Name Letter Branding: Valence Transfers When Product Specific Needs Are Active

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Respondents in five experiments were more likely to choose a brand when the brand name started with letters from their names than when it did not, a choice phenomenon we call "name letter branding." We propose that during a first stage an active need to self-enhance increases the positive valence of name letters themselves and that during stage 2 positive name letter valence transfers to product-specific attributes (e.g., taste of a beverage). Accordingly, when respondents form a brand preference (e.g., of beverages), activating a product-specific need (e.g., need to drink) boosts the influence of this (transferred) valence.

I magine asking a friend named Dennis whether his decision to become a dentist could have been influenced by the similarity of his name to the word dentist. The vast majority of people whom we have approached with this idea have brushed it off disdainfully. Yet, according to archival data, people named Dennis are, in fact, overrepresented among dentists (Pelham, Mirenberg, and Jones 2002). These authors also found similar correlations among other professions, as well as the cities and states in which people choose to live. For example, Louises are disproportionately likely to move to Louisiana. Presumably, objects that include the letters from people's names absorb some of the positive valence that people associate with these letters.

We were intrigued by these findings because they suggest an influence of unconscious processes on major decisions. However, with any correlational research, third-variable explanations cannot be completely ruled out, and indeed a debate to that effect has ignited (Gallucci 2003; Pelham, Mirenberg, and Jones 2002). Even if we accept Pelham and colleagues' findings at face value, research examining more mundane preferences report mixed results. Hodson and Olson (2005) examined the role of name letters in attitudes toward, for example, food and leisure activities and found that their "data identify some limits of the name letter effect—in particular, it does not appear to generalize to everyday attitudes" (22). Indeed, at first we experienced similar difficulties when studying mundane choices of perfumes. Yet in very recent work on interpersonal preferences, Jones et al. (2004) found that respondents judged a person depicted on a photograph more positively when that person's T-shirt displayed a number that had previously been presented subliminally in conjunction with the respondent's first name (see also Garner 2005 for a study with fully overlapping first names of respondent and target person). The purpose of this article is to resolve this apparent discrepancy by specifying clearly when (i.e., given which moderators)—and how (i.e., based on what mechanism)—name letter preferences should be expected to influence consumption preferences. We begin by reviewing research on liking for name letters themselves.

The Name Letter Effect: Preference for One's Own Name Letters

When people rate their liking for the letters of the alphabet, they like the letters contained in their own names more than other letters and more than other people like these same letters. This finding is called the "name letter effect" (Nuttin 1985). According to the "implicit egotism" explanation of the effect, "most people possess positive associ-

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ations about themselves. For this reason, . . . most people should gravitate toward things that resemble the self" (Pelham et al. 2003, 800). Evidence supporting this view comes from findings that when respondents have recently written about a personal flaw, thus threatening their positive sense of self, their liking for name letters increases (Jones et al. 2002). This boost of name letter liking has not been found after people wrote about a personal strength (Jones et al. 2002; Koole et al. 2001). This research suggests that activating the motive to enhance self-esteem increases liking for one's name letters.

Name Letter Branding: Choosing Name Lettered Objects

Note that there is an important difference between liking of name letters versus objects bearing name letters, which we refer to as "name letter brands." Clearly, the valence of a letter is relevant for judgments of letter liking, and there is not much other information to base such judgments on (see Lynch, Marmorstein, and Weigold 1988; Pham 1996). However, if name letters contained in object names are to influence choices, it is not enough that the letters have positive valence. That valence has to somehow transfer to the choice object. Thus, for name letters in brands to influence choices, two stages are involved: (1) name letters are preferred because of implicit egotism and (2) name letter valence has to transfer to the brand. (Note that when several letters overlap, their valence can stem from phonetic or morphemic information.)

The second stage raises two issues. First, even if valence transfers, it may often be too weak to influence consumption choices because it is neither relevant nor the sole information in choosing between products. Second, what is the mechanism for the transfer of valence?

Considering the first issue, the evidence thus far is mixed. As already noted, correlational data from Pelham et al. (2002) suggest that name letter branding influences choices of professions. However, Hodson and Olson (2005) found a preference for name letters but no effect on mundane, everyday attitudes. One possibility is that (a) interpersonally relevant choices (e.g., choosing a profession, evaluating another person) or (b) noninterpersonal but important choices (e.g., choosing a place to live) may be much more threatening to the self than mundane consumption choices (e.g., choosing a candy bar). Since name letter preferences are boosted under self-threat (Jones et al. 2002), it is possible that it is only under such conditions that the name letter valence, as a result of boosting, is strong enough to influence choices. Thus, for the important life decisions studied by Pelham and colleagues, the decision may be threatening, whereas for the mundane consumption choices studied by Hodson and Olson and ourselves, the decisions may not be threatening, accounting for the observed effect or lack thereof. This discussion attests to the importance of distinguishing the name letter effect from name letter branding (i.e., the influence of name letters on choices). Below we refer to objects bearing versus not bearing name letters as NL brands versus NNL brands.

