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Brand and automaticity

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CONTENTS

1. INTRODUCTION

In his book on how to build a strong brand, Aaker (1996) delineates a brand identity system comprising various levels of brand attributes and corresponding branding strategies, ranging from intrinsic core product attributes to extrinsic brand communication activities. A foundation of this framework is that consumers endeavor to maximize the utility of their choices and are in complete control of their purchasing and consumption behavior. Indeed, several studies based on experimental designs or secondary scanner data have portrayed consumers as shrewd and strategic players who actively react to brands' marketing strategies. When selecting a product, consumers are assumed to take into account past prices, competitor prices, cost of the product, and inflation to form a fair reference price in their mind (Bolton, Warlop, and Alba 2003). They might deliberately raise this anchor for brands meeting their special needs, for instance, brands with an appropriate personality consistent with their self-image (Aaker 1997). When exposed to marketing communications, they are assumed to cautiously implement their knowledge on persuader's motives and tactics to cope with persuasion attempts (Friestad and Wright 1994). Further, as rational players, consumers would not always be loyal to brands but rather benefit-oriented, switching brands because of promotions (Foubert and Gijsbrechts 2007; Van Heerde, Leeflang, and Wittink 2000; Van Heerde, Sachin, and Wittink 2003), but also patient enough to

postpone their choices when comparison between brands is difficult (Dhar 1997). Yet, is this a complete picture of us, as normal consumers? Are we completely conscious of and in control of our choices in everyday life?

Everyday life experience suggests that many of our choices are not all that reasoned or conscious. Remember last time you ended up with several bags of dashing outfits, wondering why you picked them up in the first place. You may have attributed it to the chic and fast music in the stores, your trendy friends who accompanied you, your grumpy mood prior to the shopping trip, or maybe you even failed to attribute it to a specific reason. Whatever the reasons might be, you ended up with those excessive clothes and try to squeeze them in the already very crammed closet, lured into buying by a process out of your conscious control.

A number of academic studies underscore that automaticity, one facet of behavior, is indispensable to complete the portrait of consumers and their behavior. An automatic process is defined as a process that, once started (irrespective of whether it was started with intention or not), runs to completion without conscious guidance or monitoring (Bargh 1992, 1994). Automaticity is not unconditional. For the process to produce effects, it requires preconditions such as, for instance, a triggering proximal stimulus, recent awareness of the stimulus, and a certain amount of attentional resources. The fewer the conditions needed, the more constant and general the effect is (Bargh 1992, 1994; Moors and De Houwer 2006). As it is prevalent in various domains such as perception (Macleod 1991), memory (Jacoby 1991), emotion

(Scherer 1993), and social cognition (Wegner and Bargh 1998), automaticity has also been detected in diverse consumer behavior settings (Bargh 2002; Dijksterhuis et al. 2005). For instance, Wheeler and Berger (2007) revealed that when the concept of "party" was primed, introvert consumers chose more low-arousal objects than extrovert consumers because the two groups of consumers bear different associations with "party". These choices are automatic in the sense that "party" activates the associations automatically and influences consumers' choices without their conscious awareness. Other studies demonstrated the role of automaticity in consumer evaluations by adopting subliminal primes. For instance, Strahan and colleagues (2000), in one of their experiments, subliminally primed participants with the words "thirsty" and "dry", and then asked them to evaluate ads either highlighting the thirst-quenching or the electrolyte-restoring features of a sports-drink brand. Thirsty participants treated with thirsty primes rated the thirst-quenching brand as more favorable than the other brand. In this case, a prime stimulus (thirsty) activated a goal (quenching thirst) that was then non-consciously pursued. As a more realistic prime, the background colors of a web page have been found to influence consumers' brand preference non-consciously, thereby increasing the liking of the brand with similar color as the background (Mandel and Johnson 2002). Similar influences of automaticity on consumer behavior have also been reflected in consumers' enhanced likelihood of conducting a purchase after considering preferences for a set of products (Xu and Wyer 2007), increased tendency of variety seeking after a graphical prime

that displayed a series of different shapes (Maimaran and Wheeler, in press), and preference for brand names starting with their own name letters (Brendl, Chattopadhyay, Pelham, and Carvallo 2005). Although these studies differ in the types and mechanism of automaticity as well as consumers' responses, they jointly accentuate the ubiquity of automatic processes in consumer research.

Despite its importance, little attention is paid to how the automatic side of behavior can be captured and integrated into managerial decision making. Most extant literature on automaticity in marketing perceived the automatic influence as relatively insignificant or at least accidental, and primarily focused on environmental triggers that are hardly controlled by branding strategies (Simonson 2005). The question, therefore, remains whether brand attributes (instead of accidental environmental cues) can trigger or interact with automatic processes and influence brand performance. Some support is provided in an interesting paper by Shiv, Carmon, and Ariely (2005) who revealed that price, a core product attribute, can alter consumers' evaluations of product performance non-consciously. Given exactly the same product (energy drink) but with either the normal price of the brand or a discounted price, consumers getting a normal-price drink subsequently found the product more effective in boosting their energy than those trying a reduced-price drink. Interestingly, none of the consumers attributed this effect to the price discount. This finding alerts brand managers that price promotion may not only accelerate purchase amount and interval (Ailawadi and Neslin 1998) as well as damage brand images in the long run (Mela, Gupta, and

Lehmann 1997), but it may also exert a detrimental impact on perceived product effectiveness without conscious awareness. As the latter effect is not accidental or trivial, this study shows that neglecting the automaticity facet in brand management may be detrimental to brand performance.

However, the interplay between automaticity and brand attributes, and how it influences brand performance, still remains largely unclear. Particularly, which brand attributes trigger or interact with automatic processes and how? Does this effect vary with consumer characteristics? Furthermore, what are the consequences of this interaction for brand performance (e.g., brand evaluation, purchase intention)? Finally, how can brand strategies cope with the, often unwanted, non-conscious effects of brand attributes and contexts?

This dissertation contains three essays that shed light on these issues. Although quite different in emphasis and setup, these essays have one common theme: each essay shows how a different brand attribute proposed by Aaker (1991, 1996) (brand typicality in chapter 2, brand value proposition -- self-expressiveness in chapter 3, and brand country-of-origin combined with communication activities in chapter 4), interacts with automatic processes for specific consumers or communication contexts, and thereby influences brand performance. Further, the essays provide suggestions on how to account for these subtle influences through brand management and communication strategies.

Overview of the Dissertation

Empirical evidence from three projects (Chapters 2-4) demonstrates that automatic processes interact with various types of brand attributes, and that the effect of this interaction can reveal both positive and negative effects for brand performance, depending on consumer characteristics and/or on the communication context.

Chapter 2 zooms in on the attribute of brand typicality. It investigates the extent to which brands with different levels of typicality more strongly trigger recall of the category name and other category members on the one hand, and are recalled more easily themselves given a category cue on the other hand. To this end, it first relates observed levels of brand typicality (very typical, moderately typical, atypical) to two different typicality antecedents: family resemblance (FR, the degree to which a category member shares common attributes with other category members) and frequency of instantiation (FOI, how often one has experienced an entity as a member of a particular category). Adopting free association tasks and reaction time analyses, four studies then affirm that the automatic recall triggered by brand typicality is asymmetric in the brand-to-category direction and in the category-to-brand direction, driven by the two different antecedents of brand typicality. In particular, FR is more important in determining how fast a brand is categorized given a brand cue, whereas FOI is more influential in determining the speed of brand recall in the presence of a category name. Since fast categorization may divert attention away *from* the focal

brand *to* the category and competitors, while rapid brand recall increases the chance that the brand is included in the consideration set, the (positive or negative) effects of automatic recall associated with typicality depend on the type of typicality (i.e., induced by FR or FOI) and the direction of recall. When a category name is given, brands high on FOI can benefit from the "top-of-mind" fast recall, whereas when a brand name is presented, brands high on FR entail fast categorization and diverting attention to competitors.

In Aaker (1996)'s framework, a brand needs to build on its core product attributes to provide a brand value proposition, emphasizing functional, emotional, and self-expressive benefits relevant to the consumer. Chapter 3 focuses on the self-expressive benefits from brands. It examines to what extent brands that allow for self expression trigger different levels of self-brand closeness and purchase intentions, contingent on consumers' self-construal. Across three studies, this essay shows that self-construal, one component of a consumer's self-concept, may automatically influence brand perceptions in a counter-intuitive way. Specifically, consumers with independent versus interdependent self-construal value self-expression differently, because their accessible self-concepts are associated with different goals (distinguish the self from the social context vs. maintain harmony with the social context) and this, in turn, determines their closeness to self-expressive brands. Interestingly, the consequence is that consumers with (primed or chronically) independent selves feel *closer* to self-expressive brands and appreciate them more, indicating higher purchase

intention in comparison with consumers with (primed or chronically) interdependent selves. In contrast, consumers with interdependent self-construal even report lower purchase intentions when a brand adopts a self-expressive slogan compared to when it does not.

Chapter 4, finally, zooms in on automatic processes triggered by brands' country-of-origin in combination with their communication activities. In particular, it examines how a seemingly unrelated media context for brand advertising, by activating a specific mindset, influences the preference for domestic and foreign brands. Grounded in the mortality salience literature, four experiments demonstrate that a death-related media context increases the liking of domestic brands but decreases the liking of foreign brands, compared to a control media context. These effects appear because death-related media contexts shift individuals' patriotism upwards, without consumers being aware of this influence. In addition, the positive effects for domestic brands and the negative effects for foreign brands rendered by the death-related context appear stronger after a temporal delay (study 2) and appear stronger for highly patriotic consumers (study 3). A final experiment demonstrates that foreign brands can counter the negative effects of a death-eliciting media context on brand evaluations and purchase intentions by making a pro-domestic advertising claim.

Taken together, the three essays demonstrate that automatic processes interact with brand attributes, ranging from core product characteristics to extrinsic brand communication activities. The trigger of the automatic processes can be as simple as a

brand name, a personality trait, or a seemingly unrelated but popular news report. Their impact disseminates to consumers' brand recall, brand perception, purchase intention, and can be positive or negative depending on the combination of brand and consumer characteristics. Therefore, this dissertation manifests the urge to account for the automaticity facet of behavior in executing well targeted branding strategies, so as to leverage the positive results while countering the negative impact.

2. WHY "FAST FOOD" TRIGGERS "MCDONALD'S" AND "BURGERKING" TRIGGERS "FAST FOOD": ANTECEDENTS OF BRAND TYPICALITY AND RELATIONSHIP BETWEEN CATEGORY AND BRAND

Introduction

As product categories grow and approach saturation, a brand's position in the category and its relation with other category members get increasing attention. A key measure of interest from this perspective is brand typicality, indicating the degree to which a brand is 'representative of a category' (Loken and Ward 1990). Brand typicality has been shown, or at least is expected, to affect both the speed of brand recall (category-to-brand) and of categorization (brand-to-category) (Alba, Hutchinson, and Lynch 1991; Nedungadi and Hutchinson 1985; Rosch, Simpson, and Miller 1976).Yet, what drives these effects, and whether this makes brand typicality beneficial or harmful to brand performance, remains much more ambiguous.

On the one hand, more typical brands are recalled faster than less typical ones in the presence of a category cue (Nedungadi and Hutchinson 1985). Clearly, this advantage for typical brands may be beneficial to the brand manager, allowing him – for instance – to reap more attention and sales from generic advertising (Chakravarti

and Janiszewski 2004) than less typical competitors. On the other hand, being closely associated with the category name, typical brands tend to be harder to successfully extend to another category (Herr, Farquhar, and Fazio 1996), which may constitute a curse. More importantly, consumers presented with a brand cue for a typical brand – say, a brand advertising message - may immediately recall the category name. To the extent that this subsequently brings other category members to mind (e.g., other typical brands, consumers' preferred brands), a strong brand typicality effect in the presence of a brand cue may dilute the own-effect of brand ads. In sum, while strong category-to-brand links brought about by brand typicality are good for brand performance, strong brand-to-category links can yield negative effects.

More interestingly, opposite to the brand typicality literature, Loftus (1973) has argued that the relationship between a category and its instances (e.g., brands) is bi-directional and the two directions are not always symmetric. Accordingly, a strong category-to-brand typicality effect does not necessarily imply a strong brand-to-category typicality effect, and vice versa. Yet, whether brand typicality effects are indeed asymmetric, what drives these asymmetries in a brand context, and whether or how typical brands can be built so as to maximally capitalize on the positive links while avoiding the negative effects, remains an open issue.

This paper sheds more light on these interesting questions. We demonstrate the asymmetric brand typicality effect and reveal the potential drivers of this asymmetry by tracing back the two antecedents of brand typicality (*family resemblance (FR): the*

extent to which common attributes are shared with other category members, and *frequency of instantiation (FOI):* the extent to which a brand is encountered as a category exemplar). Study 1 selects and classifies real brands based on their typicality level (i.e., very typical brands, moderately typical brands, atypical brands). We further measure the FR and FOI level of each brand, and link them with the brand's typicality level. As such, we can observe to what extent an existing brand's typicality level is determined by FR and FOI. This also enables us to test and prove that, instead of being independent as often manipulated in psychology studies, FOI is constrained by FR in the natural marketing context. Study 2 and 3 jointly reveal that brand typicality effects are asymmetric in that a brand's level of FR is more essential in the brand-to-category direction (because of its determining role in the categorization process), whereas a brand's level of FOI would especially enhance the category-to-brand typicality effect (due to the mechanism of recall). All together, the results from these three studies shed light on the interrelationship between FOI and FR (which are the different antecedents of brand typicality) in an existing brands setting, and on the different typicality effects they may render. Our findings provide preliminary insights for managers on how to build a typical brand, so that the benefits of brand typicality are maximized while the spillover effect to other product category members remains low.

Brand Typicality and the Relationship between Category and Brand

The construct of typicality originates from the cognitive psychology literature, where it was adopted to reflect the structure of natural semantic categories (Rosch and Mervis 1975). The common view is that categories possess a graded structure, in which instances of a category differ with respect to how representative of the category they are (Mervis and Rosch 1981; Rosch 1978; Smith and Medin 1981). Good exemplars of a category, with high typicality ratings, are further found to entail two behavioral responses. First, in an 'instance-to-category' task, they are rapidly classified as members of their category, and with few errors. Second, in the converse setting of a 'category production task' (recall of category instances given a category name) they appear frequently and early.

Subsequent *brand* typicality studies in marketing contexts, also, found empirical evidence for strong brand typicality effects in the category-to-brand link: category cues leading to rapid recall for typical brands. Building on the insights from cognitive psychology, the authors of these brand typicality studies implicitly assumed that brand typicality would be equally predictive of behavioral responses in the brand-to-category connection (Loken and Ward 1990; Nedungadi and Hutchinson 1985): typical brands leading to fast categorization in the presence of a brand cue. However, Loftus (1973) and Wilkins (1971) have warned that the relationship between an

instance and its category can be bi-directional, and that the effects are not always symmetric. A measure of the relationship in one direction does not necessarily represent a similar pattern in the reverse direction. An earlier study by Farquhar, Herr, and Fazio (1990) suggests the possibility of such an asymmetric bi-directional relationship. For two brands in the mouthwash category, they observed that while one brand was named faster and more frequently in reaction to a category cue, the other brand was classified faster as a member of the category.

If typicality effects are indeed asymmetric in the bi-directional link between the brand and the category, a key question is what could drive this asymmetry? The answer, we believe, lies in the different antecedents of brand typicality, and their differential effect on the ensuing brand and category association. Addressing this issue is important for brand managers, as the consequences of the brand typicality effects are quite different in the two directions. While a strong brand typicality effect in the category-to-brand link may prove highly beneficial, as it directs the attention of consumers confronted with a general category cue towards the own brand, a strong typicality effect in the brand-to-category link runs the risk that own brand cues spill over to same-category rivals.

Antecedents of Brand Typicality

Previous research has identified three antecedents of typicality in natural semantic categories, namely, family resemblance, frequency of instantiation, and ideal (Barsalou 1985; Rosch and Mervis 1975). *Family resemblance* (FR) is the degree to which a category member shares common attributes with other category members (Rosch and Mervis 1975). It primarily measures the objective similarities between category members. A more parsimonious way to view FR is as an instance's similarity to the central tendency of the category (Hampton 1979; Smith et al. 1974), where central tendency refers to the common attributes of all category members. *Frequency of instantiation* (FOI) is defined as the subjective estimation of how often one has experienced an entity as a member of a particular category (Barsalou 1985). This is different from familiarity, which refers to the frequency of encountering an instance independent of the category context. In addition, Barsalou (1985) found that familiarity accounted for no unique variance in effects of typicality. Rather, the (weak) correlations between familiarity and typicality merely stemmed from the variance familiarity shared with frequency of instantiation. A third antecedent, *Ideal*, is the extent to which a category member contains the attributes that are best serving the specific goals associated with the category (Barsalou 1983, 1985). A taxonomic category normally has more than one ideal depending on the specific goals individuals

want the category to accomplish. For instance, the ideal of "snacks that you may eat while watching TV" could be "easy to take", whereas the ideal for "snacks good for your diet" would rather be "low on calories". Since ideal is idiosyncratic to specific goals rather than common to taxonomic categories (Ratneshwar and Shocker 1991), we concentrate on family resemblance and frequency of instantiation in the current study.

