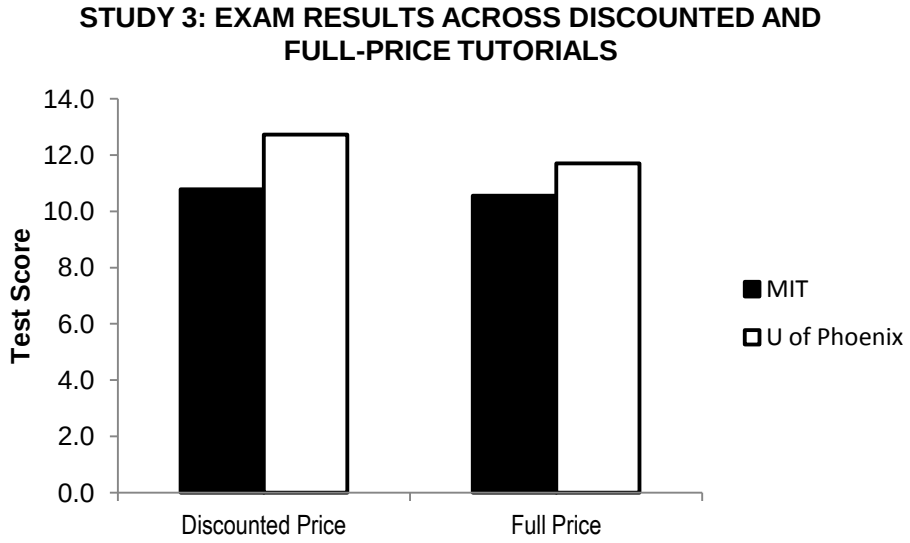


Figure 15. Higher-status brand use is associated with performance deficits. However, there is no influence of price on performance.

We assessed whether perceived standards and participant self-reported intimidation mediate the relationship between brand status and performance. Consistent with the results in Study 2, perceived standards were higher when participants used the MIT tutorial (M = 4.74) relative to the University of Phoenix tutorial (M = 3.96, $F(1, 115) = 9.01$, $p < 0.01$). Additionally, standards predicted participant levels of intimidation ($F(1,114) = 15.33$, $p < 0.001$). Finally, a full model incorporating all of the variables to predict test performance suggests the following: (1) intimidation predicts test performance ($F(1,113) = 4.24$, $p < 0.05$), (2) school brand ($F(1,113) = 3.54$, $p < 0.10$) marginally predicts test performance, and (3) the effects of perceived standards ($F(1,114) = 0.30$, p = NS) on performance are insignificant. See Table 2 for a summary of these findings. Combined, these results replicate our analysis in Study 2, and provide additional support that the status of the brand influences perceived standards and intimidation, ultimately influencing performance and causing reverse placebo effects.

STUDY 3: THREE-PATH MEDIATION ANALYSIS

	Standards (Mediator 1)		Intimidated (Mediator 2)		Performance (DV)	
IV	*b*	*t*	*b*	*t*	*b*	*t*
Constant	24.252***	27.938	-4.629	-1.713	9.290	1.452
Education	-0.108*	-2.054	-0.058	-0.969	0.378**	2.696
Age	0.005	0.521	-0.011	-0.897	-0.007	-0.267
School	**0.771****	-3.002	0.227	-0.763	-1.312	1.881
Standards			**0.407****	3.916	-0.124	-0.479
Intimidated					**--0.451***	-2.058

Table 2. Status brands once again affect performance through perceived standards and intimidation.

Discussion

Replicating the results from Study 2, we find once again that (1) higher-status brand training lowers performance (supporting Hypothesis 1c), and that this relationship can be explained by (2) increases perceived standards from higher-status branding (supporting Hypothesis 1a), which increases intimidation and decreases performance (supporting Hypothesis 1b). At the same time, we also find that the price of training does not impact performance in our experiment. A separate unbranded version of this experiment with only price manipulations failed to replicate the results of Shiv et al. (2005a), suggesting that our price manipulation may not be conducive to generating forward placebo effects. Nevertheless, after introducing price variations into our paradigm, we still find that high brand status can negatively influence performance and generate reverse placebo effects.

CONCLUSION

In the studies presented here, we document a reverse placebo effect in which participants that used high-status brand performance enhancers actually performed worse in subsequent

diagnostic tasks. We find evidence in support of an account that builds on the belief-expectancy-outcome framework (Shiv et al., 2005b) by identifying contexts in which positive product beliefs lead to negative self-efficacy thoughts and therefore negative behavioral outcomes. Specifically, when individuals are presented with high-status brand products, reference group comparisons are made against high-performance others, a performance standard that increases intimidation and generates these reverse placebo effects. We also find that these effects are more pronounced among high self-monitors who are more likely to process brand-related information.