Possible Mechanisms Underlying Name Letter Branding

Adding an Assumption for the Name-to-Object Influence. There are several ways in which name letter branding could influence choices. The most obvious one is "global transfer of valence" (Kim, Allen, and Kardes 1996). In this view, name letters have positive valence; this valence spills over to, say, an NL-branded beverage. This valence transfer is global because valence merely transfers from its actual source, the name letter, to another source—the branded product. Further, specific product attributes would not play any instrumental role in the transfer of valence, for example, by serving as a prerequisite for valence transfer to occur. This transfer process would be consistent with attitude toward the ad, for example, where liking for the ad can transfer directly to the brand (MacKenzie, Lutz, and Belch 1986; Mitchell 1986).

As a second possibility, name letter branding could influence more directly consumers' perceptions of specific product attributes (e.g., accessible or prototypical ones), which would then drive overall liking for the product. This "attribute-specific valence transfer" would follow from parallel constraint satisfaction models (e.g., Read, Vanman, and Miller 1997).

One can easily express the difference between global and attribute-specific valence transfer algebraically. If one assumes a model in which the overall valence of a product is a weighted average of the valences of its attributes (e.g., Wright 1975), global valence transfer would be expressed by merely adding a global valence attribute to the equation. In contrast, attribute-specific valence transfer would be expressed by increasing the positive valence of some attributes more than of others. In the extreme, the valence of only one attribute could be increased. Thus, by definition, in global valence transfer, the global valence component is not associated with any product attributes. (That is the reason to call this kind of valence transfer global.) We find attributespecific valence transfer more plausible because, presumably, some product attributes (e.g., Coca-Cola's taste) are associated more closely with the product than others (e.g., Coca-Cola's bottle color), and these closer associates should have information processing advantages (e.g., higher accessibility) during valence transfer. This is consistent with the general insight from modern theories of associative information processing that for two concepts to be associated, their content has to fit quite well. For instance, Pavlovian conditioning only works when the conditioned stimulus fits the unconditioned response (Rescorla 1988). A third kind of transfer process is "meaning transfer" (from name letter to product) rather than valence transfer (Kim et al. 1996). For example, people may choose NL brands simply because they perceive them as similar to themselves and hence infer

that the product "is more like me," "more appropriate for me," "a better fit," and so forth (Aaker 1997).

In sum, name letters may influence choices by means of global valence transfer, attribute-specific valence transfer, or meaning transfer. While several of these processes could co-occur, we focus on attribute-specific valence transfer, as this mechanism suggests specific boundary conditions under which name letter branding should influence consumer choices.

Product Relevant Needs and Goals as a Crucial Test. In contrast to the other two transfer processes, only attribute-specific valence transfer suggests that product relevant needs should play a role in name letter branding. For example, the greater the individuals' need to eat, the more they prefer high- to low-fat food (Read and van Leeuwen 1998); the greater their need to drink, the more they like beverages (Ferguson and Bargh 2004). According to attribute-specific valence transfer, perceiving a beverage's name that overlaps with one's own name should transfer positive name letter valence to certain properties of a beverage. These could be thirst-quenching properties because of their prototypicality for a beverage (rather than, e.g., weight, caloric content, etc.). Then, need to drink should increase Peter's preference for Pepsi, as he would perceive Pepsi as more thirst quenching. Recently Winkielman, Berridge, and Wilbarger (2005) observed an influence of affective priming on the amount of a beverage consumed when participants' measured thirst was high, but not when it was low. To the degree that name letter branding and affective priming share the same mechanism of valence transfer, these findings suggest that name letter branding involves attribute-specific valence transfer.

In contrast, if name letter branding has a global, additive effect on one's liking for a NL-branded drink, need to drink should not influence the degree of this liking because, by definition, the name letter valence would not transfer to specific product attributes (e.g., weight, color, taste, calories, etc.) but instead to the object as a whole without being associated to or facilitated by particular object attributes. If consumers infer that the NL-branded beverage is more like themselves (meaning transfer), need to drink should also have no effect because that meaning is irrelevant for the need to drink. Thus, if we vary product relevant needs, such as the need to eat or drink, we can provide unique support for attribute-specific valence transfer. This does not rule out any role for global valence transfer or meaning transfer underlying name letter branding. To the degree we find support for attribute-specific valence transfer, we would be one step further in explaining how name letter valence transfers to name letter branded objects and, thus, predicting when name letter branding is likely to influence choice—when a product relevant need is active.

Self-Enhancement. Note that the need to self-enhance should increase the effect of name letter branding for any product because it has a direct effect on the valence of name letters. In contrast, the need to eat, drink, and so forth, do

not influence liking of name letters. Instead, we hypothesize that they moderate the transfer of valence from name letters to product attributes. Thus, the process driving liking of name letters is different from that driving liking of name letter brands. The discussion above leads us to formally hypothesize:

H1: Name letter branding influences product preferences by means of attribute-specific valence transfer.

This leads to the prediction that the effect of name letter branding on product preferences is moderated by product relevant needs. Note that the specific shape of this moderation cannot be derived from the hypothesis, because it requires assumptions about the nature of needs, an issue about which our hypothesis is silent. We now turn to the shape of the moderation.

Shape of the Moderation. As noted above, we make two assumptions: First, increasing a product relevant need (e.g., to drink) enhances the positive valence of means instrumental for satisfying the need (e.g., a thirst-quenching beverage). Second, name letter branding may be too weak to influence choices unless it is boosted. Hence, for a low need (e.g., to drink) we predict no or, at best, a small effect of name letter branding. In contrast, for an intermediate need (e.g., to drink) we predict an effect of name letter branding. During the transfer process two things happen: valence is transferred to specific attributes (e.g., thirst quenchingness, taste), and to the degree that these are relevant to the currently active need, they get weighted more heavily and/or get boosted (see Cabanac 1971).