Derived from the findings that FOI can be encoded without being associated with the specific properties of the instances (Hintzman, Nozawa, and Irmscher 1982; Zajonc 1980), FR and FOI are deemed as two independent antecedents of typicality in the cognitive psychology literature (Nosofsky 1988), and no further effort has been exerted to examine their relationships. Rather, lab studies on categorization have often manipulated these two typicality antecedents as separate, and even as inversely related, constructs (Rosch et al. 1976). In line with these insights from cognitive psychology, the extant brand typicality literature proclaims that brands can increase their typicality by adding more common attributes (increasing FR) and/or by more often explicitly presenting themselves as a category member (increasing FOI).

However, unlike the experimental setting in a lab where FOI can be artificially enhanced in the absence of FR, marketplace conditions may preclude FOI for real brands from being completely independent of FR. Because of their similar characteristics with other category members, brands high on FR will, even in the absence of marketing communications, already be more likely to co-appear with the

product category (high FOI) in consumers' everyday life (e.g., retail outlets and consumption settings). Furthermore, this natural link between the brand typicality antecedents can be strongly reinforced by managers' strategic communication decisions. On the one hand, it is common practice for brand advertisements to stress brands' unique attributes instead of their category membership (low FOI) (Chakravarti and Janiszewski 2004). This is particularly true for brands with low FR - targeting a niche market and designed to share few common characteristics with other category members. On the other hand, mainstream brands with few unique features (high FR) may wish to turn this property into an asset, by explicitly presenting themselves as *the* category exemplar in their brand communications. Such communication practice should further enhance their FOI. In summary, we propose that in the marketing context, FOI and FR of real brands are not completely uncorrelated. More specifically, we expect high FOI levels to occur for high FR but not for low FR brands, and low FOI to be associated with low FR but not with high FR brands.

Nevertheless, as two separate antecedents of brand typicality, we postulate that the FOI and FR levels of existing brands may render different typicality effects, and have different strategic brand implications – as brought forward in the next section.

Antecedents of Brand Typicality and Bi-directional Typicality Effects

Integrating the two antecedents of brand typicality with the bi-directional brand typicality effects, this paper proposes a conceptual framework explaining the roles of the antecedents in determining the brand-to-category and the category-to-brand brand typicality effects, respectively.

Brand to category

In the brand-to-category direction, the brand typicality effect translates into faster and more accurate categorization behavior. Therefore, categorization theories may shed some light on the role of the antecedents for this association. There are two distinct accounts to explain categorization behavior in cognitive psychology literature, namely, rule-based and exemplar-based. The rule-based model (Ashby and Gott 1988; Ashby and Maddox 1992, 1993) suggests that the categorization decision is based on abstract and definitional rules, for instance: a tall person should be taller than 180cm. In other words, instances are compared with the boundary and common central tendency of the category. The exemplar-based model (Medin and Schaffer 1978; Nosofsky 1986) argues that people compare an instance with some stored examples of the category to judge its category membership. In this logic, to be categorized as tall, a

person should be compared with several tall examples. In both cases, the process seems strongly intertwined with the notion of FR, which is also based on the identification of common attributes, and involves comparing the similarity between instances.

Empirical evidence from cognitive psychology further supports the view that FR is more crucial in determining the typicality effects in the instance-to-category direction (Nosofsky 1988; Nosofsky and Palmeri 1997; Shin and Nosofsky 1992). In a category-learning task, Rosch and Colleagues (1976) manipulated FOI to be inversely correlated with FR, and recorded the performance of the categorization task. They found that participants categorized the instances with high FR but low FOI faster and more accurately than the instances with low FR but high FOI. Additional, albeit less conclusive, support is given in a study by Nosofsky (1988), in which participants learned to classify colors into two categories. The results revealed that when the FR of the stimuli was on the same level, FOI determined the performance of the categorization task and the typicality ratings. However, stimuli with low FR but high FOI did not outperform those with high FR but low FOI in classification performance, showing that at least FOI is not more important than FR in determining the typicality effects in the instance-to-category direction.

In summary, building on categorization theory and individuals' classification performance in 'natural' categories, we predict that FR is a more crucial determinant than FOI of brand typicality effects in the brand-to-category direction. Put differently,

we hypothesize that when brands' typicality is *a result of higher FR*, they will be categorized faster.

Category to brand

In the category-to-brand direction, brand typicality is expected to entail higher brand recalling speed and frequency in the presence of a category cue. Extant typicality literature hardly provides any insights as to which antecedent is more essential in influencing the typicality effect in this direction. However, studies on implicit priming, examining the probability of item-generation after prior exposure, give some empirical indications in this context. Even though this stream of literature does not touch upon FR, it generally underscores that FOI should increase the probability of the instance coming to mind when a category cue is given (Humphreys, Bain, and Pike 1989; Zeelenberg, Shiffrin, and Raaijmakers 1999). For instance, in one of their experiments, Hunt and Lamb (2006) first gave participants several sentences that conceptually related instances and categories. Then, after distraction tasks, participants were more likely to recall the instances that appeared more frequently in the sentence phase as examples of the category.

An important tool to help us understand and predict these typicality effects and their antecedents in the category-to-brand direction is the interconnected memory network model (Anderson 1983; Collins and Loftus 1975). While our paper does not directly tap into memory processes, the underlying process of recall described by this

network memory model may shed light on the differential roles of FR and FOI. Specifically, the model suggests that semantic long-term memory is constructed by a network of memory nodes, and links between them. When one of the memory nodes is activated by external cues, the activation will spread to related concepts, with fewer links between the concepts entailing faster activation spread. In the brand typicality context, brands, attributes, and the category can be deemed as memory nodes in the network (Keller 1991). We are interested in, if the category node is activated, which antecedent of brand typicality is more likely to influence the recall of a brand, that is, the spread of activation from the category node to the brand nodes. For brands high on FR to be activated, the category name first needs to trigger the memory nodes of the category's 'central tendency' (the common attributes), and then continues to spread the activation to the brands. In this process, at least three memory nodes and two links (i.e., category → common attribute(s) → brand) are activated. In contrast, FOI by definition represents a *direct* link between a category and a brand because it reflects how often one has experienced a brand as a member of its product category. Therefore, the activated category node will trigger brands high on FOI through only one link (instead of two), involving only two nodes (instead of three). Hence, we propose that

FOI leads to faster and more efficient brand recall than FR [1]. Therefore, we hypothesize that when brands' typicality is a result of higher FOI, they will be activated faster in the presence of a category cue.

Figure 2.1 summarizes our conceptual framework, which will be tested in the next section.

Figure 2.1: Conceptual framework (Bi-directional typicality effects and their antecedents)
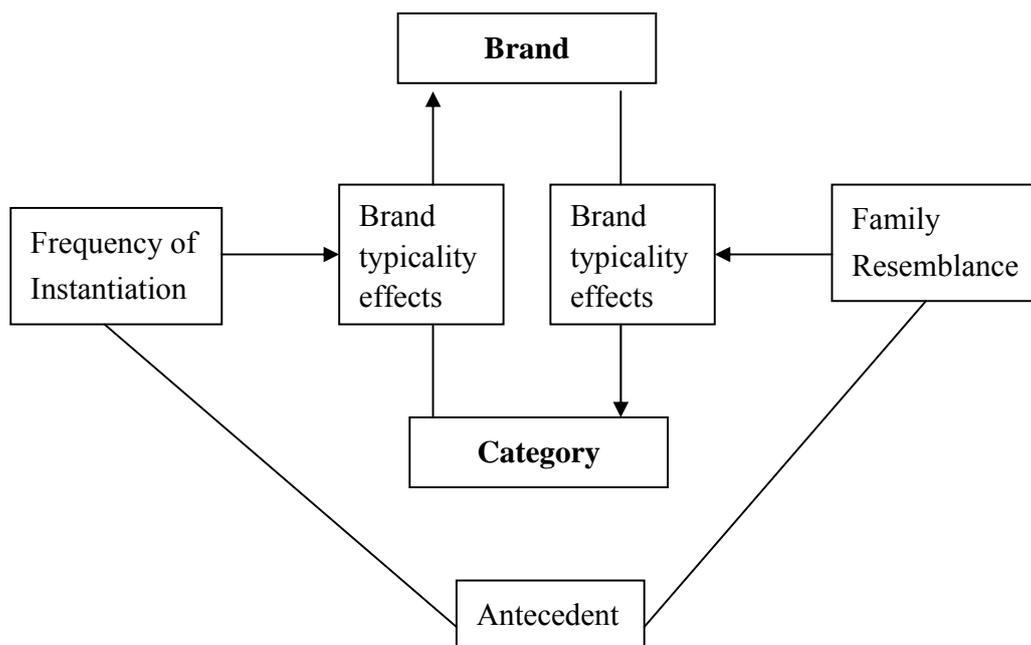
[1] We did not apply the interconnected memory network model in the brand-to-category direction, because it is the repeating categorization activities instead of the recall processes that establish and determine the activation pattern in this direction. Over time, consumers may possess the link from a brand name to a category label in their memory, which makes the brand-to-category association *seem* like a recall process. But, fundamentally, it is a categorization activity, and this initial behavior (categorization) that build the links in memory, determines the pattern of subsequent recall (Sakamoto and Love 2004). In contrast, the category-to-brand link is established in memory through recall activities.

Overview of the Studies

Across three studies, we examine whether the hypothesized asymmetric bi-directional brand typicality effects occur in a real brands context and whether this asymmetry is driven by either FR (brand-to-category direction) or FOI (category-to-brand direction) of existing brands. In Study 1, we measure the FR and FOI of real brands, and further explore their interrelationship by examining the pattern of FR and FOI of each brand on different levels of typicality. Brands (and the categories they belong to) are then, based on their scores on the FR- and FOI-dimensions, selected as stimuli for Studies 2-3. These studies test the proposed asymmetric typicality effects, and whether FR and FOI can explain this asymmetry. Hence, we do not manipulate FR and FOI directly, but rather indirectly via brand typicality (and the different scores very typical, moderately typical, and typical brands have on the FR and FOI dimensions). In Study 2, we use a free association task and a reaction time measure technique to examine whether brands' FR is more influential than their FOI for the brand typicality effect in the brand-to-category direction. In Study 3, we adopt a category production task and a reaction time measure technique to examine whether brands' FOI rather than their FR determines the brand typicality effect in the category-to-brand direction.

Study 1

The purpose of the first study was to explore the two antecedents of brand typicality (i.e., FR and FOI), demonstrate that they vary across brands within a category, and shed some light on their interrelationship in a marketing context. This will enable us to identify the FR and FOI levels per level of typicality. Before measuring the FR and FOI of brands within a category, we first selected a set of brands and categories for this study and then assessed their level of typicality (Loken and Ward 1990).

Stimuli Selection

Twenty-five Dutch undergraduates generated a large pool of categories and brands. Participants were asked to write down five product categories they are highly familiar with, and to list as many brands as possible in each category. Based on this initial pool of categories, we further screened out some categories to make sure that (1) there are at least three national brands in each category to guarantee a range of typicality, and (2) the category membership is clearly defined and does not entail any confusing labels. For instance, many participants listed the brand names Mars and Snickers, but there was no reliable consensus among participants' labeling of the category membership (e.g., candy bars, chocolate bars, candies, etc). Therefore, we

excluded categories that were labeled differently by the participants from further analysis.

Finally, another separate and independent group of eighty Dutch undergraduates rated the typicality (Loken and Ward 1990) and familiarity of each brand in each selected category. Familiarity was measured on a scale from 1 (not familiar at all) to 7 (very familiar). Following Loken and Ward (1990), brands with average familiarity scores lower than 2 were excluded to guarantee the reliability of the typicality ratings and the further results. The typicality measure comprised three items: "How good an exemplar is brand X for category Y?", "How typical is brand X in category Y?", and "How representative is brand X for category Y?", with endpoints 1 "*extremely bad/low*" and 7 "*extremely good/high*". Participants were instructed to select the score that best represented their opinions. Based on the average of the three typicality items ($\alpha = .91$), categories in which brands did not significantly differ from each other in terms of their average typicality scores were left out from further analysis. This resulted in four remaining categories, namely chips, fast food, beer, and juice. In each of these categories, we could group brands in three levels of typicality, i.e., very typical brands, moderately typical brands, and atypical brands (see Table 2.1a and 2.1b). In each category, the typicality scores of brands from different levels were significantly different from each other, whereas those of brands with the same typicality level were not significantly different from each other. For instance, in the chips category, the very typical brand (Lays, $M = 6.44$) was rated significantly higher

than the moderately typical brand (Croky, $M = 5.67$, $t(93) = 2.18$ $p < .05$), which, in turn, had a significantly higher rating than the atypical brands (Pringles, $M = 4.88$, $t(93) = 2.20$ $p < .05$, and Doritos, $M = 4.92$, $t(93) = 2.09$ $p < .05$). The two atypical brands did not differ with respect to their typicality levels ($t(93) = -0.12$ $p > .90$).

Table 2.1a: Typicality levels and scores

	Chips	**Fast food**	**Beer**	**Juice**
Very typical	Lays (6.44)	McDonald's (6.96)	Heineken (6.54)	Appelsientje (6.13)
			Bavaria (6.64)	
Moderately typical	Croky (5.67)	Burgerking (6.04)	Amstel (5.92)	Coolbest (5.14)
			Grolsch (5.83)	
Atypical	Pringles (4.88)	KFC (4.88)	Corona (3.88)	Taksi (4.33)
	Doritos (4.92)	Pizzahut (4.68)		

* Numbers within brackets are the means of typicality ratings

Table 2.1b: Comparison between typicality levels

	Comparison very - moderately typical brands	**Comparison moderately - atypical brands**	**Comparison very - atypical brands**
Fast food	$t(91) = 2.48$ $p < .05$	$t(91) = 3.11$ $p < .01$	$t(91) = 3.55$ $p < .001$
Chips	$T(93) = 2.18$ $p < .05$	$t(93) = 2.20$ $p < .05$	$t(93) = 2.09$ $p < .05$
Juice	$t(67) = 2.50$ $p < .05$	$t(67) = 2.03$ $p < .05$	$t(67) = 4.63$ $p < .001$
Beer	$t(114) = 1.99$ $p < .05$	$t(114) = 6.53$ $p < .001$	$t(114) = 2.24$ $p < .05$

* We only list the statistical results of one brand from each typicality level in each product category (brands from the same typicality level generates similar results).

Method

One hundred ten undergraduates from a Dutch university participated in this study in exchange for €5 payment. Participants were told that the research purpose of the study was to select some product categories and brands for a large-scale future study. The participants' main task was to indicate the FR and FOI of the brands that were preselected.

Measurement of FR. Participants had to indicate the FR of a list of brands. The procedures for determining the FR were adapted from earlier studies (Loken and Ward 1990; Rosch and Mervis 1975). Participants were requested to list as many attributes as possible of a set of brands from different categories, which generated a list of attributes (across participants) for each individual brand. Two independent judges then screened the answers and excluded the wrong attributes (i.e., the attributes that actually do not belong to the brand) from the list. The attribute lists were then pooled across brands to yield a final attribute list per product category, which allowed giving a weight to each individual attribute depending on how many brands of that category share that specific attribute. The FR score of an individual brand was then the weighted sum of all the attributes it possesses.

The gist of FR-measurement is to capture the central tendency of the category (i.e., the common attributes of all category members) and to evaluate, based on a complete set of brand attributes, individual brands on how many attributes they share

with other category members (i.e., the other brands from the same category). Therefore, to have a reliable indication of the central tendency of a category in terms of attributes, we included all the brands from the category irrespective of their familiarity ratings. Furthermore, because the final FR scores for the brands and the attribute weights are based on aggregation across participants, the final results should reflect the objective product attributes of both familiar and unfamiliar brands.

In total, we used 24 brands for the FR task[2]: six brands from each category that was pre-selected (i.e., chips, fast food, beer, and juice). The brands were composed of both familiar and unfamiliar brands per category. Participants were randomly assigned to one of six groups, each of which contained a set of four brands (i.e., one brand from each of the four selected categories).

Measurement of FOI. Participants were also asked to indicate the FOI of a selected set of brands. FOI was measured by asking participants to rate how frequently they encountered a brand as an example of the category. A nine-point scale was used with 1 representing "*not frequently at all*" and 9 representing "*very frequently*". The instruction we used, following Barsalou (1985) and Loken and Ward (1990), urged participants to judge the FOI of brands, independent of their familiarity with the brand.

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[2] In addition to the 16 brands list in Table 2.1a, the other 8 brands are: Nibbit, Cheetos (chips), Subway, Wendy's (fast food), Jupiler (beer), Minute Maid, Tropicana, and Dubbelfris (juice). Since the average familiarity ratings of these brands are lower than 2, we only used them in this FR measurement but not in further analyses (Loken and Ward 1990).

Please rate how frequently you encountered each of the following brands (in stores, advertisement, talk with friends, etc.) as an instance of the category they belong to. Please do not merely judge how familiar you are with the item. For example, if you were rating instances of the category "fruit" you might think of "mango" as a familiar term to you. But you might rate "mango" as an instance of the category "fruit" less frequently than other types of fruits like apple, pear, or banana. In summary, don't confuse familiarity with a phrase or word with how often you have encountered an item as member of particular category.