A natural question that arises from these results is whether high-status brand products can ever generate forward placebo effects, akin to high-priced products in previous research. We believe this question yield an interesting direction for future research. Indeed, our findings suggest that participants infer high performance standards after contrasting themselves against a high-status reference group, and that this social comparison lowers performance by causing intimidation. However, consistent with social comparison research, there may be ways to get participants to assimilate to the social comparison, rather than contrast themselves from it (Mussweiler, 2001). One possibility might be to improve the self-esteem of the participant, as previous research has suggested that self-esteem can boost assimilation in social comparison (Aspinwall & Taylor, 1993; Buunk et al., 1990; Gibbons & Gerrard, 1989). Another possibility is to limit participants' elaboration on the high-status brand such that social comparison does not occur in the first place. This is consistent with research suggesting that the subconscious priming of Apple can result in increased creativity (Fitzsimons et al., 2008), and supports the idea that forward placebo effects in marketing can operate at the subconscious level (Shiv et al., 2005b).

Also, it would be beneficial to extend the findings of this essay to new performance domains and brands. For instance, our studies assess reverse placebo effects in brain training

and language learning software, and we focus on brand manipulations featuring two well-known educational institutions (MIT and the University of Phoenix). Perhaps this research can be extended to creative performance with brands like Apple that may be associated with high-performing customers (ex. "creative types"), as previously described. Also, another obvious extension of these findings would be to the medical domain, where products and treatments are oftentimes associated with the research universities that developed them. If it is discovered that the salience of high-status research institutions can lower patient health outcomes during treatment, this finding would have important implications for the way in which medicine should be marketed and packaged in order to maximize treatment benefits.

To summarize, this work has uncovered a novel and perhaps cautionary finding that better brands may actually lead to worse performance outcomes. By extending the belief-expectancy-outcome framework to include social comparison processes, we were able to identify a context in which positive beliefs about brand status actually leads to negative outcomes for consumers. More research is needed on the mechanisms behind placebo and reverse placebo effects, in order to provide us with methods to improve product efficacy without altering core functional components of the product. We hope that this work stimulates future research that will help to identify ways in which marketing actions might not only increase the purchases of products, but also the benefits provided to the consumer.

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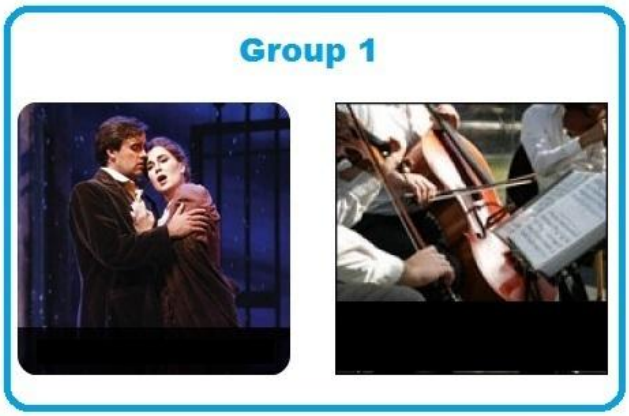
APPENDIX A

SAMPLE OUTFITS FROM STUDY 1



APPENDIX B

STIMULI FROM STUDY 2 (AGENCY CONDITION)