In contrast to low- and intermediate-need levels, for highneed levels prior research suggests two possible predictions resulting in different shapes of the moderating effect of need. The reason is that increasing a need not only influences the valence of instrumental means but also increases arousal. From the perspective of the elaboration likelihood model (ELM; Petty and Cacioppo 1986), "high arousal levels reduce the amount of processing capacity. . . . Consequently, peripheral cues that require little processing capacity have a stronger effect on brand attitudes in high than in moderate arousal conditions" (Sanbonmatsu and Kardes 1988, 383). These authors found evidence for this prediction. Because name letter valence is a peripheral cue, from this view its influence should increase monotonically as need increases, predicting a strong effect of name letter branding for high need.

However, Pham (1996) has shown that under certain conditions the relation of arousal and the persuasiveness of peripheral cues may follow an inverted-U shape, reminiscent of the Yerkes-Dodson law (1908). According to Pham, increasing arousal has two effects. First, as arousal increases, perceivers select for further processing those persuasive elements/information in the appeal that are most diagnostic (and do not select the least diagnostic ones). One source of diagnosticity is the degree to which an element of an appeal can distinguish among choice options. Because name letter valence distinguishes between NL and NNL brands, it is a

diagnostic cue in our experiments and, therefore, should have more impact on persuasion, the more perceivers' need (e.g., to drink) is aroused. The second effect of arousal is that the perceivers' ability to elaborate on the previously selected piece of information decreases as arousal increases. When the demand that the persuasive element poses on cognitive resources reaches the level of the resources available to the perceiver, increasing arousal further decreases the persuasiveness of the element, because the perceiver cannot adequately elaborate on the element. Applied to our study, choosing a brand name based on attribute-specific valence transfer requires some amount of cognitive resources, X. If arousing a need decreases cognitive resources beyond X, increasing need (and arousal) further would decrease the effect of name letter branding. This view predicts no (or a weak) effect of name letter branding for high need, resulting an inverted-U relationship between level of need and the impact of name letter branding.

In sum, we predict that the effect of name letter branding will be absent for low need and present for intermediate need; however, whether there is an effect of name letter branding for high need is an empirical question we explore in study 2. Answering this question will allow us to identify the shape that the moderating effect of product relevant need has (monotonic increase vs. inverted-U) and to better specify the mechanism underlying the name letter branding effect.

Our theoretical contribution is thus twofold. We elucidate the process by which name letter branding influences choices by showing that compared with the name letter effect, name letter branding involves an additional process, attribute-specific valence transfer (see hypothesis 1). Second, we propose a two-stage process based on implicit egotism (stage 1) and attribute-specific valence transfer (stage 2) that can parsimoniously account for all empirical phenomena in this domain observed to date.

STUDY 1: BOOSTING NAME LETTER BRANDING WITH MEASURED HUNGER

The main purpose of studies 1 and 2 was to obtain evidence that product-specific needs boost the effect of name letter branding on preferences. In study 1 respondents chose between two brand names for a product, one NL brand name and one NNL brand name. Having respondents choose brand names for a product rather than products themselves works against our hypothesis of attribute-specific valence transfer and is hence a conservative test. Compare assigning names to beverages with choosing between beverages. If anything, respondents should be less likely to infer from positive (name letter) valence that the name Alioki sounds thirst quenching rather than that the beverage they have just tasted is thirst quenching. Studies 3 and 4 demonstrate the effect of name letter branding for actual product choices and preferences.

The main goal of study 1 was to see whether a relevant need, here self-reported hunger, would boost the influence of name letter branding. It further sought to confirm that, as in the name letter effect, self-threat also boosts the effect of name letter branding.

Method

Overview and Participants. The two stages of this study were introduced to participants as two separate studies. The first stage randomly assigned participants to one of several experimental manipulations (all between subjects). The second stage involved the name letter branding task. Native-speaking pedestrians from a major metropolis were recruited in pairs. The number of valid participants was 181.

Stage 1—Experimental Manipulations. Threat versus affirmation was manipulated between subjects using the Jones et al. (2002) procedure. After completing a self-esteem scale, threat participants were asked to write about an aspect of themselves that they would like to change. Affirmation participants wrote about a positive aspect of themselves.

Stage 2—Name Letter Branding Task. This alleged second study was introduced as being a linguistic study on how people infer meaning from unknown words. Participants first tasted a salty Japanese cracker. Then the experimenter asked them to decide which of two Japanese names they preferred as a name for the cracker—supposedly because we needed to name it for a future study. Being nonspeakers of Japanese, participants were to choose a name quickly and spontaneously, trusting their "first impressions and intuitions," by circling one of the two supposedly Japanese names printed on an answer sheet. Participants were run in yoked pairs such that both participants in the same condition received identical brand names. The experimenter created these names by adding the word stem "oki" to the first three letters of each participant's first name (taken from the consent form). For example, for Jonathan and Elisabeth these would have been Jonoki and Elioki. (Fortunately, we did not encounter anyone named Kari.) Yoking held constant any difference between the two brand names, beyond name letter matches.