Each participant was assigned eighteen brands from a random set of three categories in a random order to evaluate FOI.

Results and Discussion

In the analysis, we only focus on the brands listed in Table 2.1a, because these brands spanned different typicality levels in each category and were rated as familiar. Across all four categories, we identified three levels of brands' FOI, which is in line with the brand typicality classification (see Table 2.2). For instance, in the Chips category, Lay's (the very typical brand, $M = 7.93$) scored significantly higher on FOI

than Croky (the moderately typical brand, $M = 7.10$), ($F(1,82) = 16.82$, $p < .001$). Further, Croky scored higher on FOI than the atypical brands Pringles ($M = 6.54$, $F(1,82) = 4.18$, $p < .05$) and Doritos ($M = 6.35$, $F(1,82) = 8.96$, $p < .01$), whereas the FOI ratings of Pringles and Doritos were not significantly different from each other ($F(1,82) = 0.54$, $p > .46$).

Unlike the FOI scores, statistically we could not compare the FR levels across brands, because the final FR scores were aggregated across all participants. However, we could still detect some very clear and consistent patterns from the data, as shown in Table 2.2. In each category, there are roughly two levels of FR. More specifically, very typical brands have basically the same FR scores as moderately typical brands, whereas atypical brands get lower FR scores than the other two types of brands.

To examine the relationship between FOI and FR in a marketing context (for real brands), we mapped the FOI and FR dimensions as well as their levels in one table. As shown in Table 2.3, Study 1 identified three types of brands in all four categories, which matched with the three different levels of typicality that we found in the stimuli selection. The three types of brands are: brands with both high FOI and FR (i.e., the very typical brands), brands with high FR and moderate FOI (i.e., the moderately typical brands), and brands with both low FOI and FR (i.e., the atypical brands). We did not find brands with low FR and high FOI (because low FR may decrease the chance that brands appear as category exemplars), nor brands with high FR and low FOI (because high FR results in relatively high frequency of appearance

as category exemplars). This seems to confirm our expectation that, in a marketing setting, the FOI level of a brand is constrained by its FR. Furthermore, there were also no brands with low FR and moderate FOI. This might be because brands with low FR are rarely mentioned as category exemplars and often do not emphasize the brands' category membership in communication activities, such as advertising.

Table 2.2: Frequency of instantiation and family resemblance for different typicality levels

	Chips		Fast food		Beer		Juice	
	FOI	FR	FOI	FR	FOI	FR	FOI	FR
Very typical	7.93	68	8.64	89	8.25	81	7.44	84
					8.06	81		
Moderately typical	7.1	68	7.66	89	7.02	80	5.83	84
					6.89	79		
Atypical	6.54	54	5.86	67	4.07	37	4.74	69
	6.35	54	5.58	63				

*For the specific brand names, please refer to Table 1.1a

Table 2.3: Observed levels of typicality and their underlying pattern of antecedents for real brands

	FR	FOI
Very typical brands	High	High
Moderately typical brands	High	Moderate
Atypical brands	Low	Low

Study 2

Study 1 identified the FOI and FR levels of the selected brands. In the next two studies, we examined which of the two antecedents (FR or FOI) drives the typicality effects in the bi-directional relationship between a brand and its category. In Study 2, we focused on the roles of FOI and FR in the brand-to-category direction.

Earlier research on typicality effects in the instance-to-category link often used categorization tasks in which participants had to identify the category membership of a given instance (Nosofsky 1988). However, because the brands used in our research are all well established and their category memberships are familiar to the participants, a categorization task may not be sensitive enough to detect brand differences. Therefore, instead of directly asking the participants to explicitly name the category brands belong to, we used two more implicit measures of categorization, i.e., a free association task and a reaction time task. We used the selected very typical, moderately typical, and atypical brands from Study 1. Based on the categorization responses from these three types of brands, we can derive whether the brands' FR or FOI levels are responsible for the observed effects.

We expected FR to be dominant over FOI in determining typicality effects in the brand-to-category direction. Therefore, although very typical brands and moderately typical brands differ in terms of FOI, these brands should be categorized

equally fast, due to their similar high level of FR. However, we expected both types of brands to be categorized faster than atypical brands, which have a low level of FR.

Study 2a

Study 2a used a free association task to investigate the role of FOI versus FR in determining the brand typicality effects in the brand-to-category direction.

Method

One hundred Dutch undergraduates were paid €5 each to participate in this study. Participants were randomly assigned to one of four groups, each of which contained four brands, i.e., one from the four different categories[3]. Each individual brand was presented on the top of a separate page. Participants were instructed to write down whatever came to their mind upon seeing the brand name, and in such an order that earlier thoughts were written down first.

Results

To assess how quickly a brand was categorized based on the recalled association, we focused on the order of occurrence of the category name while coding: the sooner the category name is mentioned, the faster the brand is categorized (Fazio,

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[3] The beer category contains five brands. We collected the ratings of "Amstel" from another group of 25 Dutch undergraduates who share a similar background as this group of students.

Williams, and Powell 2000). The coding scheme followed guidelines provided by

Fazio et al. (2000). For each participant and each brand, if the category name appeared

first among all the associated words, the brand got a score of 1. If the category name

appeared second, the brand got a score of 2, etc. If the category name did not appear

in the association list, the brand got a score equal to the rank of the last associated

word plus two. The extra two-points are a correction for the absence of a category

association in response to a brand name. As a result, each brand got a score from each

participant. We compared the rankings between brands within a category[4].

We conducted a between-participants ANOVA, with level of typicality as an

independent variable, on the categorization coding for each category. The effect was

significant in all four categories (see Table 2.4): chips ($F(2,97) = 4.49$, $p < .05$), beer

($F(2,122) = 7.98$, $p < .01$), fast food ($F(2,97) = 4.12$, $p < .001$), and juice ($F(2,72) =$

8.33, $p < .001$) showing that, indeed, brands with different typicality levels vary with

respect to their categorization times. To disclose what the difference is and why, we

further zoomed in on the two antecedents.

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[4] As a robustness check, we coded the data using an alternative scheme that also takes
into account both the occurrence of the category name and the order of the occurrence.
The first associate has been shown to reflect the link between two concepts much more
reliable than the second one (Nelson, McEvoy, and Dennis 2000). Hence, if the category
name appeared first among all the associated words the brand got a score of 1, whereas if
the category name appeared second, the brands got a score of ½, etc. If the category name
did not appear in the association list, the brand got a score of 0. Consequently, the higher
the score (1 is higher than 1/2), the faster the brand was categorized. This coding scheme
led to the same results as the reported one.

Table 2.4: Mean ranks of categorization speed in the brand-to-category direction

	Mean rank of very typical brands (with high FR and high FOI)	Mean rank of moderately typical brands (with high FR and moderate FOI)	Mean rank of atypical brands (with low FR and low FOI)	Comparison columns 2 and 3	Comparison columns 2 and 4	Comparison columns 3 and 4	Comparison across all brands
Chips	1.68	1.44	2.64 / 2.72	$t(96) = -.15$ $p > .88$	$t(96) = -1.79$ $p < .077$	$t(96) = -2.23$ $p < .05$	$F(2,97) = 4.49$ $p < .05$
Beer	1.16 / 1.2	1.24 / 1.12	2.48	$t(120) = .03$ $p > .97$	$t(120) = -1.94$ $p < .056$	$t(120) = -1.93$ $p < .056$	$F(2,123) = 7.98$ $p < .01$
Fast-food	1.88	1.88	2.76 / 2.84	$t(96) = .00$ $p = 1$	$t(96) = -2.02$ $p < .05$	$t(96) = -2.02$ $p < .05$	$F(2,97) = 4.12$ $p < .05$
Juice	1.52	1.56	2.84	$t(72) = -.11$ $p > .91$	$t(72) = -3.59$ $p < .001$	$t(72) = -3.48$ $p < .001$	$F(2,73) = 8.33$ $p < .001$

A planned comparison revealed that brands with the same level of FR were categorized equally fast, even though they differed significantly in their FOI levels (i.e. very typical and moderately typical brands, column 2 and column 3 in Table 2.4). For instance, Lay's (very typical brand, $M = 1.68$) and Croky (moderately typical brand, $M = 1.44$), which had the same level of FR, were categorized equally fast ($t(96) = -0.15$, p > .88), although the FOI of Lay's is significantly higher than that of Croky (as shown in Study 1). Furthermore, the results showed that very typical brands (with high FR and high FOI) as well as moderately typical brands (with high FR and moderate FOI) were categorized faster than atypical brands (with low FR and low FOI). For instance, in the chips category, both Lay's and Croky were categorized

faster than Pringles (M = 2.64, respectively $t(96)$ = -1.79, p < .07, and $t(96)$ = -2.23, p

< .05), and Doritos (M = 2.72, respectively $t(96)$ = -1.94, p < .056, and $t(96)$ = -2.38, p

< .05). With the same (low) levels of FOI and FR, Pringles and Doritos did not differ

in their categorization time ($t(96)$ = -.15, p > .8).

Discussion

Study 2a confirmed that FR is more influential for the brand typicality effects

in the brand-to-category direction. More specifically, the results demonstrated that

very typical and moderately typical brands, which exhibit the same level of FR, were

categorized equally fast even if they significantly differed on their FOI levels. In

addition, both these types of brands were categorized faster than atypical brands,

scoring low on both FR and FOI.

However, the coding of the free association data may not be completely non-

arbitrary. Also, although we asked participants to write down the associated things in

order, there could have been some distortions in the way participants reported their

thoughts. Therefore, we want to tap categorization responses by using a reaction time

task (that measures the proper association between a brand and a category), to verify

the finding of Study 2a. In addition, reaction time data are less prone to floor effects

than thought-listing type of tasks, as long as reaction times are above 300ms (Fazio

1990).

Study 2b

Study 2b applied a reaction time task in which participants were exposed to a brand name, followed by a product attribute that is either a category-related attribute, a brand-related attribute, or an attribute not belonging to the brand. Participants were asked to judge for each attribute as rapidly as possible whether it belonged to the brand. One of the category-related attributes was the category name. We were mainly interested in comparing the speed of judging the category names across the three types of typicality brands, differing in FR and FOI, to investigate which antecedent is more important in inducing the brand typicality effect in the brand-to-category direction. Faster reaction times for the category names should indicate that the category is more accessible given a brand name, and consequently the brand is more likely to be categorized. Brand-related attributes and attributes not linked to the brand were treated as filler words.

Method

In Study 2a, there was no significant difference between brands with the same level of FOI and FR in a category (i.e., Pringles and Doritos; KFC and Pizza Hut; Heineken and Bavaria; Amstel and Grolsch) with respect to the speed of categorization in the free association task. Therefore, we only used one brand from each FOI and FR level per category. This resulted in three brands in each category. Sixty-six Dutch students participated in the study and each of them received €5 for

participation. Participants were randomly assigned to one of three reaction time tasks, each of which contained fours brands taken from four different product categories. Each brand was paired with nine product attributes. Therefore, 36 trials were included in each reaction time task. Before those 36 critical trials, participants also had several practice trials to get familiar with the task. Three of the nine product attributes that were paired with an individual brand name were brand-specific attributes, three attributes were category-common attributes, and three attributes did not belong to the brand. We selected the brand-specific attributes and the category-common attributes from the free association task in Study 2a. The three brand-specific attributes were those mentioned most frequently in the free association task for an individual brand. For the three category-common attributes, one attribute was the category name and the other two attributes were those mentioned most frequently across all brands within a category.

On each trial, a string of X's first appeared in the middle of the screen for 250 ms to remind participants that the trial was about to start. Then, the string of X's was replaced by a brand name remaining on the screen for 750 ms. After a 250 ms pause, a product attribute appeared on the screen and remained there until participants made a decision. On each trial, participants were asked to judge whether the product attribute did belong to the brand (by pressing "J") or did not (by pressing "F"). In the instruction, we used the brand "Colgate" as an illustration, with 'white', 'toothpaste', 'mint', 'America', and 'fresh' as examples of attributes that belonged to the brand,

and 'watch' or 'money' as examples of attributes that did not[5]. Participants were instructed to always keep their right index finger ready on the "J" and their left index finger ready on the "F". After a participant made a decision, the screen remained blank for 1000 ms. Then, another trial was presented to the participants, which could be another combination of a brand and an attribute. The 36 brand-attribute trials were randomly presented to the participants.

Results

Only correct responses (95% of all responses)[6] were included in the analysis (Fazio 1990). To reduce the distorting effect of outliers, data points that were three standard deviations above or below the mean for each word were considered outliers and were dropped from subsequent analysis (see Bargh and Chartrand 2000). Because reaction time data are often skewed, we also ran this analysis on logarithmic transformations of our reaction time data, which are sometimes applied to normalize the data and meet the assumptions of statistical tests (as suggested by Fazio 1990; see also Bargh and Chartrand 2000). The substantive results remained the same.

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[5] Note that in this example, both category-common and brand-specific attributes were listed as attributes belonging to the brand, but the distinction between them was not explicitly mentioned, to avoid any external influence on the spontaneous categorization process.

[6] The incorrect responses spread roughly equally across brands, so that leaving out incorrect responses is not likely to lead to biased results. The fact that somewhat more errors were observed for Corona (atypical beer brand with low FOI and FR) is consistent with the expectation that brands with low FR are categorized less accurately than those with high FR.

Table 2.5: Mean reaction times of the category name

	RT of very typical brands (with high FR and high FOI)	RT of moderately typical brands (with high FR and moderate FOI)	RT of atypical brands (with low FR and low FOI)	Comparison columns 2 and 3	Comparison columns 2 and 4	Comparison columns 3 and 4	Comparison across all brands
Chips	702.15	691.36	804.59	$t(67) = .27$ $p > .79$	$t(67) = -1.98$ $p < .05$	$t(67) = -2.16$ $p < .05$	$F(2,67) = 2.83$ $p < .066$
Beer	651.92	663.55	794	$t(61) = .03$ $p > .97$	$t(61) = -2.82$ $p < .01$	$t(61) = -2.78$ $p < .01$	$F(2,61) = 4.97$ $p < .01$
Fast food	750.54	761.78	860.57	$t(65) = -.07$ $p > .94$	$t(65) = -2.32$ $p < .05$	$t(65) = -2.23$ $p < .05$	$F(2,65) = 3.40$ $p < .05$
Juice	744.55	724.3	836.54	$t(65) = .62$ $p > .53$	$t(65) = -2.22$ $p < .05$	$t(65) = -2.81$ $p < .01$	$F(2,65) = 4.52$ $p < .05$

Table 2.5 reports the average reaction times to the category names. The faster the reaction time to the category names, the more accessible a category concept is upon exposure to a brand name, and hence the faster the brand is categorized (Fazio 1990).The between-participants one-way ANOVA with the category name as a dependent variable, conducted per category, revealed that the level of typicality had a significant effect on these reaction times for chips ($F(2,67) = 2.83$, $p < .07$), fast food ($F(2,65) = 3.40$, $p < .05$), beer ($F(2,61) = 4.97$, $p < .01$), and juice category ($F(2,65) = 4.52$, $p < .05$). Planned comparisons further indicated that very typical and moderately typical brands, which have the same level of FR , elicited the same reaction times (not significantly different from each other), even if they had different levels of FOI. For instance, the reaction time for Heineken (very typical brand with

high FR and high FOI, M = 651.92) did not differ from that for Grolsch (moderately typical brand with high FR and moderate FOI, M = 663.55; $t(61)$ = 0.03, $p > .97$). On the other hand, brands with different levels of FR led to significantly different brand-to-category reaction times. More specifically, very typical brands (with high FR and high FOI) as well as moderately typical brands (with high FR and moderate FOI) elicited faster brand-to-category reaction times than atypical brands (with low FR and low FOI). For example, in the fast food category, the reaction times for both McDonald's (high FR and high FOI, M = 750.54) and Burgerking (high FR and moderate FOI, M = 761.78) were faster than those of KFC (low FR and low FOI, M = 860.57, respectively $t(65)$ = -2.32, $p < .05$, and $t(65)$ = -2.23, $p < .05$). An ANOVA on the aggregate of all category-related attributes revealed similar results as the analysis on the category name only.

Discussion

Study 2b, adopting a reaction time measure task, replicated the findings of Study 2a. That is, FR is more essential than FOI in inducing the brand typicality effects in the brand-to-category direction. Specifically, comparison of the reaction times revealed that the categorization speed of the brands with the same level of FR (very typical and moderately typical brands) did no differ from each other, even if their FOI levels were significantly different. However, brands low on FR and FOI (i.e., atypical brands) elicited slower reaction times. These results imply that brands

that share more common attributes with other category members are more likely to be categorized sooner. In addition, the results of the reaction time tasks indicate that the similar categorization speeds of very typical and moderately typical brands are not likely to be caused by potential floor effects, because the average reaction times of all brands are above 650 ms, which is much higher than the consented floor-effect threshold of 300 ms (Bargh and Chartrand 2000).