APPENDIX C

CO-BRANDING STIMULI FROM STUDY 4

PRADA

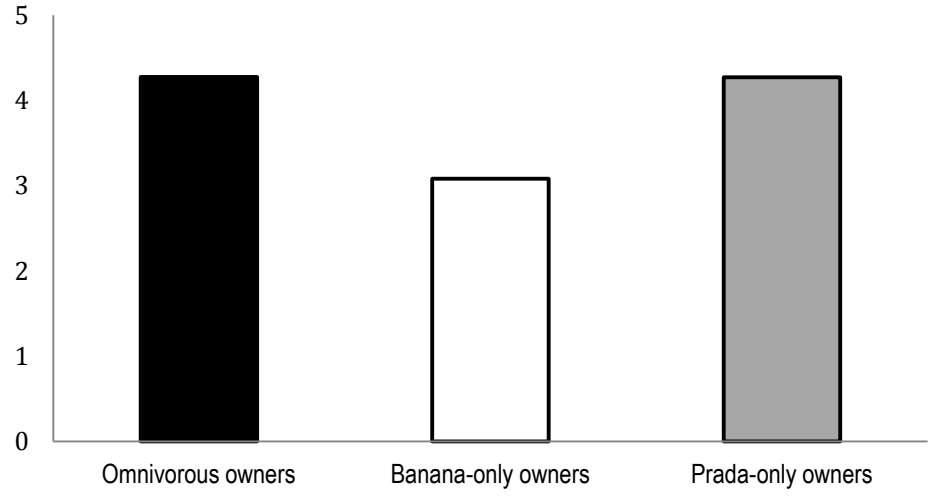
FOR BANANA REPUBLIC

SAMPLE SIZES FROM STUDY 4

Ownership Group	Sample
Prada Only	11
Banana Only	48
Prada and Banana	18

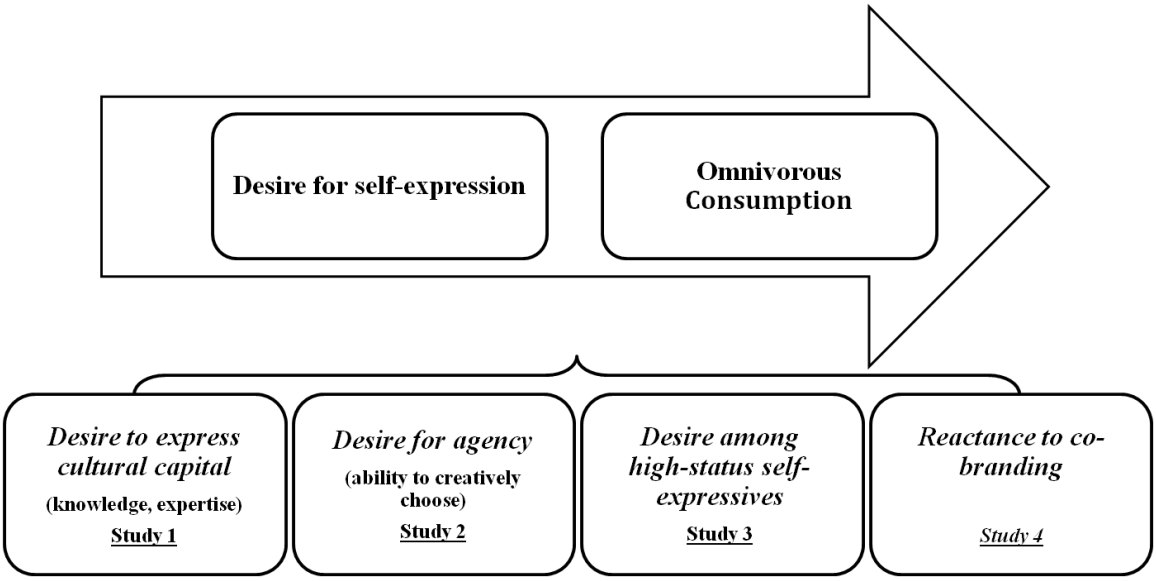
OWNERSHIP GROUP DIFFERENCES IN WEALTH

STUDY 4: ABILITY TO AFFORD PRADA ITEMS



APPENDIX D

MODEL FOR OMNIVORUSNESS AND NEED FOR SELF-EXPRESSION



APPENDIX E

STUDY 1A MATERIALS



STUDY 1B MATERIALS

HARVARD UNIVERSITY

APPENDIX F

STUDY 2 MATERIALS



APPENDIX G

STUDY 3 MATERIALS

LOW BRAND PROMINENCE





HIGH BRAND PROMINENCE





APPENDIX H

STUDY 4 ADVERTISEMENT (SAMPLE)

Imagine how heads will turn.