Then, a questionnaire probed for hypothesis awareness asking, in the following order, why respondents had chosen the particular beverage name; to list all thoughts they had during the study; to list precisely the purposes of the studies as they perceived them right now; to list anything that they may have found surprising; to tell whether they thought—and, if so, how—the two studies could have been connected. Subsequently, participants rated how hungry and thirsty they were on scales from zero (not at all) to six (absolutely).

Data Exclusions and Hypothesis Awareness. In this paradigm some participants will receive inappropriate NL and NNL brands. The main reason is that two participants sometimes share name letters. We excluded participants who shared the same first initial. There were some other infrequent reasons for exclusions, namely, when participants' names on the consent form were illegible; they signed the

consent form with their official name but went by another name, such as a nickname (and the NL brand should have been constructed from the nickname); and the experimenter assigned a wrong brand name. The number of participants excluded was 24.

Based on two independent coders' judgments of the openended questions, we excluded two respondents who could have been hypothesis aware, for example, by indicating that we might have manipulated the brand names so that they are similar to their own names. For any open-ended question, coders disagreed for no more than three respondents and resolved these disagreements by discussion. This left 155 participants for analysis.

Results

Preference for Name Letter Brand. Participants preferred the NL brand (N = 87) to the NNL brand (N = 68, $\chi^2(1) = 2.33$, p = .12). We were not surprised that this effect did not reach statistical significance because we expected that the effect of name letter branding in consumer choices is weak unless moderating conditions boost it. Hence, we expected that this effect would be statistically significant for threat participants but not for affirmation participants.

Self-Threat versus Self-Affirmation. For this analysis we excluded an additional four respondents who had not filled out the threat versus affirmation questionnaires adequately. As expected, respondents whose self-esteem had been threatened preferred the NL brand (N = 46) to the NNL brand (N = 28), that is, a 62% preference for the NL brand, which is significantly different from the 50% expected by chance ($\chi^2(1) = 4.38$, p < .05). In contrast, and also confirming our expectations, affirmation respondents did not prefer the NL brand (N = 39) to the NNL brand (N = 38). In sum, participants preferred the NL brand to the NNL brand after self-esteem threat but not after selfaffirmation. This finding contrasts with the name letter effect that has been reported under both conditions. Hence, introducing a consumption context might attenuate the influence of name letter liking. Yet, given the right boundary condition (i.e., self-threat), name letter branding influenced choice. Jones et al. (2004) very recently replicated this effect for forming impressions of other people. After reading a description of a woman, male respondents evaluated her more positively when her name included a few letters from their surnames, but only when their self-esteem had been threatened.

Hunger and Thirst. We conducted a logistic regression of the choice of the NL brand versus the NNL brand on self-reported thirst and hunger ratings, dropping one respondent because of missing ratings. As expected, as hunger increased, respondents' likelihood of choosing the NL brand over the NNL brand increased (b = .17; t(152) = 2.13, p < .05, r = .17). Because we predicted a moderating influence only for product relevant needs, this relation should be unique to hunger, and, indeed, brand choice was not

related to thirst (t < 1). Also consistent with our two-stage model, hunger predicted NL brand choice for self-threatened participants (b = .28; t(71) = 2.11, p < .05, r = .24) but not for self-affirmed participants (b = .14; t(74) = 1.23, p = .22, r = .14). Presumably, for affirmation participants, positive name letter valence from stage 1 was too weak to be boosted sufficiently by need to eat during stage 2.

STUDY 2: BOOSTING NAME LETTER BRANDING WITH EXPERIMENTALLY INDUCED NEED TO DRINK

Whereas level of need in study 1 was only measured, in study 2 we experimentally manipulated it. Ratings of experienced hunger or thirst are very poor measures of physiological need to eat or drink (e.g., Tiffany 1990). Hence, in addition to the usual methodological advantages, experimentally manipulating need provides a more valid operationalization of physiological need. Also, to generalize beyond the need to eat, this time we varied the need to drink. The product used was a supposedly Japanese beverage. We expected that this time the need to drink but not the need to eat would boost the choice share of the NL brand.

Method

Participants and Procedure. The procedure was the same as in study 1 with the following exceptions: First, the number of valid participants recruited was 295. Second, there was no self-threat manipulation. Third, study 2 manipulated need to drink on three levels: low, moderate, and high. More specifically, all participants tasted and rated their liking of three salty crackers and chose their preferred one, supposedly as part of a taste test. In reality we intended to arouse the need to drink. Then, two thirds of the respondents participated in an alleged taste test of several spring waters. The one third who did not participate in this test were in the "high need to drink condition." Of those respondents participating in the taste test of spring waters, half drank a total of 210 mL of water; the other half drank 420 mL of water. These participants were in the "moderate need to drink" and "low need to drink" conditions, respectively. As the third difference from study 1, the focal product was a Japanese beverage (in fact, a sports drink served at room temperature), which participants tasted (40 mL) at this point. Then, as our main dependent measure, they assigned one of the two brand names to the beverage. Finally (and subsequent to the above), while answering the hypothesis awareness questions, all participants were given 280 mL of water from which they could drink as much as they wished. As a manipulation check for need to drink, we measured the amount they drank.

Data Exclusions and Hypothesis Awareness. Participant exclusions amounted to 36 due to issues related to assignment of brand names as described earlier for study 1 and seven due to potential hypothesis awareness. (Coders

disagreed on maximally four respondents per open-ended question.) This left 252 respondents.