Study 3

In Study 3, we examined differences among the three levels of (typical) brands in the category-to-brand direction. As such, we can determine which component of typicality, FOI or FR, is most responsible for driving the observed brand typicality effects. Category-to-brand responses are often measured by the extent to which brands or specific brand characteristics become accessible upon exposure to the product category name. We employed two techniques for assessing typicality effects in the category-to-brand direction. In Study 3a, participants were requested to conduct a category production task, in which they were first given a category name and then asked to list instances of the category that came to their mind. In Study 3b, participants had to conduct a reaction time task, in which upon exposure to a category

name, they needed to judge as fast as possible if a subsequently appearing brand belonged to a product category.

We expected FOI to be more important than FR in steering brand typicality effects in the category-to-brand direction. Therefore, despite their similar level of FR, very typical brands should be elicited faster upon a category cue than moderately typical brands, due to their different level of FOI. Atypical brands, which have a low level of FOI, should be elicited more slowly and later than very typical and moderately typical brands.

Study 3a

In Study 3a, we used a category production task to investigate which antecedent (FOI or FR) determined the brand typicality effects in the category-to-brand direction. Put differently, we were interested in how fast a brand is recalled given a product category name, contingent on either the FOI or FR level of the brand.

Method

Thirty-two Dutch undergraduates were paid €5 to participate in this study. Each participant was given four product category names in a random order and asked to write down as many brands belonging to the category as possible. The instruction explicitly emphasized that participants should write down the brand names as soon as they came to mind.

Results

The coding scheme was similar to the one used in Study 2a (cf., Fazio et al. 2000) and used, this time, to rank brands in terms of recall (the higher the ranking, the faster the brand was recalled). We then compared the rankings between brands within a category, specifically looking at the order of the brands that we preselected.

Table 2.6: Mean ranks of brands recall in the category-to-brand direction

	Mean rankings of very typical brands (with high FR and high FOI)	Mean rankings of moderately typical brands (with high FR and moderate FOI)	Mean rankings of atypical brands (with low FR and low FOI)	Comparison columns 2 and 3	Comparison columns 3 and 4	Comparison across all brands
Chips	1.531	2.344	3.563	$F(1,31) = 9.24$ $p < .01$	$F(1,31) = 12.82$ $p < .001$	$F(2,62) = 25.17$ $p < .001$
Beer	2.438	3.734	6.281	$F(1,31) = 19.08$ $p < .01$	$F(1,31) = 62.97$ $p < .001$	$F(2,62) = 79.91$ $p < .001$
Fast food	1.281	2.188	3.859	$F(1,31) = 15.45$ $p < .001$	$F(1,31) = 38.29$ $p < .001$	$F(2,62) = 69.70$ $p < .001$
Juice	1.563	2.813	3.75	$F(1,31) = 18.02$ $p < .001$	$F(1,31) = 12.48$ $p < .001$	$F(2,62) = 28.36$ $p < .001$

Because there was neither a significant difference between brands with the same level of typicality (i.e., with the same level of FR and FOI; e.g., Pringles and Doritos in the chips category, Heineken and Bavaria in the beer category, Grolsch and Amstel in the beer category, Pizzahut and KFC in the fast food category) in terms of recall rankings, nor a difference between these brands when comparing them with

brands from different typicality levels, we collapsed all the brands sharing the same level of FR and FOI within a category[7]. The within-subject one-way ANOVA indicated a significant effect of level of typicality on the recall ranking for each product category: chips ($F(2,62) = 25.16$, $p < .001$), fast food ($F(2,62) = 69.70$, $p < .001$), beer ($F(2,62) = 79.91$, $p < .001$), and juice ($F(2,62) = 28.36$, $p < .001$) (see Table 2.6). Planned comparisons further disclosed that in all categories, very typical brands (with high FOI and high FR) were recalled significantly faster than the moderately typical brands (with moderate FOI and high FR), whereas the latter were recalled significantly faster than atypical brands (with low FOI and low FR). Taking the juice category as an example, the recall speed of Appelsientje (very typical brand with high FOI and high FR, $M = 1.56$) was the fastest among the three brands. Coolbest (moderately typical brand with moderate FOI and high FR, $M = 2.81$) was recalled significantly slower than Appelsientje ($F(1,31) = 18.02$, $p < .000$), while significantly faster than Taksi (atypical brand with low FOI and low FR, $M = 3.75$, $F(1,31) = 12.48$, $p < .000$).

We also controlled for brand familiarity by including it as a covariate in the analysis, for each category. None of the familiarities exerted a significant effect[8]. Therefore, it is the occurrence of the brand as a category member that enhanced the

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[7] Considering these brands separately leads to the same results.
[8] The average correlation between familiarity and FOI (across all brands) is only 0.08. Moreover, for 14 out of 16 brands, the correlations are insignificant (exceptions being KFC (r = 0.39) and Taksi (r = 0.41)). This confirms that Familiarity and FOI indeed measure different constructs.

brand typicality effect in the category-to-brand direction, not brand familiarity unrelated to the category context.

Discussion

Results from four categories converged on the fact that although brands with high and moderate FOI shared the same level of FR, they differed in recall order in the category production task. More specifically, very typical brands (with high FOI) appeared earlier and more often in the list compared to moderately typical brands (with moderate FOI but the same level of FR). As the two groups of brands have the same level of FR, we could merely conclude that when FR is on the same level, FOI determines the brand typicality effects in the category-to-brand direction. To completely verify the prediction that FOI is more essential than FR, we need to have brands whose FOI levels and FR properties are inversely related. However, as discussed earlier, in a marketing context, real brands' FOI is likely to be constrained by their FR property. Further, our data indicated that brands with low FOI and low FR (i.e., atypical brands) appear later in the recall order list than the other brands.

Study 3b

Although Study 3a highlights the important role of FOI (when FR is constant) in the category-to-brand direction, there are some potential limitations inherent to the category production task. For instance, Alba et al. (1991) proposed that similar brands

tend to be recalled together. If participants used this recall strategy, the results may not reflect the influence of FOI or FR on the brand typicality effects. In Study 3b, we used a reaction time measure task to verify the findings from Study 3a. The reaction time task followed a similar procedure as Study 2b. This time participants were exposed to a category name that was followed by a brand name on the computer screen. Participants were asked to judge whether the brand belongs to the category (or not) as fast as they could. Faster reaction times indicate a higher accessibility of the brand given the product category (Fazio 1990).

Method

Participants were 35 Dutch students who received €5 for participation. The reaction time task consisted of 38 trials, with six practice trials and 32 critical trials. In half of the critical trials, the brand belonged to the category (the 16 brands list in Table 1a), whereas in the other half of the critical trials, brand and categories did not match. Exposure times of the stimuli mimicked those in Study 2b. In this experiment, participants had to decide as soon as possible, by pressing one of two buttons on a keyboard, whether the brand belonged to the category or not. The 32 trials were randomly presented to each participant.

Results

Only correct responses (97% of all responses)[9] and brands belonging to the category were included in the analysis. The data were subjected to the same outlier analysis and log transformation as in Study 2b (cf. Bargh and Chartrand 2000; Fazio 1990).

Table 2.7: Mean reaction times of brand recall

	Mean RT of very typical brands (with high FR and high FOI)	Mean RT of moderately typical brands (with high FR and moderate FOI)	Mean RT of atypical brands (with low FR and low FOI)	Comparison columns 2 and 3	Comparison columns 3 and 4	Comparison across all brands
Chips	594.77	662.35	743.46	$F(1,31) = 4.9$ $p < .05$	$F(1,31) = 11.67$ $p < .01$	$F(2,62) = 14.59$ $p < .001$
Beer	554.64	623.15	791.16	$F(1,30) = 13.37$ $p < .001$	$F(1,30) = 11.68$ $p < .01$	$F(2,60) = 19.72$ $p < .001$
Fast food	574.94	651.52	783.01	$F(1,30) = 8.96$ $p < .01$	$F(1,30) = 13.52$ $p < .001$	$F(2,60) = 23.79$ $p < .001$
Juice	637.67	704.83	840.94	$F(1,30) = 7.74$ $p < .01$	$F(1,30) = 4.96$ $p < .03$	$F(2,60) = 12.94$ $p < .001$

As in Study 3a, we collapsed brands with the same typicality level (i.e., the same level of FOI and FR) per category, because they did not differ in their reaction

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[9] The incorrect responses spread roughly equally across brands, so that leaving out incorrect responses is not likely to lead to biased results. The fact that somewhat more errors were observed for Corona (atypical beer brand with low FOI and FR) is consistent with the expectation that brands with low FOI are named with more errors than those with high FOI when a category name is presented.

times to the category name, nor in their comparison with brands from other typicality levels. The within-participants one-way ANOVA indicated a significant effect of level of typicality on the reaction times for each product category: chips ($F(2,62) = 14.59$, $p < .01$), fast food ($F(2,60) = 23.79$, $p < .00$), beer ($F(2,60) = 19.72$, $p < .01$), and juice ($F(2,60) = 12.94$, $p < .01$) (see Table 2.7). Planned comparisons revealed that in all categories, very typical brands (with high FOI and high FR) elicited faster reaction than moderately typical brands (with moderate FOI and high FR), whereas the latter elicited faster reactions than atypical brands (with low FOI and low FR). In line with this pattern, the accessibility of McDonald's (very typical brand with high FOI and high FR, $M = 574.94$) in association with the category name was significantly higher than that of Burgerking (moderately typical brand with high FOI and moderate FR, $M = 651.52$, $F(1,30) = 8.96$, $p < .01$), which in turn was paired with the category significantly faster than the atypical brands Pizzahut and KFC (with low FOI and low FR, $M = 783.01$, $F(1,30) = 13.52$, $p < .001$).

Discussion

Study 3b replicated the results of Study 3a using a reaction time measure task. The differences in the reaction times, again, revealed the important role of FOI for typicality effects in the category-to-brand direction. When brands did not differ in terms of FR, brands with high FOI (i.e., very typical brands) were linked more rapidly to the category than lower FOI (i.e., moderately typical) brands. Brands low on both

FOI and FR (i.e., atypical brands) took the longest time to be recognized as a category member. Comparing the results from Study 2 and Study 3, it is clear that the brand typicality effects were not always symmetric. Specifically, brands with high FR and moderate FOI (moderately typical brands) were elicited *more slowly* than brands with both high FR and FOI (very typical brands) *given a category label*, yet were categorized *equally fast in the presence of a brand cue*. Brands low on FR and FOI were always activated latest, independent of whether the cue was a brand or a category.

General Discussion

Summary and theoretical contribution

Previous research proposed that the speed of brand recall (category-to-brand) and categorization (brand-to-category) is a function of a brand's typicality level: higher typicality leading to faster recall *and* categorization (Alba et al. 1991; Loken and Ward 1990). However, building on the cognitive psychology literature, this paper conjectures that brand typicality may produce different effects in the brand-to-category than in the category-to-brand direction, and that this asymmetry can be traced back to different brand typicality antecedents. This paper makes the first attempt to shed light on the interrelationship between these antecedents of brand

typicality, FOI and FR, in an existing brands setting, and on the different typicality effects that these antecedent might be responsible for.

Across five studies, we demonstrate that the brand typicality effects are indeed bi-directional and determined by different antecedents. Study 1 confirms that FR and FOI are important antecedents of brand typicality, and, across various categories, sheds light on the relationship between these antecedents. As expected, we find that for real brands, levels of FOI are constrained by levels of FR. Low levels of FR go along with low levels of FOI, which is consistent with the observation that atypical brands, with rather unique features, seldom purposefully present themselves as members of the category (but rather emphasize their exceptional attributes). On the contrary, high levels of FR do not coincide with low FOI. It appears that brands that share many common attributes with others (high FR) will automatically be encountered more often in the category context (e.g. be displayed alongside on retail shelves) and, therefore, at least exhibit moderate levels of FOI and typicality. Moreover, if such brands are purposefully marketed as 'category exemplars', this will further enhance their FOI, and turn them into very typical brands. Although FOI and FR have been identified as the antecedents of typicality in both the psychology and the marketing literature (Barsalou 1985; Loken and Ward 1990), extant research deemed them as rather independent if not conflicting. Our paper extends this literature, by showing that in a brand setting, high FOI goes along with high FR - thereby

emphasizing the multi-dimensional nature of brand typicality and further highlighting the links among the dimensions.

Studies 2 and 3 demonstrate that, unlike the common belief, brand typicality effects are asymmetric in the brand-category relationship. Furthermore, the effects in the two directions are determined by different antecedents. Adopting a free association task and a reaction time task, Study 2 verifies that a brand's FR is more essential in determining the brand typicality effect in the brand-to-category link. In particular, brands with the same level of FR are categorized equally fast, even though they differ in FOI (i.e., very typical and moderately typical brands). Brands that have both low FR and FOI (i.e., atypical brands) lead to the slowest categorization responses. Study 3, in contrast, shows that among brands with the same levels of FR, higher FOI leads to substantially stronger category-to-brand links. Indeed, very typical brands (high FR and high FOI) are elicited much faster than moderately typical brands (high FR and moderate FOI). Brands with both low FR and FOI are, again, elicited as last upon a category cue. Taken together, Studies 2 and 3 contribute to the brand typicality literature by illustrating that more typical brands are not always recalled faster and do not always elicit category names more rapidly than less typical brands. Rather, to judge the speed of categorization and brand recall, one needs to zoom in on the FR and FOI levels of the brands. The identification of the different antecedents of the bi-directional brand-category relation further richens the research from Herr and colleagues (1990, 1996). Their studies demonstrated the fact that the brand-category

relationship is asymmetric, while this paper discloses one potential underlying mechanism that drives this asymmetry.

From a theoretical perspective, this paper bridges a gap between the bi-directional brand-category relationship and typicality literature. At the same time, our findings entail important implications for brand and category managers.

Managerial implications

We find that, from a managerial viewpoint, brand typicality is indeed a mixed blessing. On the one hand, brands that share many characteristics with other category members - either because they fail to differentiate themselves from others, or because they deliberately stick to a 'common' design in order to appeal to large mainstream markets - have to pay the price for their ensuing typicality. Their high level of family resemblance (FR) reinforces the brand-to-category link: it leads to fast categorization and, consequently, is bound to divert attention away to the competitors. Advertising messages promoting these brands may, therefore, produce unwanted spillovers in favor of other players in the category. Especially if these brands remain relatively low on FOI, this negative effect may not be sufficiently compensated by the reverse association: brand typicality producing strong category-to-brand links and channeling attention from general category cues towards the brand. It follows that moderately typical brands, high on FR but relatively low on FOI, find themselves in a rather inferior position: their brand recall is slower than that of a very typical brand, whereas

the brand itself is more likely to trigger the activation of competitors compared to atypical brands.

Yet, the news is not all unpropitious. Our results show that managers of 'common' or 'mainstream' brands may be able to turn this disadvantage into an asset, by dwelling upon their 'representativeness'. By explicitly positioning the brand as *the* category exemplar in their communications and thereby increasing their frequency of instantiation, these brands not only move from moderate to high levels of typicality, but also asymmetrically enhance the category-to-brand link. As a result, these brands will disproportionally benefit from settings or communications where consumers are confronted with a category cue, coming faster to mind than their moderately typical or atypical rivals.

At the other extreme, atypical brands, low on both FR and FOI, stay 'out of the loop': they neither suffer from own communication spillovers to rival category members nor benefit from top-of-mind recall given a category cue. Is investing in FOI a desirable strategy for these brands? We see at least two reasons for caution. First of all, although marketing activities may inflate a brand's FOI level artificially, the FOI level is also influenced by the FR property of a brand, and managers of "unique" brands may need to invest more to increase their brands' FOI. Moreover, even if these managers are willing to make the extra investment, it may be irreconcilable with the unique brand's propensity to cater to a niche market, and may even dilute the brand image.

In sum, our results caution managers of 'mainstream' brands not to get stuck in the middle, suffering from the downsides of their moderate typicality levels in the form of diluted brand communication effectiveness. Instead, investing in FOI may offer these managers an interesting way out, leading to further typicality increases that selectively speed up brand recall given a category cue. In contrast, we suggest that the managers of atypical brands would rather focus on emphasizing the unique features of the brands, thereby minimizing the diluting effect of brand communication. Sacrificing the top of mind benefit given a general category cue is not a disaster for these brands, because they rather target a niche market.

Limitations and future research

While providing interesting insights, our research paves the way for new managerial and academic challenges. Should managers of 'common', high FR brands increase their FOI (enhance the positive consequences of typicality), or rather reduce FR (escape from the downsides)? And, given its observed positive consequences, is enhancing FOI also an appropriate strategy for brands that are rather unique? Given prevailing marketing practice and our focus on *real brands*, our stimuli were existing brands with their observed levels of FR and FOI. Hence, we could not experimentally manipulate FR and FOR nor identify or analyze brands coupling high or moderate levels of FOI with low FR. Consequently, we could not fully ascertain the FOI consequences for brands low on FR, nor that FOI is *more* important than FR in the

category-to-brand link. Future research may create some hypothetical brands and manipulate their FR and FOI levels orthogonally to shed more light on these issues.