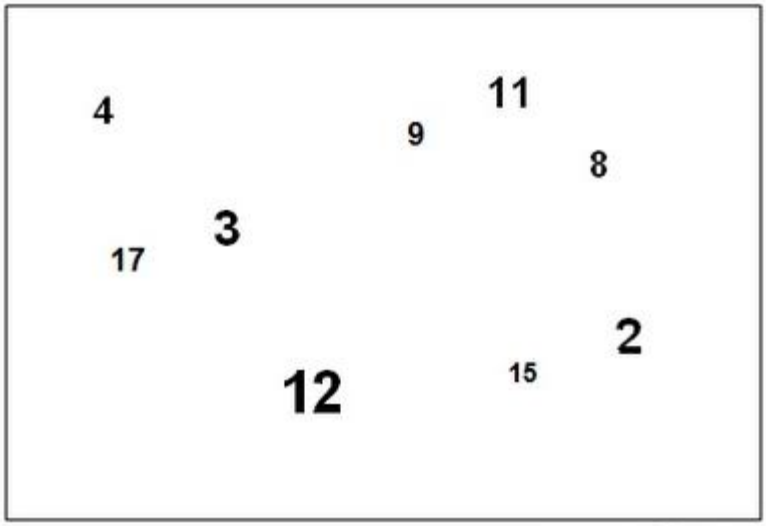


The all new Lotus Elise SC, starting at $47,250

APPENDIX I

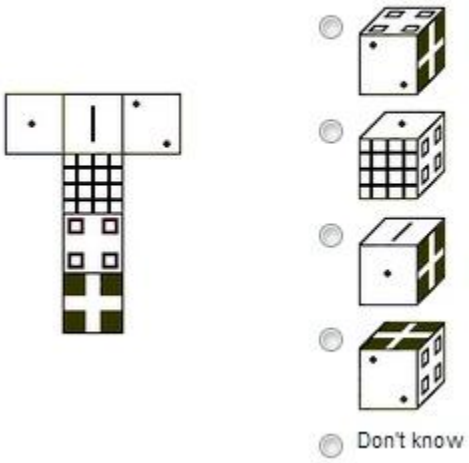
STUDY 1 SAMPLE TRAINING MATERIAL

Click on the number with the greatest value.



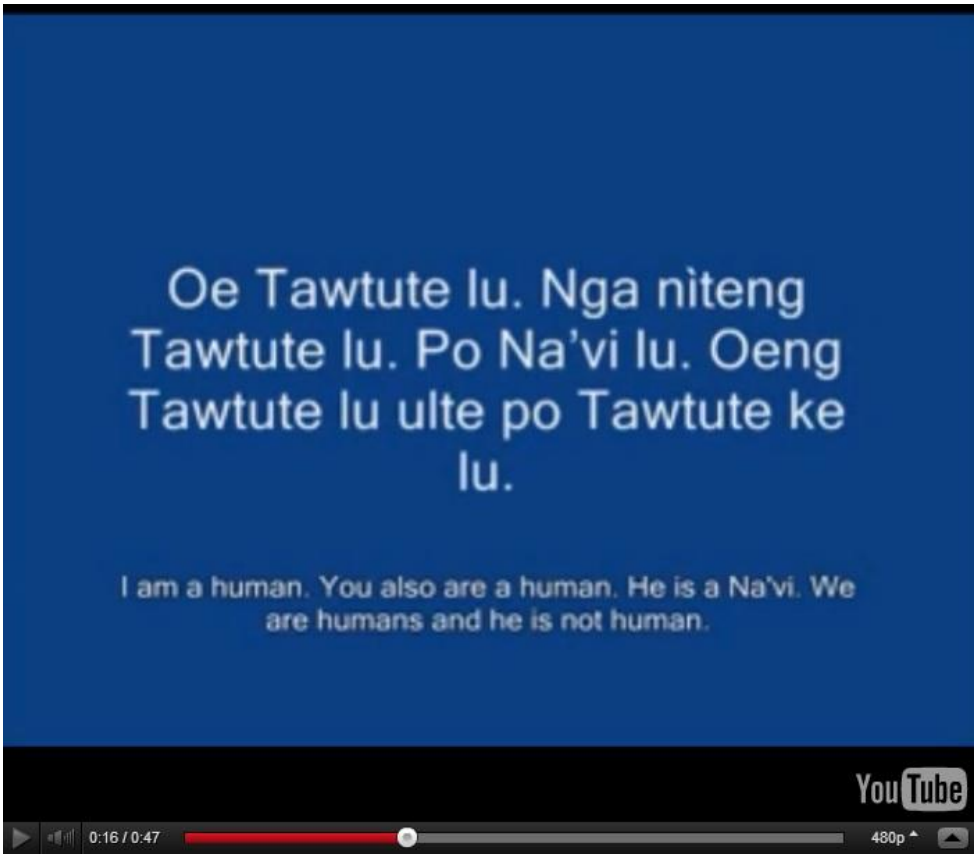
STUDY 1 SAMPLE EXAM QUESTION

Which of the cubes shown is the same as the unfolded cube below?



APPENDIX J

STUDY 2 SAMPLE TRAINING MATERIAL (FROM VIDEO)



STUDY 2 SAMPLE EXAM QUESTION

Now, please translate the following sentences from Na'vi to English.

Oe Tawtute lu

a) I am human
b) You are human
c) He is human
d) We are human