Results

Manipulation Check. With increasing (manipulated) need to drink, participants drank more of the 280 mL of water at the end of the study: M = 17 mL (low need), M = 52 mL (intermediate need), M = 120 mL (high need), all p's < .01. Also, the percentage of respondents who drank all 280 mL in these conditions was: 1%, 3.8%, and 18.2%, respectively.

Preference for Name Letter Brand. As predicted, participants with a low need to drink, that is, those who at the beginning of the study had taste tested 420 mL of spring water after eating the salty crackers, chose either brand with equal likelihood (N = 48 for each brand type). Also as predicted, participants with a moderate need to drink (having taste tested only 210 mL of spring water after eating the salty crackers) chose the NL brand more often (N = 48)than the NNL brand $(N = 31; \chi^2(1) = 3.66, p = .028,$ one-tailed). Hence, as in study 1, the effect of name letter branding was moderated by a product relevant need, this time the manipulated need to drink. More specifically, need to drink boosts the name letter branding effect. However, looking at low- and intermediate-need levels only does not allow us to see whether the shape of this moderation follows a monotonic increase or an inverted-U pattern. To explore this question, we had added the high-need level. Respondents who had not done the taste test of water (high need), chose the two brands statistically equally often (N's = 37 and 40; χ^2 < 1). Thus, the moderating pattern of need to drink follows an inverted-U, consistent with Pham's (1996) theorizing but not predicted by the ELM.1 While arousal may be involved in causing this inverted U-shape (see Pham 1996), it cannot explain the need specificity of the name letter branding effect. Attribute-specific valence transfer can.

Discussion of Studies 1 and 2

The data thus far are consistent with our prediction that product relevant needs moderate name letter branding. When a product relevant need was active at a moderate level but not at a low level, respondents preferred an NL brand name to an NNL brand name. This was the case for manipulated need to drink with a beverage as product (study 2) and for measured hunger with a cracker as product (study 1). Moreover, at a high level of need, as produced by our manipulation in study 2, the name letter branding effect again disappeared. It is a fragile effect. Note also that in both studies respondents were instructed to trust their first impressions and intuitions, presumably focusing them on their feelings. In contrast to the name letter effect (Koole et al. 2001), this

focus alone was not sufficient to produce the name letter branding effect.

The corollary of our prediction is that product irrelevant needs should not moderate the name letter branding effect. This was supported in study 1. Whereas this result was correlational, an additional study using the same paradigm as study 2 confirmed it experimentally. Respondents whose need to drink had been experimentally manipulated to be moderate (as in study 2) were more likely to choose the NL brand over the NNL brand (70% preference; p < .05, one-tailed) when the product they assigned a brand name to was a beverage but not when it was a cracker (54% preference for the NL brand).

The preference for an NL brand name was also increased by activating the need to self-enhance. This was expected from previous research showing that activating the need to self-enhance increases the valence of name letters themselves (Jones et al. 2002). It is hard to believe that activating, say, the need to drink would increase the valence of these letters. Hence, additional processes must kick in as we move from the name letter effect to name letter branding.

Underlying Process. We proposed a two-stage mechanism. The first stage produces positive valence of name letters and has been described by implicit egotism. The need to self-enhance directly acts on this process and increases the positive valence of name letters. However, other needs (e.g., to drink) should not moderate this process. When name letters are part of a product name, a second (subsequent) stage—attribute-specific valence transfer—gets involved. It transfers the positive valence of the name letters to product attributes. The attribute-specific nature of this transfer follows from our findings that the effect of name letter branding is boosted only by product relevant needs. For example, the need to drink should only boost the effect of name letter branding if the valence that originates from name letters is associated with product attributes relevant for this need (e.g., taste, thirst quenchingness). Because respondents misattributed the source of name letter valence, these findings also show that respondents are not aware of the source of name letter valence, even if they might be aware of the name letters themselves or of the valence triggered by them. Further, to bring about name letter branding effects, boosting name letter valence during stage 1 is not necessary. It can be sufficient to boost the transferred name letter valence during stage 2 by means of a relevant need.

Remaining Questions Addressed by Subsequent Studies. Because studies 1 and 2 only demonstrated preferences for brand names, studies 3 and 4 test whether name letter branding influences actual product choices and preferences when these moderating conditions are optimized.

While in studies 1 and 2 we excluded respondents who could have been hypothesis aware, we do not know the degree to which respondents noticed a similarity between their own names and the brand names. These studies were not designed to investigate such awareness because, being studies of brand name choices, they draw attention to the

¹We did not find an inverted-U pattern for hunger ratings in study 1. This is not surprising because presumably need levels there were much lower, never reaching the peak of the inverted-U.

brand names. However, our conclusion that name letter branding is moderated by product relevant needs is not threatened. Awareness of similarity can only predict the same effect across all need conditions. Yet, it is conceivable that awareness of name letters (without awareness of the source of name letter valence) strengthens name letter branding effects by increasing name letter valence. For instance, if Dennis the dentist has noticed the name similarity, it may have increased the positive valence he derives from it. (But presumably he has no conscious access to how much of his liking for the dentist profession stems from name letter valence.) The subsequent studies show that name letter branding occurs also when people are clearly unaware that brand names contain name letters.