Second, this paper focuses on the influence of FOI and FR on brand recall and categorization. It remains unclear whether and how these brand typicality antecedents affect brand preference. While most of the brand typicality literature found a positive correlation between brand typicality and brand evaluations, there is no agreement on what drives this relationship, and – in particular – on whether it is primarily shaped by high FOI (emphasizing the brand as a risk-free, sensible choice from the category, Rosch 1978), or by high FR (because consumers appreciate the common category attributes as such to fulfill their purchasing and consumption goals, Carson, Jewell, and Joiner 2007). Future studies could address the differential effects of the two typicality antecedents on brand evaluations. Similarly, future research could address to what extent these fast recall and spillover effects influence brand choice and purchase. On the one hand, as product assortments become more extended, brands "first coming to mind" may benefit from high accessibility and are more likely to be purchased. However, this may only apply to low involvement product categories. On the other hand, the effects of fast categorization may not be detrimental, especially for high prestige brands that favorably compare to other category members anyway. Hence, future research may jointly examine the brand typicality effects and other product characteristics to investigate the influence of FR and FOI on brand choice and purchase intentions.

Third, this paper solely examines brands that merely exist in one product category, which makes the distinction between FOI and familiarity intuitively less pronounced. However, for brands available in multiple categories, this distinction can be more relevant. It is plausible that marketing communications to enhance FOI may generate mixed effects for these brands, contingent on the relatedness of the product categories. High FOI in one category may enhance the brand's recall given a related category cue, while it may not have any influence on recall, or even backfire, in unrelated categories. Given the prevalence of brand extension activities (Loken and John 1993; Mao and Krishnan 2006), such cross-category effects of FR and FOI deserve more attention.

Finally, as this study focused on national brands, an interesting issue remains how our findings translate to private labels. On the one hand, private labels seem to coincide with moderately typical national brands in that they often possess the common features of a category (high FR) while the investment on advertising is relatively low (low FOI) (Hoch and Banerij 1993; Sayman, Hoch, and Raju 2002; Steenkamp and Dekimpe 1997). In addition, the exclusive distribution of private labels (each private label is typically available in only one retail chain) further constrains their FOI. On the other hand, private labels that are often characterized as a combination of reliable quality and relatively low prices (Lamey, Deleersnyder, Dekimpe, and Steenkamp 2007) may not fall in the pitfall of moderately typical national brands. It seems that private labels satisfy a niche of consumers' need of

decent quality, basic features of the category, and low cost, which can override the categorization and recall effects demonstrated in this study. Future research should study the FOI and FR of private labels, and the ensuing category-brand associations.

3. MY BRAND AND I: THE IMPACT OF SELF-CONSTRUAL ON SELF-BRAND CLOSENESS

Introduction

It is commonly accepted that some consumers personify brands and form relationships with them (Aggarwal 2004; Fournier 1998). Consumers often construct these relationships to shape their self-concept and to reinforce an own personal identity (Belk 1988; Kleine, Kleine, and Allen 1995). The connection that consumers have with a brand also tends to be an important component in the development of brand preference (Belk 1988; Escalas and Bettman 2005; Richins 1994). Yet, because not all consumers are equally prone to self-brand relationships (Escalas and Bettman 2003), understanding the antecedents, and the underlying mechanisms, that lead to close consumer-brand connections is a key area of interest.

One consumer characteristic that relates to the need for closeness and has gained widespread attention in the social psychology literature is *self-construal*, which reflects the extent to which individuals perceive themselves as separate from others or connected to others (Markus and Kitayama 1991). There is substantial evidence that self-construal influences people's preference for interpersonal closeness. Specifically, it has consistently been found that individuals with an interdependent self-construal

('interdependent selves') have in general a stronger inclination for interpersonal closeness than those with an independent self-construal ('independent selves') (Gardner, Gabriel, and Hochschild 2002; Holland et al. 2004; Oyserman, Coon, and Kemmelmeier 2002). Then, one may expect that interdependent selves are in general also more bound to develop more closeness in self-brand connections than independent consumers (Holland et al. 2004). In this paper, however, we argue that rather the opposite is true. Based on the observation that self-brand relationships and self-person relationships play very different roles in constructing self-concepts of in(ter)dependent selves, we hypothesize that, rather, independent selves tend to build and maintain closer relationships with brands than interdependent selves, and particularly with brands that allow expressing oneself. Independent individuals have a higher desire for self-expression (Kim and Sherman 2007), and reliance on brands to express the inner self may therefore reinforce self-brand connections. Three experiments corroborate this proposition, showing that it holds for chronic as well as situation-activated self-construal and for preferred as well as hypothetical brands. In addition, we show support for the essential role of self-expression.

Self-Construal and Closeness to the Self

The term self-construal reflects the extent to which the self is defined as being separate, unique, and autonomous from others ('independent self-construal') or

intertwined and connected with others ('interdependent self-construal') (Markus and Kitayama 1991; Singelis 1994). Various studies have asserted that while independent and interdependent self-construal coexist in consumers' memory (Gardner, Gabriel, and Lee 1999; Trafimow, Triandis and Goto 1991), one may be more predominant than the other, allowing to characterize persons as interdependent selves - who emphasize connectedness to others and strengthening existing relationships - or as independent selves - whose primary motive is to stand out of others and express unique internal attributes. Moreover, an individual's self-construal can be altered by situational cues (Trafimow et al. 1991). For instance, simply recalling and describing a recent purchase (for self vs. others) can activate a specific self-construal in all consumers (Mandel 2003).

Whether chronic or situationally activated, self-construal has been shown to be a highly relevant concept for consumer behavior (Agrawal and Maheswaran 2005; Jain, Desai, and Mao 2007; Lee, Aaker, and Gardner 2000). For instance, Mandel (2003) revealed that interdependent consumers are less likely to take social risks (but more likely to take financial risks) than independent consumers. Further, several studies have shown that interdependent selves are more likely to conform to others' opinions or social norms than independent selves (Torelli 2006; Ybarra and Trafimow 1998). An important reason for these effects is that interdependent selves care more about connectedness and keeping harmony in interpersonal relationships, whereas independent selves strive for being distinct from others. This is also reflected in the

fact that interdependent selves have a stronger preference for interpersonal closeness than independent selves, as demonstrated in several empirical studies. Participants primed with interdependent self-construal are more likely to perceive their friends as related to them and incorporate them into their self-concepts (Gardner et al. 2002), and to maintain shorter physical distances to others (Holland et al. 2004). Also, participants with a independent self-construal display less nonconscious mimicry, which is a prevalent social behavior (Chartrand, Maddux, and Lakin 2005), than participants with a interdependent self-construal (Van Baaren et al. 2003). Further, in the social comparison realm, self-construal has been found to moderate the direction of social comparison (Blanton and Stapel, in press; Stapel and Koomen 2001; Stapel and Van der Zee 2006). Specifically, an accessible interdependent self-construal is more likely to activate assimilative social comparisons, whereas contrastive social comparisons are more likely to occur when an independent self-construal is made accessible. All together, these findings confirm independent selves' preference to 'differentiate and keep distance from others' and their low level of assimilation to others.

An interesting question is, then, whether this (lack of) preference for (personal) closeness linked to self-construal, also carries through to connections between an individual and a brand. Previous research has suggested that brands can facilitate in shaping and expressing the self (Belk 1988; Richins 1994), and can become 'extended selves'. As a consequence, consumers often anthropomorphize brands (Aggarwal and

McGill 2007), incorporate them into their self-concepts, and maintain relationships with them, which often mirror interpersonal social relationships (Aaker, Fournier and Brasel 2004; Aggarwal 2004; Chaplin and John 2005; Escalas and Bettman 2005; Fournier 1998). However, incorporating objects in the self-construal conceptualization, which is rooted in the literature on interpersonal relationships and social context, is far from obvious (Markus and Kitayama 1991) and relatively underexplored. A few attempts treated self-construal rather as a moderator to leverage the relation between self-brand connection and other variables, and reported diverse findings. For instance, Escalas and Bettman (2005) revealed that self-construal merely moderates the impact of outgroup-consistent brand associations on self-brand connections, with independent selves having *less* tight connections to a brand with such associations than interdependent selves. However, there were no effects of self-construal on self-brand connections to brands with an outgroup-inconsistent image or to brands with ingroup-(in)consistent images. Further, Swaminathan et al. (2007) found that, when examining how consumers' self-construal moderates the impact of chronic brand-relationships (self-concept connection or country-of-origin connection) on the resistance to negative brand information, self-construal did *not* change the self-brand connection of brands in a television product category.

All together, these studies highlight the importance of self-construal in examining self-brand connections, but since none of them touched upon why self-construal may affect self-brand connections, they reported diverse or rather contrary

findings to what we predict. In our paper, we argue and show that independent consumers have stronger self-brand connections to brands that allow expressing oneself compared to interdependent consumers, because independent consumers appreciate self-expression much more and using brands to communicate the selves further strengthen their self-brand connections. In addition to demonstrating the direct effects of self-construal on self-brand connections, we also shed light on mediating (individuals' need for self-expression) as well as moderating factors (type of product and brand's level of expressiveness), and explore implications for brand purchase intentions.

Self-Construal, Self Expression, and Self-Brand Connection

Whereas interdependent self-construal is strongly intertwined with a preference for *personal closeness*, we argue that independent self-construal is strongly associated with a preference for *self-brand closeness*, particularly in case of self-expressive brands. Hence, in our view, the link of self-construal with self-brand closeness is opposite to its link with self-person closeness. In the following, we will discuss our conceptual framework supporting this proposition. Our reasoning proceeds in four steps.

A first and key observation why brands may entail different closeness with independent versus interdependent selves is that the two construals value self-expression differently (Kim and Sherman 2007). By expressing themselves, individuals can reveal their inner attributes, such as feelings, thoughts, and preferences in order to realize their individuality (Kim and Sherman 2007). This may aid individuals to validate their self-concept (Kim and Ko, in press). The need for self-expression, however, is argued to be contingent on individuals' self-construal. For independent selves, a fundamental motive is to discover, establish, and affirm the unique and stable internal self. Consequently, independent self-construal entails a motivation to express who the self is and distinguish the autonomous self from the social context. Empirical evidence supports this view, by showing that (European) Americans, most of whom can be characterized with independent self-construal, value self-expressive beliefs and behavior more than (East Asian) Americans, for whom interdependent self-construal is more dominant (Kim and Sherman 2007). In contrast, interdependent selves, whose personal attributes and preferences are subject to the motive of integrating into the social context, may perceive self-expression as trivial and inconsequential. Derived from the definition, the self-concept of interdependent selves is contextual, tailoring to fit the thoughts and actions of other social actors. Hence, interdependent selves do not always have a salient and diagnostic internal self to express. Furthermore, even if interdependent selves are aware of their invariant selves, the presence of unique internal selves may impair the primary goal of keeping

harmony with other actors. Put differently, a unique and invariant self-concept (e.g., relatedness to a certain social group) is not likely to be prevalent in any social context. As a consequence, the safest way for interdependent consumers to fit in one's surrounding is to not express the internal self.

Second, self-expression can take various forms, one of which is through individuals' choices (Aaker and Schmitt 2001; Kim and Sherman 2007). Through making choices, consumers can make their preferences overt and observable, which is one way to stand out from others. Kim and Drolet (2003) affirmed the importance of making choices to express the self, for individuals born in independent type of countries. In one of their studies, they found that participants born in the US (an individualist/independent cultural context) had a higher tendency to switch choice rules (compromise vs. non-compromise rules) than participants born in Korea (a collectivist/interdependent cultural context). Variety-seeking in choice making has been proven a means to express and distinguish the unique self from the social context (Ariely and Levav 2000). Being the chosen options on multiple choice occasions over time, brands can be deemed as one of the agents consumers rely on to define and communicate the internal self, and relationships with brands can express consumers' identities (Aaker 1999; Reed 2004; Escalas and Bettman 2005). Therefore, we propose that consumers with independent self-construal are more inclined to adopt brands for self-expression than interdependent selves.

Third, individuals using a brand as a means of self-expression are more likely to incorporate that brand into their self-concept and develop a stronger relationship with it. This is implicitly supported by evidence on the "spread of alternatives" effect – the phenomenon whereby individuals, after choosing from two equally attractive options, tend to become more positive about the chosen one than the rejected one relative to their pre-choice evaluations. Recent studies reveal that this only occurs for individuals whose independent self-construal is dominant (Heine and Lehman 1997) and who value and emphasize self-expression (Snibbe and Markus 2005). In a similar vein, Swaminathan et al. (2007) showed that independent consumers discount and even counterargue negative brand information when they have a high chronic attachment to the brand. A plausible explanation for this commitment to the chosen options is that individuals with independent self-construal use those choices to reflect personal attributes and define the internal self. Hence, showing more attachment to the choice is a means to defend and affirm the self. Moreover, in a brand context, it seems plausible that interdependent consumers are more inclined to vary their choices across occasions to fit in the diverse social contexts, in comparison with independent consumers who may stick to the same brands revealing the invariant selves independent of the choice contexts. It is important to mention that self-brand connections are built on integrating brands into the self-concept, not on merely liking or occasionally using the brands. A close self-brand connection then implies that consumers perceive the brand as the representation of who they are across occasions.

Hence, independent consumers should maintain a strong relationship with self-expressive brands that are part of the selves, whereas it is hard for interdependent consumers to integrate a certain brand into their self-concepts, given that their self-concepts are contextual and very few brands can fit in all social contexts consumers may encounter.

Fourth, categories and brands may differ in the ability to project the internal self to the outside world. Publicly consumed products can better communicate the self than privately consumed ones (Bearden and Etzel 1982) and, within a product category, some brands leverage the self-expression function better than others due to their clear and definite brand image, associations, and personality (Aaker 1997). Our conceptualization implies that independent selves develop closer self-brand connections only for such self-expressive brands and self-expressive choice settings. Non self-expressive brands should not serve to communicate the self to others or elicit connections to the self. In contrast, for interdependent selves who perceive choices and brands as less meaningful for revealing anything inherent to the self, self-brand connections and post-choice evaluations should not be influenced by whether the brand is self-expressive or not. Indirect evidence of this is given by Kim and Sherman (2007) who, in one of their experiments, asked participants to make a choice of four pens, by either writing the choice down (a self-expressive act) or simply remembering it (a non self-expressive act). Then, all participants were given their least favorite pen and were asked how much they liked that pen. In line with our reasoning, participants

with chronic independent self-construals liked the pen less when they had written down their choice than when they did not write down their choice. Thus, independent consumers evaluated the un-chosen pen more harshly when they expressed their pen choice than when they did not express their pen choice. This may indicate that they, in fact, became more attached to the pen they did choose. Chronic interdependent selves' liking of the un-chosen pen did not vary as a function of expressing their pen choice or not.

In sum, we hypothesize that consumers with independent self-construal tend to incorporate (existing or hypothetical) brands that allow for self-expression into their self-concepts and, hence, maintain closer connections with these brands than consumers with interdependent self-construal. Across three experiments, we provide support for this proposition. We further corroborate the role of self-expressiveness by investigating the difference in publicly versus privately consumed categories, and manipulating the self-expressive function of hypothetical brands within a category. The expectation is that consumers with independent and interdependent self-construals merely differ in their connection with brands able to express the self, either because they are publicly consumed or possess a desirable brand image to present the self to others.

Overview of the Experiments

To examine the influence of self-construal on consumers' closeness to self-expressive brands, we operationalized self-construal and brand's self-expressiveness in multiple ways across three studies. Study 1, classifying participants based on their chronic self-construal, measured the self-brand connections in a publicly consumed category (sneakers) and a privately consumed category (yogurt). In study 2, self-construal was activated by situational cues and, in addition, we demonstrated the mediating role of self-expression in bridging self-construal and self-brand closeness. Finally, in study 3, we manipulated the degree of self-expressiveness of hypothetical brands through the use of advertising slogans, testing the expectation that consumers with independent self-construal build stronger connections with brands that adopt a self-expressive claim, but not when brands do not use such a claim.

Study 1

Study 1 intended to establish that consumers with chronic independent self-construal bear closer connections with self-expressive brands than those who are chronically interdependent, by varying the self-expressive ability of brands based on

their category characteristics (publicly consumed vs. privately consumed). A small pretest first defined "public product" (according to Bearden and Etzel 1982), and then asked 15 participants to assess sneakers and yogurt on a 1 ("A public product for no one") to 5 ("A public product for everyone") scale with respect to the degree of publicly consumed (Bearden and Etzel 1982). The results indicated that sneakers ($M =$ 3.93) score significantly higher than yogurt ($M = 1.73$) on the "publicly consumed" dimension ($F (1, 14) = 61.98, p < .001$). Hence, we measured participants' connections with brands in both categories, expecting that chronically independent selves have stronger self-brand connections than chronically interdependent selves only in the sneakers category but not in the yogurt category.

Method

One hundred ninety-two undergraduates participated in this study in exchange for partial course credit. They were told that the purpose of this study was to select brands for a future larger-scale study, and asked to complete several questions with respect to two product categories, sneakers and yogurt, presented to them in a random order.

The real purpose of study 1 was to examine the degree of brand closeness developed by individuals with different self–construal. Therefore, we asked participants to first write down the brand they like the most in each of the two categories. Next, they were asked to evaluate this brand on the Self-Brand Connection

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Scale (Escalas and Bettman 2005), presenting seven items that measure the extent to which individuals have incorporated or intend to incorporate a brand into the self-concept and maintain a close relationship with it. Examples of items are "I feel a personal connection to this brand" and "I can identify with this brand". Participants had to indicate their ratings on a 0 ("strongly disagree") to 10 ("strongly agree") scale. Items of this scale were averaged to form a composite index of self-brand connection for both sneakers and yoghurt ($\alpha_{sneakers}$ = .93 and α_{yogurt} = .91). After several unrelated filler tasks, participants filled out the Self-Construal Scale (Singelis 1994) that measures to what extent individuals are chronically independent or interdependent. Participants had to rate items such as "My personal identity independent of others, is very important to me" (independent item) and "My happiness depends on the happiness of those around me" (interdependent item) on a 1 (strongly disagree) to 7 (strongly agree) scale. The items for the two construals were averaged separately to yield an overall independent and interdependent score. Consistent with previous research (Jain et al. 2007), participants were identified as having chronically independent (interdependent) self-construal, if their independent (interdependent) scores were above the 60th percentile and their interdependent (independent) scores were below the 40th percentile.

Results

        Based on the previous rule, 80 participants were retained, 42 of whom could be characterized as chronically independent, and 38 as chronically interdependent. To investigate the influence of self-construal on self-brand closeness in both the sneakers and the yoghurt product categories, we ran a 2 (self-construal: independent vs. interdependent) × 2 (product category: sneakers vs. yogurt) × 2 (gender: male vs. female) ANOVA with self-construal and gender as between-participants factors, and product category as a within-participants factor. Gender difference is often found to be intertwined with self-construal effects (Baumeister and Sommer 1997; Cross and Madson 1997), hence we included it as a control variable to test for unexpected interaction effects with the other variables. A main effect of product category (F (1, 76) = 67.55, $p < .001$) indicated that participants possess closer self-brand connections with sneakers ($M = 5.11$) than with yogurt ($M = 2.96$). Furthermore, there was also a significant self-construal × product category interaction (F (1, 76) = 4.43, $p < .05$), as depicted in Figure 3.1. Planned comparisons showed that chronically independent consumers ($M = 5.52$) had a stronger self-brand relationship than chronically interdependent consumers ($M = 4.67$) in the sneakers product category (F (1, 76) = 4.19, $p < .05$), but not in the yoghurt product category ($M_{independent} = 2.91$ and $M_{interdependent} = 3.02$; F (1, 76) = 0.16 $p > .69$). There were no gender effects in this analysis (Fs < 1, NS).

Figure 3.1: Self-brand connection as a function of self-construal and product category.
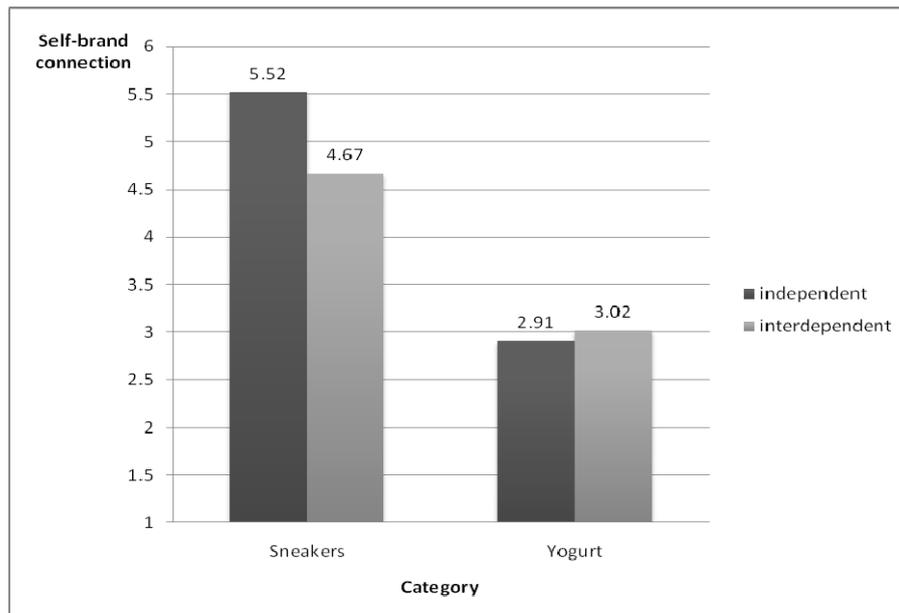
Discussion

This study measured the self-brand connections of participants with predominant independent versus interdependent self-construal in a publicly consumed versus a privately consumed category, thereby verifying that independent selves tend to maintain closer self-brand connections than interdependent selves, but only when the brand serves to communicate the self to the social context. The results also revealed significantly stronger self-brand connections for sneakers than for yoghurt irrespective of participants' self-construal, which may be rendered by the different financial values of the two product categories (Richins 1994).

Study 2

The first study classified participants based on their predominant chronic self-construal, while the malleable self is not always invariant and can be shaped in response to situational primes (Trafimow et al. 1991). Therefore, in study 2, we temporarily activated independent versus interdependent self-construal before measuring self-brand connections. We expected participants primed with independent self-construal to show tighter relationships to their favorite brands than those primed with interdependent self-construal. In addition, although study 1 confirmed the impact of self-construal on self-brand connections, it did not directly measure the difference in need for self-expression between individuals with independent and interdependent self-construal. Therefore, a second aim of study 2 was to verify the mediating role of the need for self-expression. Given that differences in self-brand connections between independent and interdependent self-construals merely appear in publicly consumed categories, we used two such categories - sneakers and bags - in the second study.

Method

One hundred fifty-eight undergraduates participated in this study in exchange for course credit. Participants were told they had to complete several unrelated tasks, and randomly assigned to either the independent or the interdependent construal

condition. To prime these conditions, we used the Sumerian warrior story that has successfully been used in previous research (Jain et al. 2007; Mandel 2003; Trafimow et al. 1991). The story portrays a warrior, named Sostaras, who has to select an officer for an upcoming battle. In the independent self-construal condition, Sostaras selects a talented general and the story emphasizes the benefits for Sostaras himself, whereas in the interdependent condition, Sostaras selects a family member, and the story underscores the benefits for Sostaras' family. Participants had to indicate to what extent they admired Sostaras.

After reading this story, participants completed the same self-brand connection scale as in study 1, for their favorite brands in the two randomly presented product categories: sneakers ($\alpha = .92$) and bags ($\alpha = .95$). Finally, participants had to indicate their gender, age and their usage of sneakers and bags, and were asked two questions measuring their inclination to express themselves: "To what extent do you like to express yourself?" and "How much are you willing to communicate who you are to others?".

Results

Nineteen participants indicated that they rarely or never wear sneakers or use bags. As they are not likely to build and maintain self-brand connections in these two categories, they were excluded from the analysis.

Self-brand connections results. A 2 (self-construal: independent vs. interdependent) × 2 (product category: sneakers vs. bag) × 2 (gender: male vs. female) ANOVA, with self-construal and gender as between-participants factors and product category as a within-participants factor, was conducted on the self-brand connection measure. As expected, the significant main effect of self-construal confirmed that participants primed with independent self-construal ($M = 4.92$) felt closer to their favorite brands than those primed with interdependent self-construal ($M = 4.25$ F (1, 136) = 6.30, $p < .05$). The significant main effect of product category indicated closer self-brand connections with sneakers ($M = 4.91$) compared to bags ($M = 4.26$), (F (1, 136) = 5.35, $p < .05$). Moreover, while the interactions between construal and gender, as well as construal and category were all insignificant (all ps > .75), there was a significant interaction between gender and product category (F (1, 136) = 9.39, $p < .01$). Post-hoc Tukey HSD comparisons revealed that female consumers ($M = 4.68$) have a higher self-brand connection with bags than males ($M = 4.07$), whereas males ($M = 5.2$) have a higher self-brand connection with sneakers than females ($M = 4.53$).

Mediation analyses. Next, we tested whether the effect of self-construal on self-brand closeness is mediated by participants' need to express themselves. After collapsing the two items of the self-expression scale ($\alpha = .95$), we conducted two separate sets of regressions: one for sneakers and one for bags. Given the small sample, we used the bootstrapping method suggested by Preacher and Hayes (2004) for our mediation analyses.

For the sneakers category, two separate regressions showed an effect of primed self-construal on the self-brand connection rating ($\beta = .59$, $t(137) = 2.08$, $p < .05$) and on participants' need to express themselves ($\beta = .53$, $t(137) = 2.06$, $p < .05$). In a regression with both self-construal and need to self-express as explanatory variables, only the latter exerted a significant effect on the self-brand connection rating ($\beta = .43$, $t(136) = 4.92$, $p < .001$), whereas the effect of self-construal became insignificant ($\beta = .36$, $t(136) = 1.36$, $p > .17$). Preacher and Hayes' (2004) bootstrapping method confirmed that the need to self-express fully mediated the effect of primed self-construal on the self-brand connections ($p < .05$).

Similar results were obtained for bags: primed self-construal significantly affected both participants' self-brand connections ($\beta = .73$, $t(137) = 2.18$, $p < .05$), and their need to express themselves ($\beta = .53$, $t(137) = 2.06$, $p < .05$). When both self-construal and the need to self-express simultaneously entered the regression, only the need to self-express significantly influenced the self-brand connection ($\beta = .49$, $t(136) = 4.72$, $p < .001$), whereas the impact of self-construal disappeared ($\beta = .47$, $t(136) = 1.48$, $p > .14$). Again, the bootstrapping results pointed to full mediation ($p < .05$).

Discussion

Study 2 corroborated the results of study 1, showing that *temporarily* salient self-construal, also, influences degree of self-brand closeness. As expected,

participants primed with independent self-construal gave higher ratings on the self-brand connection scale than those primed with interdependent self-construal. Furthermore, study 2 confirmed that it is the higher need to self-express of independent selves that fully mediates their closer self-brand closeness. In addition, the results revealed that female consumers feel closer to bags than sneakers, while the pattern for male consumers is reversed. This gender difference is probably not surprising, given the prevalent belief that females are more attached to bags than males.

Study 3

Studies 1 and 2 jointly proved that consumers with independent self-construal, whether chronically predominant or situation-activated, are more inclined to express themselves through publicly consumed brands, and maintain closer relationships with them. However, in the first two studies, we only recorded participants' self-brand connections with their favorite brands, which were expected to accomplish the self-expression goal. The question then is if these effects replicate for brands, unknown to the participants, but containing a self-expressive image. Therefore, to corroborate our findings, study 3 used hypothetical brands and manipulated their ability to serve as a self-expressive tool through brand advertising slogans. The expectation was that compared with interdependent selves, consumers with independent self-construal build

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stronger self-brand connections with brands highlighting a self-expressive image, but not with brands lacking such an image. In addition, study 3 investigated whether independent consumers also have higher purchase intentions for self-expressive (hypothetical) brands.

Method

Two hundred and eighty undergraduates participated in the study in exchange for course credits. Participants were randomly assigned to the conditions of a 2 (self-construal: independent vs. interdependent) × 2 (ad slogan: self-expressive vs. neutral) between-participants design.

Upon arriving in the lab, subjects were told that they would participate in several unrelated tasks, one being the selection of print ads for some new brands. Similar to study 2, participants were given the story about the warrior Sostaras, to activate their independent versus interdependent self. Following this manipulation, they were exposed to two ads and related questions after each ad -- one of a jeans brand and one of a juice brand. The juice ad was included as a filler ad and did not contain any slogan. It always appeared after the jeans ad and its questions. The slogan of the jeans ad was manipulated: half of the participants were exposed to a self-expressive slogan ("Show who you are"), the other half to a neutral slogan ("A good choice"). For both the jeans and the juice ads, participants had to fill out the same self-brand connection scale as in the previous studies, followed by questions with respect

to their purchase intention of the brand (one question: "What is the chance that you will buy this brand?" rated on a scale from 1 (extremely low) to 9 (extremely high)), the perceived quality of the brand (one question: "What is your perception of the quality of the brand in the ad?" rated on the same scale), the degree of self-expressiveness of the ad (two questions: "The target of this ad is consumers who are eager to express themselves" and "You perceive this ad as a very self-expressive one" rated between 1 (not agree at all) and 9 (strongly agree)), and several filler questions about the ad (e.g., its picture quality).

Results

Three participants were excluded because they indicated not to wear jeans at all. As a manipulation check, we first ran a 2 (self-construal: independent vs. interdependent) × 2 (slogan: self-expressive vs. neutral) × 2 (gender: male vs. female) between-participants ANOVA on the average self-expressiveness rating of the ad (α = .94). The results revealed that participants perceived the ad with the self-expressive slogan (M = 4.48) as more self-expressive than the ad with the neutral slogan (M = 3.54, F (1, 269) = 8.26, p < .005), irrespective of their primed self-construal (F (1, 269) = 0.44, p > .51).

Self-brand connection. We conducted a 2 (self-construal: independent vs. interdependent) × 2 (slogan: self-expressive vs. neutral) × 2 (gender: male vs. female) between-participants ANOVA on the average self-brand connections (α = .90). This

analysis only revealed a marginally significant interaction ($F_{(1, 269)} = 3.46$, $p = .06$) between self-construal and the type of slogan. Given the specificity of our hypotheses, we conducted planned comparisons to examine the effect of self-construal on the self-expressive brand versus the non self-expressive brand (Rosnow and Rosenthal 1995). As expected, consumers primed with independent self-construal ($M = 3.31$) gave higher scores on the self-brand connection scale than those primed with interdependent self-construal, but only in case of a self-expressive slogan ($M = 2.83$, $F_{(1, 269)} = 4.22$, $p < .05$). In contrast, consumers with primed independent self-construal did not report different self-brand connections with the neutral-slogan brand ($M = 2.78$) than those primed with interdependent self-construal ($M = 2.87$, $F_{(1, 269)} = 0.35$, $p > .55$).

We further analyzed this interaction by comparing the self-brand connection means within the specific self-construals, using Tukey HSD post hoc comparisons. These comparisons indicated that consumers primed with independent construal have a closer relationship with the brand having a self-expressive slogan ($M = 3.31$) compared to the brand having a neutral slogan ($M = 2.78$, $p < .05$), whereas the nature of the slogan did not influence the self-brand relationship of consumers with interdependent self-construals ($M_{self-expressive} = 2.83$, $M_{neutral} = 2.87$, NS).

Figure 3.2: The effects of self-construal and type of slogan on self-brand connection
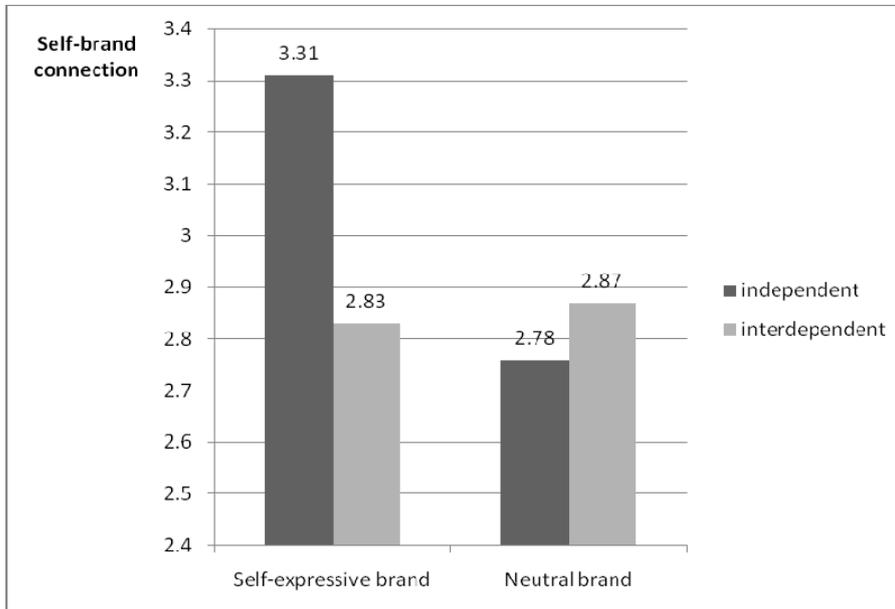
Purchase intentions. We further analyzed to what extent self-construal influences consumers' intention to adopt the self-expressive brand versus the non self-expressive brand. A 2 (self-construal: independent vs. interdependent) × 2 (slogan: self-expressive vs. neutral) × 2 (gender: male vs. female) between-participants ANOVA on purchase intention merely revealed a significant interaction between self-construal and self-expressiveness of the slogan (F (1, 269) = 9.24, p < .01). Planned comparisons further indicated that consumers primed with independent self-construal reported higher brand purchase intentions (M = 3.41) than those primed with interdependent self-construal (M = 2.65, F (1, 269) = 4.58, p < .05), but only in case of the self-expressive slogan. This is completely in line with the pattern of the self-brand

connections findings. Interestingly, for the brand with a non self-expressive slogan, the purchase intention was reversed for the two groups of consumers: consumers primed with independent self-construal were less likely to purchase the non self-expressive brand ($M = 2.69$) than those with primed interdependent selves ($M = 3.25$, $F (1, 269) = 4.66, p < .05$).