STUDY 3: NAME LETTER BRANDING INFLUENCES ACTUAL CHOICE

Study 3 aimed to demonstrate the influence of name letter branding on actual product choices. To create optimal conditions, we threatened respondents' self-esteem. Participants tasted one NL brand and one NNL brand of tea and then chose one of them to take home.

Method

Pedestrians (N = 88) were recruited in pairs for a taste test of tea. Following the same procedure as before, the experimenter created for each pair of participants two brand names (NL and NNL brands) in a yoked design. Participants saw 20 packets of tea lined up that were presumably being tested. Each packet was labeled with a made-up Japanese name (e.g., Mataku, Somuta), two of them being the brand names just constructed. The experimenter explained, to ensure optimal tasting, each participant would taste only two teas and would be allowed to choose one packet of these two to take home. Presumably all relevant combinations of teas had been printed onto slips of paper contained in a box. One participant had to randomly draw one paper slip and select the respective packets of tea. Next, participants were led to individual cubicles. There, "while the teas were being brewed," they worked on another allegedly independent study supposedly investigating self-perception. In reality, it was the self-threat manipulation from study 1, in which respondents wrote about an unfavorable aspect of themselves. The teas were identical except that one contained a drop of lemon juice, pretested to make them perceptually distinguishable without giving away the lemon taste. When the experimenter returned, participants rated their hunger and thirst and were given the first cup of tea, the labeled packet of tea, and a one-page questionnaire. They wrote the name of the tea onto the questionnaire, tasted one sip, and rated how much they liked it. After having cleansed their palate with water, they repeated the procedure for the second tea. Participants could taste the teas again before choosing one to take home. The order of tasting the teas (with vs. without lemon) and of seeing the brand labels (NL vs. NNL) was counterbalanced across respondents but held constant for each yoked pair. Subsequently, an open-ended questionnaire probed for the reason of the respondent's choice of tea, the believed purpose of the study, and any doubts about the study purpose as stated by the experimenter. Then respondents rated their liking for tea in general and how often they drank it, followed by ratings whether their choice had been influenced by the color of the teas, the strength of brew, by them having been without sugar or milk, by their names, and by the order of tasting them. Thus, we camouflaged the question about the influence of the tea names among other influence questions.

Results and Discussion

Exclusions and Hypothesis Awareness. Two coders categorized the open-ended questions according to whether respondents were hypothesis aware (N=1), mentioned anything about the brand names while not being hypothesis aware (N=6), or did not mention anything about the brand names (N=81). We included only the latter respondents (perfect coder agreement) and only those who had rated the influence of the name on their choice as zero on the 0–6 scale (N=61). We can be very confident that these respondents were not aware of the name letter matches.

Preference for Name Letter Brand. As predicted, the NL brand of tea was chosen by more respondents (N=39) than the NNL brand (N=22), that is, 64% of the respondents had a name letter preference ($\chi^2(1)=4.74, p<.05$). Ratings showed the same significant pattern.

Thirst and Hunger. Neither thirst nor hunger predicted the preference for the NL brand over the NNL brand (both t's < 1). Most respondents rated their thirst as intermediate, suggesting they were reasonably hydrated, resulting in little systematic variability in need to drink.

Reasons for Choosing. Answers to the first openended question inquiring why a respondent chose a tea were categorized by two independent coders. Each answer was assigned to up to four types of reasons. The percentages of respondents mentioning something about taste, smell, and temperature were 96.7, 14.8, and 0, respectively. The fourth type of reason was anything concerning the brand names. Recall that we had excluded respondents mentioning this reason. But even before these exclusions only 5% of the respondents mentioned something about the brand names. After exclusions, the influence of the brand name on choice was rated as M=0, while it was M=3.34 for the intensity of brew, M=2.38 for the absence of sugar or milk, M=1.23 for the order of tasting, and M=.92 for the color of the tea.

Summary. Study 3 provides evidence that name letter branding can influence actual decisions, at least if moderating conditions are boosting its effect. Respondents, all of whom had had their self-esteem threatened, chose the NL brand more often (64% of the time) than the NNL brand.

STUDY 4: NAME LETTER BRANDING WITH REAL BRANDS

One may argue that the influence of name letter branding on choices may be limited to breaking the ties in decisions where there are no other reasons to prefer one choice option. After all, in study 3 the teas only differed on name and very slightly in taste. Further, even though respondents were unaware that one brand name was similar to their first names, their attention must have been drawn to the unusual brand names, possibly enhancing the effect of name letter branding. To address these issues, in study 4 respondents rank ordered existing brands of chocolate candy. In study 3 we had boosted the valence of name letters by threatening selfesteem, thus affecting stage 1 of the hypothesized process. Study 4 was conducted directly before lunch, so presumably the need to eat would boost the influence of name letter valence on preferences for candy during stage 2 of the hypothesized process. Also, in contrast to the previous threeletter overlaps, study 4 implemented real NL brands with one-letter overlaps.

Prior research suggests that the name letter effect occurs when respondents trust their feelings rather than reasons (Koole et al. 2001). One would thus expect that name letter branding should also be feeling based. Alternatively, if valence transfer is attribute specific, name letter branding in contrast to the name letter effect could be a case of reason-based choice (Simonson 1989). To test this possibility, we instructed respondents to focus either on feelings or on reasons.