To further shed light on this reversed purchase intention, we compared the purchase intentions means within the specific self-construals, using Tukey HSD post hoc comparisons. These comparison revealed that consumers primed with independent construal were more likely to buy the self-expressive brand ($M = 3.41$) than the non self-expressive one ($M = 2.69$ $p < .05$), whereas those primed with interdependent self-construal were less likely to buy the self-expressive brand ($M = 2.65$) than the non self-expressive one (M $= 3.25, p < .05$).

Quality perceptions. Finally, a 2 (self-construal: independent vs. interdependent) × 2 (slogan: self-expressive vs. neutral) × 2 (gender: male vs. female) between-participants ANOVA on participants' quality perceptions of the brand did not reveal any significant effects (Fs < 1, ps = NS). Hence, differences in purchase intentions cannot be attributed to different quality perceptions between the self-expressive and non self-expressive brand.

Figure 3.3: The effect of self-construal and type of slogan on purchase intention
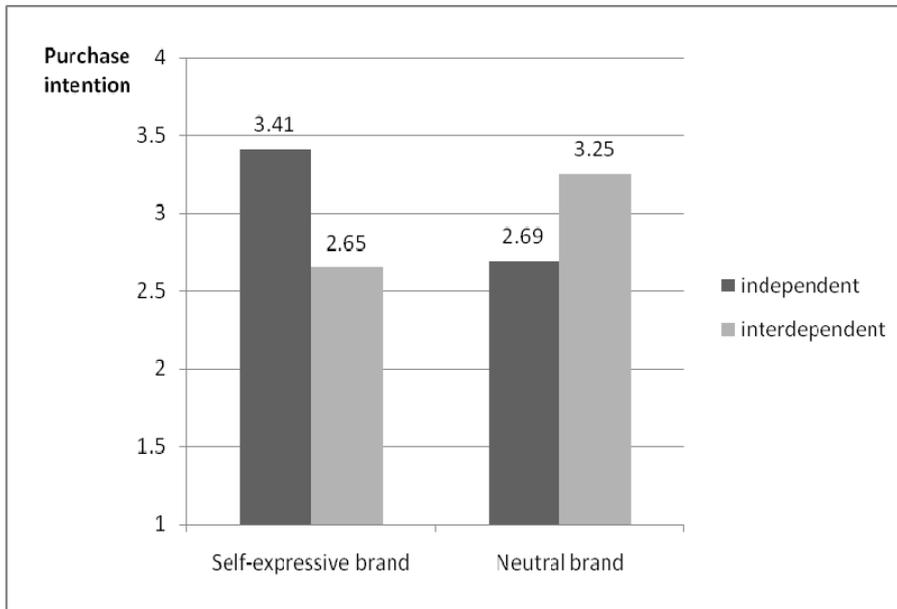
Discussion

Manipulating the slogans of hypothetical brands, study 3 demonstrated that consumers with independent self-construal tend to build stronger brand relationships than interdependent selves, but only with brands adopting a self-expressive slogan. This study also showed that their closer self-brand connection with these brands is not rendered by higher quality perceptions. These results again verify the essential role of self-expression in establishing the impact of self-construal on self-brand connections.

Study 3 also yields interesting insights into the ensuing purchase intentions. Individuals with independent self-construal not only developed closer connections to self-expressive brands, they were also more inclined to purchase these brands.

Strikingly, although interdependent selves did not show closer links to the non self-expressive brand than independent selves, they were more willing to buy this brand. Cross-brand comparison *within* the group of participants primed with interdependent self-construal even revealed that they were *less* likely to purchase the brand with a self-expressive slogan than the brand with a neutral slogan. The underlying reason may be that, due to their need of maintaining harmony with the social context, interdependent selves do not tend to use self-expressive brands, especially when it is not clear if the brand-associations fit in the social context. For them, it is much safer to buy and wear a non self-expressive brand, which is less likely to place themselves out of the social group. Furthermore, although consumers primed with interdependent self-construal showed higher purchase intentions for the brand with a neutral slogan, there was no difference in their self-brand relationship with this brand and the brand with a self-expressive slogan. This dissociation indicates that, unlike for independent consumers, the purchase intention of interdependent consumers is not at all driven by self-brand connection.

General Discussion

Whereas independent self-construal has been convincingly demonstrated to entail a preference for distant interpersonal relationships (Gardner et al. 2002; Holland et al. 2004), we argue and show that the opposite holds for self-brand connections.

Three studies corroborate that, unlike their inclination to keep a personal distance, consumers with independent self-construal tend to maintain closer relationships with brands facilitating in expressing the internal self than consumers with interdependent self-construal. This reversed effect is rendered by brands' ability to symbolize a consumer's unique identity, and by the need to express this inherent self associated with independent self-construal. Study 1 demonstrates that, compared with chronically interdependent consumers, chronically independent consumers are more likely to integrate their favorite brands into the self-concepts and hence maintain closer relationships with them. This pattern remains if self-construal is temporarily primed, as in study 2. However, the difference in brand closeness only appears in publicly consumed categories (sneakers or bags) that can better project the self to the outside world than the privately consumed one (yogurt). Consistent with this, study 2 reveals that the influence of independent (vs. interdependent) self-construal on the close self-brand connections is fully mediated by participants' need to express the self. Study 3 further substantiates the effect of self-expression in this relationship, showing that for hypothetical brands, consumers primed with independent self–construal only feel closer to brands with a self-expressive (as opposed to a neutral) slogan. For those self-expressive brands, they also exhibit higher purchase intentions than participants primed with interdependent self-construal.

Bridging the self-construal and self-brand relationship literature, this paper demonstrates that simply transferring theories established in interpersonal contexts to

person-object (in casu: person-brand) settings, could entail misleading results. In the interpersonal context, others are an integral part of the self-concept of interdependent selves, who perceive interpersonal contacts as close and desirable. This is in contrast with independent selves who, driven by their goal to establish unique and autonomous selves, strive to separate from others. However, brands are not 'others' in social interactions. Rather, interdependent selves whose self-definitions are shaped in relation to other people are not likely to perceive brands as part of the self, whereas independent selves are more likely to use brand-relationships to express their identity, and incorporate brands into their self-definitions. Hence, the different goals of the two construals (fit in or stand out) and the different roles of brands and persons ('others') in accomplishing these goals determine the differences in self-other and self-brand closeness.

The disclosure of individual differences in self-brand connections also contributes to the self-brand relationship literature. Since Belk (1988) highlighted the notion that possessions are extended-selves and that consumers may form relationship with what they own, much research has been devoted to the type of relationships that people form with brands (Aaker 1997; Aggarwal 2004), but very little attention has been paid to consumer characteristics in this relationship. In one of the few exceptions, Chaplin and John (2005) found that both the number and depth of self-brand connections increase with age. Others have deemed self-construal rather as a moderator in the relationship between brand associations and self-brand connection

(Escalas & Bettman 2005; Swaminathan et al. 2007), and reported diverse findings. However, no research has ever examined why self-construal could influence self-brand connections and, hence, reconciled the discrepancy in these studies. Focusing on (chronically predominant or situationally primed) self-construal and the tendency to express the self, the current study emphasizes that consumers differ in their inclination to incorporate brands into their self-concepts. We find this individual difference to be rooted in consumers' different attitudes towards self-expression, which further suggests that not all consumers deem brands as a means to express the selves. More importantly, as shown in study 3, an explicit self-expressive image may even lower the brand purchase intention of certain consumers. Specifically, though interdependent consumers do not display more distant relationships with self-expressive brands than with the non self-expressive ones, they are less likely to purchase the former. This finding should caution managers especially in the new product introduction stage: in the absence of a clear brand image, an explicit self-expressive ad could scare (interdependent) consumers away even before trying the product.

Clearly, our study exhibits a number of limitations that call for further study. Despite its potential contribution to the self-expression studies, this paper solely focused on the self-expressive image of a brand and did not examine how self-construal influences consumers' relationship with brands containing different specific personalities and associations. As Aaker et al. (2004) showed that brands' personalities affect the nature of the self-brand relationship, it is possible that brands'

personalities and associations could also influence the self-brand closeness. For instance, Escalas and Bettman (2005) revealed that, as out-group focus triggers independent consumers' differentiation motives, they feel more distant to brands containing associations consistent with an out-group than interdependent consumers. On the one hand, their findings are consistent with our results in that, to assert their self-definitions, independent consumers in the current study establish close relationships with self-expressive brands that allow conveying their inherent and unique self-concepts, whereas those in Escalas and Bettman's (2005) study keep a distance with brands that may project undesirable self-images. On the other hand, Escalas and Bettman's (2005) study stresses the importance of specific brand associations, which may inspire independent selves to keep a distance from brands incongruent with their self-concepts. Notwithstanding, we argue that interdependent consumers are less likely to incorporate brands into their self-concept based on the self-expression function of brands, because their primary goal is to maintain harmony with other social actors who may not appreciate self-expression. The results from studies 1 and 2 further support this view. In these studies, we asked participants to rate the self-brand connections with their favorite brands in publicly consumed categories and found that interdependent consumers reported a more distant relationship with their favorite brands than independent consumers. This indicates that interdependent consumers not easily form connections with brands based on self-expressive motives. Furthermore, in Study 2, the measurement of the inclination to express the selves

indicated that interdependent participants are less keen to express the selves than independent ones, irrespective of what to express. Finally, interdependent consumers in Escalas and Bettman's (2005) study did not give higher self-brand connection ratings to brands with self-reported ingroup-consistent brands than independent consumers.

However, we do not intend to exclude the probability that interdependent consumers may build close self-brand connections based on other motives, such as specific brand associations. For instance, they may build strong connections with what Aaker et al. (2004) call 'sincere brands', which are associated with traits such as nurturance, warmth, and family-orientation. Another potential candidate for interdependent consumers to build close connections with could be non self-expressive brands or brands in privately consumed categories. Future research may examine whether interdependent consumers can bind themselves to these sincere-type of brands.

The findings presented in this paper further lead to several follow-up questions. First of all, it is interesting to examine how stable the closer self-brand connections for independent consumers are over time. Kim and Drolet (2003) found that individuals from individualistic countries value variety-seeking more than individuals from collectivistic countries. Also, our findings are mainly found for self-expressive brands. Aaker et al. (2004) argued that 'exciting' brands have a more self-expressive character, and entail shorter-lived relationships than, for instance, 'sincere' brands

(although exciting brands are more easily re-connected to after a relationship transgression compared to sincere brands). Therefore, it could be that independent consumers have a very strong and engaged close relationship with the self-expressive brand, but that over time relationships with other self-expressive brands become stronger due to a need for variety-seeking or new hypes in the market. Second, except for the self-expressive functions of brands, other brand characteristics may influence the self-brand connections. For instance, our study reveals that, irrespective of self-construal, consumers maintain closer relationships with sneakers than with yogurt. Similarly, female consumers are more inclined to incorporate bags into the self-concepts than sneakers, while the opposite pattern holds for males. These findings seem to propose that category characteristics, such as product complexity and price, and category-consumer characteristics, such as involvement, may influence the degree of self-brand connections. Future studies could examine why and how these factors impact consumers' relationship with brands, thereby shedding light on the role of brands in composing consumers' self-concepts. Finally, this paper examined brands, which constitute only one type of object. An interesting question is whether the self-brand closeness rendered by different self-construals can be generalized to closeness to other objects listed by Belk (1988) as potential extended selves, such as pets, collections, and money.

4. HAVE YOU SEEN THE NEWS TODAY? MORTALITY SALIENCE EFFECTS ON PREFERENCES FOR FOREIGN AND DOMESTIC BRANDS

Introduction

The media context in which ads are embedded, such as the surrounding stimuli (e.g., the television program you watched right before exposure to an ad, adjacent articles in a newspaper, etc.), plays an important role in the effectiveness of the ad (Murry, Lastovicka, and Singh 1992). Previous research showed that the psychological responses (e.g., cognitive and affective responses) elicited by media contexts often continue to be experienced while being exposed to subsequent advertisements, and influence consumers' processing of these ads (Goldberg and Gorn 1987; Lord and Burnkrant 1993; Tavassoli, Shultz, and Fitzsimons 1995). However, media contexts may also simply prime specific mental constructs, which, consequently, can affect consumers' reactions towards the subsequent advertised brands. Current media coverage is rife of images of death such as accidents involving the loss of life, assassinations, natural disasters, and terror attacks (Boomgaarden and de Vreese 2007). For instance, in 2005, death-related news covered 40.8% of US newscast (State of the News Media 2006). In this respect, the increasing number of such death-related news

reports may function as mortality salience (MS) primes that make death-related thoughts nonconsciously accessible (Pyszczynski, Solomon and Greenberg 2003). According to the MS literature, individuals try to defend themselves against the fear of death by bolstering their own cultural worldview (Greenberg et al. 1990). Potential consequences of this coping process are creating positive beliefs about in-group people (who uphold one's worldview) but also negative beliefs about out-group people (who threaten one's worldview) (Arndt et al. 2004; Greenberg et al. 1990). Hence, when the media context makes death-related thoughts accessible, one may show a more favorable attitude towards in-group consumption objects, such as domestic brands, and a more negative attitude towards out-group consumption objects, such as foreign brands. At this point, no research has examined to what extent a death-eliciting media context can impact the ratings of brands, its underlying mechanism, the conditions under which it occurs, and how marketers can deal with such unintended effects on their brands.

This paper provides several novel findings revealing the underlying process by which media context induced MS influences consumers' brand liking and purchase intention. First, across four studies, we consistently find that evaluations of brands are susceptible to death-induced anxiety primed by the media context, and shed light on the underlying mechanism of this effect, showing that shifts in liking for domestic and foreign brands are mediated by consumers' patriotic feelings (Studies 1 and 2) and are stronger for consumers high on patriotism (Study 3). Second, we argue that when

serving as a prime tool (for death), the media context effect does not diminish with the increased temporal distance between the media report and the exposure to brand names (Coulter and Punj 1999). Instead, the context effect only appears after a time interval (Study 2), mainly because the MS effects occur stronger when the death-related thoughts are outside of conscious awareness. Moreover, the new reports about death-related events influence viewers' brand evaluation without shifting their affect levels. Finally, we examine the moderating role of pro-domestic ad appeals on brand perceptions, and whether the use of these appeals can inhibit or even override the negative effects of a death-eliciting media context on foreign brands (Study 4).

Media Context

The media context in which advertisements are placed may have spillover effects on the brands appearing in these ads. For instance, consumers may have different attitudes towards advertised brands after being exposed to television programs that are either positively (e.g., a happy television show) or negatively valenced (e.g., a sad movie). Research showed that the psychological responses elicited by media context programs (e.g., affect, attitude towards the context program, involvement with the context program) continue to be experienced during exposure to subsequent advertisements, and influence consumers' information processing, attitude, and memory concerning the advertised brands (Goldberg & Gorn 1987; Murry et al.

1992; Pieters & Bijmolt 1997; Tavassoli et al. 1995; Yi 1990). This suggests that media programs that do not elicit strong program likings or program-induced feelings do not have spillover effects on subsequently advertised brands.

However, media contexts may serve as an environmental cue that primes a certain mental construct and consequently influences consumers' evaluations of the advertised brand, often without consumers' awareness or without shifting their mood. There is little doubt that consumers' perceptions and behaviors can be shaped by incidental exposure to environmental cues without conscious awareness of such influence (Bargh 2002; Dijksterhuis et al. 2005; Mandel and Johnson 2002; Wheeler and Berger 2007). Further, much research converged on the view that the content of television programs can prime certain mental constructs. For instance, media violence has been found to increase the accessibility of the concept of aggression (Bushman 1995). Also, Pyszczynski et al. (2003) proposed that reports of events such as terror attacks and natural disasters could nonconsciously prime the concept of death.

The priming effects of media context on perceptions and attitudes towards advertised brands have been largely neglected. In one of the few studies, Yi (1990; see also 1993) found that contextual factors, such as print ads, can activate specific product attributes and subsequently increase the likelihood that consumers interpret an ambiguously described product in terms of the primed attribute. In Yi's research, the primed construct was always a product attribute *directly related* to the advertised brand. In our research, we do not focus on the priming effects of relevant product

attributes but examine whether and how more abstract mental constructs *unrelated* to the product (i.e., the concept of death), activated by the media context, affect consumers' brand perceptions and the marketing implication of this effect. Furthermore, we demonstrate that the influence of media context on brand evaluations can take place without altering viewers' mood.

<p style="text-align:center">Mortality Salience and Effects on Brands</p>

Researchers recently started to examine the impact of MS on consumption behaviors. In one of these studies, Ferraro, Shiv, and Bettman (2005) investigated how the salience of one's mortality affected choices between a fruit salad and a chocolate cake via a process of self-esteem striving. When MS was increased, consumers for whom their body was an important source of self-esteem preferred the fruit salad whereas consumers for whom their body was not an important source for self-esteem preferred the chocolate cake (see also Arndt et al. 2004; Fransen et al. in press; Maheswaran and Agrawal 2004; Mandel and Heine 1999; Mandel and Smeesters in press).