Method

Students in a research methods class (N=160) took part in a marketing survey on chocolate candy bar preferences. We eliminated 12 nonnative speakers. Students reported their initials after our dependent measures had been taken. In the feelings (reasons) conditions, they were to "trust their intuitions and feelings about each individual candy, focusing on things like the taste of the candy and how it made them feel" ("think carefully about all of the reasons for their preference for each individual candy"). Pictures of the 18 chocolate candies were arranged in one random order as a 6×3 matrix. Students first assigned a rank to each brand and then rated each on a scale from one (I do not like this candy bar at all) to 11 (I like this candy bar very much).

Results and Discussion

Following Kitayama and Karasawa (1997) for each of the 61 students whose first initial matched the first initial of a brand (e.g., Tonya for Twix) we obtained the rank the student had given to this NL brand. Then we computed the mean rank the rest of the sample had given this brand, now constituting an NNL brand. Next we subtracted for each respondent his or her NL score from the (group's) NNL score. For example, if Twix was ranked 5.4 by the group and 3 (i.e., third out of 18) by Tonya, her NL brand preference

score would be 5.4 - 3 = +2.4, reflecting a preference for the NL brand. We do not report liking ratings as they yielded similar results.

Respondents ranked NL brands .75 ranks higher than NNL brands (t(60) = 2.26, p < .05). In the feelings condition, that preference amounted to M = 1.5 ranks (t(26) = 3.26, p < .05), while in the reasons condition it was only M = .16 ranks (t < 1), the difference between these two effects being significant (t(59) = 2.06, p < .05). Thus, only when respondents trusted their feelings did name letter branding improve the ranking of a brand.

Hence, the influence of name letter branding on preferences involves feelings, even though these feelings appear to be attribute specific. Consistent with parallel constraint satisfaction models, the information by which the name letter influences preferences appears to be constrained by being feeling based but also by being associated with certain product attributes.

GENERAL DISCUSSION

Studies 3 and 4 provide experimental evidence that name letter branding can have a direct influence on actual choices and preferences for consumer products. In study 3 respondents chose a tea more often when it was NL branded than when it was NNL branded. In study 4, NL branding of popular candy bars improved their preference ratings. However, experiments initially conducted in other labs and in ours failed to find effects of name letter branding on mundane consumption preferences. After having gained a better understanding of the underlying process, we are now able to predict when (and when not) to expect these effects.

According to the first stage of this process, implicit egotism (i.e., the motive to self-enhance) endows name letters with positive valence (Jones et al. 2002). Consequently, activating the need to self-enhance increases positive name letter valence. Indeed, in study 1, respondents preferred to assign an NL rather than NNL brand name to a cracker when their need to self-enhance was high but not when it was low. By itself, positive name letter valence may be too weak to influence mundane consumption preferences. However, if during stage 1 of the process underlying name letter branding self-esteem threat increases name letter positivity, then name letter branding does influence mundane consumption preferences.

The positive name letter valence from stage 1 has to somehow transfer to the product during a second stage, the valence transfer stage. Respondents in study 2 preferred to assign to a beverage an NL brand name rather than an NNL brand name when their need to drink was moderately activated but not when it was low. This result gives strong support to attribute-specific valence transfer as the transfer mechanism, that is, the hypothesis that name letter valence transfers more to some attributes than to others. The reason is that increasing the need to drink can increase the impact of name letter valence on preferences only if that name letter valence is transferred to product attributes that are relevant to the need to drink. Hence, it is neither possible to explain

this finding by global valence transfer to the product as a whole nor by transfer of (self-related) meaning. The transferred valence has to become associated with specific product attributes, here attributes that are related to the need to drink. This conclusion is corroborated by some additional observations we made. After their need to drink had been stimulated, participants' preferences were influenced by name letter branding of a drink but not of a cracker (see discussion of study 2). In addition, in study 1, the effect of name letter branding crackers increased with measured hunger but not with measured thirst.

Should we call the type of valence transfer product specific instead of attribute specific? "Product-specific valence transfer" would mean that valence only transfers to products that possess need-relevant attributes (e.g., thirst quenchingness when need to drink is activated). It would differ from attribute-specific valence transfer in that the valence transfers to the product as a whole, given the attribute, rather than to the relevant attribute(s) (e.g., thirst quenchingness). Thus, in product-specific valence transfer, a specific attribute would trigger global valence transfer. One might make the argument for product-specific valence transfer because all of our evidence shows valence transfer to products with need-specific attributes (e.g., thirst quenchingness). We did not explicitly measure and show that the transfer is to these specific attributes within a product. But, in our view, product-specific valence transfer is no better supported by our data than attribute-specific valence transfer. Our evidence clearly shows that name letter branding is driven by a specific set of attributes, those of relevance to the active need. Both hypotheses and the data agree that specific product attributes trigger the valence transfer from name letters to products. The subtle question that remains is whether the name letter valence transfers (a) more to the triggering attributes than to nontriggering attributes (attribute-specific transfer) or (b) to the product as a whole (global but productspecific transfer). The issue of which of these two processes is at work, however, can only be resolved through future experiments. Most important now, our evidence does show that the valence transfer is moderated by specific product attributes, those that relate to the active need. A pure version of global valence transfer cannot explain our data.

There is an important implication of realizing that name letter branding involves a second processing stage involving attribute-specific valence transfer. In addition to self-threat, activating a product relevant need can also be a moderating variable that boosts the influence of name letter valence on preferences. Of course, product-specific needs are unique to the domain of consumer behavior and will not influence name letter liking. Attribute-specific valence transfer occurs during the valence transfer stage, a stage subsequent to implicit egotism. Our exploratory result with high levels of need to drink suggests that there may be a limitation to boosting name letter branding effects with product relevant needs. At high need levels, name letter branding effects vanished. Future research should follow up on this finding

and investigate whether it applies to other needs and other valence transfer phenomena.

Previous research had shown that judgments of name letter liking are feeling based (Koole et al. 2001), suggesting that name letter valence produced during stage 1 of the underlying process is a feeling. We investigated whether the attribute-specific valence transfer of stage 2 is also feeling based or, rather, an instance of reason-based choice (Simonson 1989). Study 4 showed that name letter branding effects occur when respondents trust their feelings rather than their reasons, suggesting that during stage 2 it is feelings that transfer. Thus, name letter branding influences preferences only when consumers weigh feelings into their judgments. However, in studies 1 and 2, even though respondents were focused on feelings, there was no name letter branding effect unless it was boosted by a need. This suggests that a focus on feelings alone may not be sufficient to bring about an effect of name letter branding on consumption choices. In contrast, a feeling focus is sufficient to bring about the name letter effect (Koole et al. 2001).

The two-stage process we have just described is the first model we are aware of that can account for all moderators of name letter branding that have been reported to date. Being equipped with this understanding, we can now explain initial failures to find effects of name letter branding: these initial studies did not use any of the above moderators to boost the effect of name letter branding. Without such boosting, name letter valence might be too weak to be detected reliably in mundane consumption preferences. Some choices may have a self-threat as a boosting variable built-in either because they have interpersonal significance or are very important. This should be the case for Pelham et al.'s (2002) important life decisions. From this perspective, the real choice experiments we reported make a unique contribution because they are the first ones showing that name letter branding can influence mundane consumption choices that do not involve a built-in self-threat. They also led us to speculate that important life decisions may be influenced by name letter branding because they are self-threatening.

To Which Product Attributes Does Valence Transfer?

Our results suggest two new questions. First, are other valence transfer phenomena (e.g., mood, atmospheric cues, affective priming, conditioning) also attribute specific? Second, and of particular relevance if the former is true, to which attributes does valence transfer? According to our theorizing, valence transfers to those product attributes that satisfy multiple constraints in parallel. Theory on knowledge activation (e.g., Lynch et al. 1988) provides a good point of departure for hypothesizing what these multiple constraints may be. For instance, taste is more prototypical for a beverage and hence a more accessible attribute than beverage color, so name letter branding should improve the valence of a beverage's taste more than that of its color. For a diet drink, low calorie content may also be highly acces-

sible, but it is not an attribute that is instrumental for (and hence not diagnostic of) quenching thirst. So the valence of this attribute may not be boosted by need to drink during the transfer process, and, as a result, it would not profit much from valence transfer. In other words, low calorie content only satisfies one of two constraints. Thus, relevance of the attribute to the need is an important constraint. Another constraint could be the relevance of feelings. People weigh feelings only into a judgment when these are relevant for it (Pham 1996). When a judgment is supposed to be reason based, feelings would become irrelevant, presumably because they do not satisfy an important constraint.

Phenomena Related to Name Letter Branding

Mere Ownership. The mere ownership effect (Beggan 1992) is an increase in liking an object as a result of owning it (but see Barone, Shimp, and Sprott 1997; Beggan and Allison 1997). According to Beggan (1992), owning an object makes it self-related. Is mere ownership like the name letter effect (i.e., a one-stage process) or like name letter branding (i.e., a two-stage process)? We can now answer this question empirically by examining whether mere ownership effects are moderated by product relevant needs. In any case, in mere ownership people are aware that they own an object. Such awareness is not necessary in name letter branding (see studies 3 and 4).

Self-Reference Branding. Name letter branding may be a special case of transfer of valence due to a brand establishing a reference to the self. There are numerous ways for brands to establish self-reference, for instance, via associations between physical features of the brand and self (e.g., femininity of the color rose, masculinity of a scent); between person attributes of spokespeople, sales staff, or other consumers of the brand and self (e.g., age, gender, language, ethnicity, profession, socioeconomic status); or between the brand's personality and self (e.g., gender of brand, country of origin, ruggedness; Aaker 1997). It is thus conceivable that our findings apply to other forms of self-reference branding.

Importance of the Decision. Based on the ELM, one could argue that self-referencing should work particularly well for unimportant choices. But what if choices are very important, such as job choices, moving, or buying a company? We speculate that particularly in such cases an objectmaking reference to consumers' selves may be preferred because such choices unite all moderating conditions we have identified. First, consumers may require feeling good about an option before committing to it, making them trust their feelings. Second, these choices may be self-threatening, increasing the positive valence of self-referencing cues. Finally, product relevant goals should be active, boosting attribute-specific valence transfer. Herbert Huffman, after having carefully studied the pros and cons of making a major investment in Hewlett Packard stock, introspects on his legendary intuition, the very reason he is CEO: he cannot quite put his finger on it, but the Hewlett Packard deal feels very safe. Presumably, when Herbert is hungry he likes Hershey bars.

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