The reason that MS can affect consumption behavior is that individuals need to engage in specific behaviors to cope with the anxiety and fear associated with death. Terror Management Theory (Greenberg, Pyszczynski, and Solomon 1986) suggests that when individuals are reminded of their inevitable deaths, they are motivated to

attenuate these existential concerns by maintaining and defending faith in their cultural worldview (Greenberg et al. 1990) or bolstering their self-esteem (Greenberg et al. 1992). According to the culture worldview defense theory, reminding individuals of their mortality leads to more negative reactions to those who threaten their cultural values and more positive reactions to those who uphold them (Rosenblatt et al. 1989). This in-group bias has also been found with respect to attitudes and behavior towards various targets. For instance, Jonas et al. (2002) found that American college students donated more money to American charities but not to foreign ones when MS was induced (see also Nelson et al. 1997). Moreover, there is evidence that individuals prefer domestic items (e.g., car and food brands, currency) over foreign ones under mortality salience conditions (Fransen et al. in press; Jonas et al. 2005). Then, it seems plausible to expect that, compared with a neutral media context, a death-eliciting media context increases the liking of domestic brands but decreases the liking of foreign brands. However, it is far from conclusive what drives this shift of preference, what are the boundary conditions in a media context setting, and if there are ways to counter the negative impact on foreign brands.

Patriotic sentiment may play an essential role in bridging the impact of MS on consumers' perceptions of domestic and foreign brands (Bilkey and Nes 1982). Patriotism refers to one's individual attachment and loyalty to one's nation and country (Kosterman and Feshbach 1989). Consumer patriotism is a crucial factor in determining attitudes towards and purchase intensions of domestic versus foreign

brands. Patriotic biases can be strong such that domestic brands are preferred over foreign brands, even when the domestic brand is inferior in quality (Gürhan-Canli and Maheswaran 2000a). Similarly, other studies found that superior foreign brands are not preferred over inferior domestic brands when there is some animosity towards the country of the foreign brand, which leads to increased patriotism (Klein, Ettenson, and Morris 1998). Because patriotism is a central component of cultural worldview defense, MS may increase individual's patriotic concerns, and hence influence their brand perceptions (Arndt, Cook, and Routledge 2004). Hence, we propose that consumers' patriotism mediates the effect of media-induced MS on the liking of domestic and foreign brands. In particular, we expect that, when death becomes accessible, consumers express a more favorable attitude towards domestic brands and a less favorable attitude towards foreign brands compared to a control condition (i.e., a condition that elicits the same level of negative effect as the MS condition, but does not activate the concept of death), due to enhanced patriotism. Hypotheses 1a and 1b are tested in Studies 1 and 2.

H1a: A death-eliciting media context leads to increased liking for domestic brands and decreased liking for foreign brands compared to a control media context.

H1b: The effects of a death-eliciting media context on brand likings are mediated by consumers' patriotism.

Hitherto, most media context studies reported that context effects reduce with increased temporal distance between the end of media programs and the evaluation of the brand or product. This is because the salience of the psychological responses, elicited by the media program, diminishes with increasing temporal distance (Lord and Burnkrant 1993; Murry et. al 1992). However, we expect that when media contexts activate death-related thoughts, these context effects will have stronger effects on consumers' liking of the advertised brands in case of a temporal distance compared to when there is no temporal distance. Research has demonstrated that individuals cope with existence anxiety with two distinct defense strategies, called, proximal defenses and distal defenses (Greenberg et al. 1994). When death-related thoughts are consciously accessible (e.g., immediately after watching a mortality-eliciting news report), individuals often engage in a rational proximal defense by distracting their attention from the vulnerability of their existence or pushing the problem into the distant future. However, when death-related thoughts are nonconsciously accessible (e.g., due to a distracting non-death related video after a death-eliciting news report), the distal defense that typically involves worldview validation takes place (Greenberg et al. 1990). Therefore, immediately after exposure to media programs that activate death-related thoughts, patriotism should not be increased and, hence, not influence consumers' liking of domestic and foreign brands, whereas a death-eliciting media context will only affect brand evaluations when there is a temporal delay between the

media context and the moment of the brand evaluation. Hypotheses 2a and 2b are tested in Study 2.

H2a: Consumers like domestic brands more and foreign brands less in a death-eliciting media context compared to a control media context. However, the effect should only appear with a temporal delay between the media context and the brand evaluation but not when there is no delay.

H2b: Patriotism mediates the effect of the death-eliciting media context on the (dis)liking of domestic and foreign brands only when there is a temporal delay between the media context and the brand evaluation but not when there is no delay.

We present four studies to reveal the essential role of patriotism in bridging the MS effects on the rating of domestic versus foreign brands, and the delayed media context effects. Before we test the effects in a media context condition, Study 1 adopts a standard MS manipulation (writing about one's own death) to establish the effect of death-accessibility on preferences for domestic versus foreign beer brands, meals, and sports. We also examine the mediating role of patriotism. Study 2 then replicates the findings from Study 1 in a media context condition, using a news report about a terror attack to activate death-related thoughts. We also test this effect when there is no temporal delay between the context program and the brand evaluations, thereby showing that the media context effect of death-related programs only influences

consumers' brand evaluations when death-related thoughts are outside focal consciousness. .

To increase the generalizability of our findings, Study 3 uses a different death-eliciting media context (i.e., a news report about a car accident). A more important purpose of this study, however, is to verify that the effects of media induced MS on brand perceptions merely occur among highly patriotic consumers but not among low patriotic consumers. As such, Study 3 further corroborates the importance of patriotism in establishing MS effects on brand evaluations.

In Study 4, we examine the effects of a death-eliciting media context on the evaluation of a brand placed in an advertisement. More importantly, we explore to what extent ad appeals can moderate the MS effects on domestic and foreign brands. Specifically, using a pro-domestic ad appeal, we find that, whereas a death-eliciting media context leads to decreased liking of a foreign brand using a neutral ad appeal, the same media context leads to increased liking of a foreign brand using a pro-domestic ad appeal.

Finally, across all studies, we control for participants' (positive and negative) affect to affirm that the media context effects reported in this study are induced by the accessibility of an abstract mental construct (death) rather than changes in participants' affect states.

Study 1

The purpose of this study was to examine the effects of MS on evaluations of domestic and foreign brands, and the underlying role of patriotism. Instead of first examining these effects in a death-eliciting media context, we adopted a standard and simple MS manipulation, writing about one's own death, in this first study. The main aim is to assure that if shifts occur in brand evaluations, these shifts are solely rendered by death accessibility, rather than any alternative factors that may be primed by more complicated media programs.

In addition to evaluations of (beer) brands, we also included evaluations of typical domestic and foreign sports and meals. We expected MS to increase the liking of domestic brands, sports, and meals, but decrease the liking of their foreign counterpart, compared to a control condition (H1a). Moreover, we expected that these MS effects on the (dis)liking of domestic versus foreign items will be mediated by shifts in patriotic feelings (H1b).

Method

One hundred and four university undergraduates from a Dutch University were paid €5 each to participate in this study. Four participants did not complete the

experiment and were therefore left out of the analyses. As a result, 100 participants were left for analysis.

Participants arrived at the laboratory and were randomly assigned to either the MS or the control condition. They were told that the study concerned pretesting a couple of stimuli for another study. Also, some personality measures were included. In the MS condition, participants had to answer the following questions: (1) Please briefly describe the emotions that the thought of your own death arouses in you; and (2) Jot down, as specifically as you can, what you think will happen to you as you physically die and once you are physically dead. Participants in the control condition answered the following questions: (1) Please briefly describe the emotions that the thought of visiting the dentist arouses in you; and (2) Jot down, as specifically as you can, what you think will happen to you the next time you have a painful procedure done at the dentist's office (Rosenblatt et al. 1989). Participants then filled out the PANAS (Positive and Negative Affect Scale, Watson, Clark, and Tellegen 1988) and some filler questions, which also serve to remove death-thoughts outside consciousness. Previous research has documented evidence that implementing a mood measure between the manipulation of MS and the dependent variables can be sufficient for this purpose (Greenberg et al. 1992; Ferraro et al. 2005). Next, participants were asked to assess a patriotism scale containing several statements, such as "I love my country" or "It is not important for me to serve my own country" (reverse coded item), on a 1 to 5 scale with 1 representing "strongly disagree" and 5 representing "strongly agree".

Finally, participants had to perform an evaluation task of a list of domestic and foreign beer brands, sports, and meals. Each of these items had to be rated on a 1 to 5 liking scale, with 1 representing "dislike very much" and 5 representing "like very much". The order of the patriotism scale and the items (brands, sports, and meals) were counterbalanced. Half of the participants first filled out the patriotism scale, whereas the other half first performed the liking ratings of the items. This order variable did not have any effect on the results (Fs < 1), and therefore filling out the patriotism scale cannot be a reason for enhanced patriotism. We do not report on this order variable anymore. We selected four beer brands, of which two domestic Dutch beers (Heineken and Amstel) and two foreign beers (Corona and Budweiser). We selected six sports from a pretest, of which three typical Dutch sports (ice skating, hockey, korfball) and three nontypical Dutch sports (baseball, ice hockey, and American football). Finally, we also selected two typical Dutch meals (stew and pea soup) and two nontypical Dutch meals (chili con carne and nasi goring). Participants not familiar with, and unable to judge, a specific item did not indicate their liking of that item. Less than 1% of the total liking ratings was not filled out. In none of our studies, gender had any effects on the results.

Results

Item ratings. We first collapsed all domestic items and all foreign items separately for the beer brands, sports, and meals. We collapsed the ratings of (a) the

domestic beer brands ($\alpha = 0.70$) and the foreign beer brands ($\alpha = 0.77$), (b) the typical Dutch sports ($\alpha = 0.73$) and the nontypical Dutch sports ($\alpha = 0.75$), and (c) the typical Dutch meals ($\alpha = 0.72$) and the nontypical Dutch meals ($\alpha = 0.77$). These ratings were then subjected to a 2 (MS: death vs. control) × 3 (item: beer brand vs. sports vs. meal) × 2 (origin of item: domestic vs. foreign) ANOVA with MS as a between-participants factor, and item and origin of item as within-participants factors. This analysis revealed a main effect of item (F (2, 196) = 24.10, p < .001). Participants gave in general higher ratings to beer brands ($M = 3.01$) and meals ($M = 3.25$) than to sports ($M = 2.62$) (Tukey HSD). More importantly, the analysis revealed an interaction between MS and origin of item, (F (1, 98) = 34.60, p < .001). Planned comparisons indicated that participants gave higher ratings to a domestic item in the MS condition ($M = 3.28$) compared to the control condition ($M = 2.67$), (F (1, 98) = 21.63, p < .001). Further, participants gave lower ratings to a foreign item in the MS condition ($M = 2.58$) compared to the control condition ($M = 3.30$), (F (1, 98) = 24.67, p < .001. These results are consistent with H1a. Figure 4.1 illustrates this interaction.

Patriotism. A one-way ANOVA with MS as a between-participants factor was conducted on consumers' patriotism ($\alpha = 0.78$). Participants in the MS condition (M = 3.50) felt more patriotic compared to participants in the control condition (M = 3.10), F (1, 98) = 10.41, p < .01).

Figure 4.1: Items ratings as a function of mortality salience and origin of item
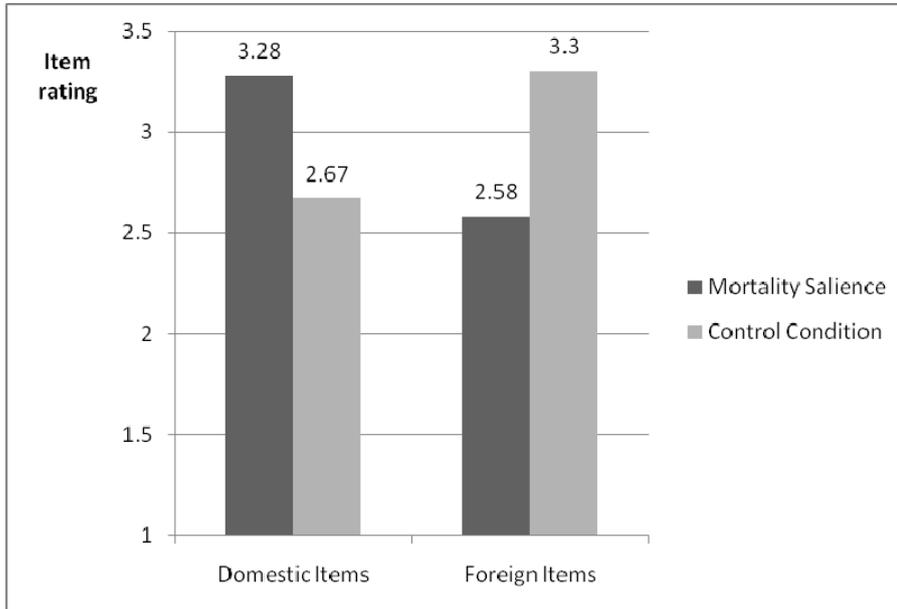
Mediation analyses. To test H1b, we tested whether the MS effects on the liking ratings for the domestic and foreign items were mediated by patriotism. The ANOVA on the item ratings revealed consistent MS effects for beer brands, sports, and meals. Therefore, we averaged all domestic ($\alpha = 0.73$) and foreign items ($\alpha = 0.75$). Following Baron and Kenny's (1986) mediation approach, we ran separate regressions for the domestic items and the foreign items.

For the domestic items, two separate regressions showed an effect of MS on the liking of the domestic items ($\beta = 0.28$, $t\,(98) = 2.91$, $p < .01$) and patriotism ($\beta = 0.31$, $t\,(98) = 3.23$, $p < .01$). When both MS and patriotism were entered in the same regression, patriotism exerted a significant effect on the liking of the domestic items ($\beta = 0.51$, t (97) = 5.83, $p < .001$), but the effect of MS became non-significant ($\beta = 0.12$,

t (97) = 1.39, p > .16). A Sobel test confirmed that patriotism mediated the effect of MS on the liking of the domestic items (z = 2.79, p < .01).

For the foreign items, it appeared that MS had a significant effect on the liking of the foreign items (β = -0.30, t (98) = -3.06, p < .01) and patriotism (β = 0.31, t (98) = 3.22, p < .01). When entering MS and patriotism in the same regression, patriotism affected the liking of the foreign items (β = -0.50, t (97) = -5.63, p < .001), whereas the MS effect became non-significant (β = -0.14, t (97) = -1.59, p > .11). Sobel's test confirmed the mediation (z = -2.77, p < .01).

PANAS. The PANAS administered after the MS manipulation revealed no effects of MS on affect, compared to the control condition.

Discussion

The results confirm that MS affects the (dis)liking of domestic and foreign brands, sports, and meals. More specifically, when MS is induced consumers increase their liking of domestic items and decrease their liking of foreign items, compared to a control condition, which is in line with Hypothesis 1a. These effects are also mediated by consumers' patriotic feelings, supporting Hypothesis 1b. Hence, consumers feel more patriotic when MS is induced, which determines their liking of domestic and foreign items. Further, consistent with prior research, self-reported affect was not influenced by MS and did not mediate the MS effects.

Inspection of the cell means revealed some interesting issues. The two-way interaction between MS and the origin of the items revealed that foreign items were liked more than domestic items in the control condition, but only for sports and meals. It is not rare that foreign items are preferred over domestic ones (cf., Gürhan-Canli and Maheswaran 2000a). Interestingly, MS completely reversed consumers' preferences. Whereas control participants preferred foreign sports/meals over domestic ones, MS participants preferred domestic sports/meals over foreign ones. Domestic and foreign beer brands did not differ significantly from each other in the control condition (Tukey HSD, $p > .15$), but likings shifted in the MS condition. Hence, MS had similar effects on item likings both when foreign items were preferred over domestic items and when foreign and domestic items were liked equally in the control conditions. This again testifies the powerful impact of death-related thoughts on consumers' preferences.

Study 2

Study 2 aimed to replicate the findings of Study 1 in a media context setting. Therefore, participants were either exposed to a news report about a terror attack, used as a MS induction, or to a control news report. The second purpose of Study 2 is to test Hypotheses 2a and 2b, which outline that the effect of a death-eliciting media context on patriotic feelings and the liking ratings of brands should only appear when

there is a delay between the context programs and the brand evaluations but not when there is no delay. This is opposite to the media context literature proposing that the effect of the media context is strongest immediately after the media context (Lord and Burnkrant 1993; Murry et. al 1992).

In Study 1, the significant effect of MS on (domestic and foreign) item evaluations was found with a temporal delay, but we did not examine if this effect could still appear when there was no delay. Hence, in Study 2, we included an immediate condition, in which participants in both the death-eliciting media context and control conditions immediately completed the dependent measures after watching the news report. In contrast, in the delay condition, participants in both the death-eliciting media context and control conditions received, after watching the news report, a distracting video about a soccer game before completing the dependent measures.

Participants were requested to indicate their liking of beer brands, as in Study 1. In addition, we also included fashion store brands and television brands to generalize the effects beyond fast moving consumer good to more high-involvement product categories.

Method

Ninety-four undergraduates from a Dutch university were paid €5 to participate in this study. They were randomly assigned to a 2 (media context: death vs. control) × 2 (time: delay vs. immediate) between-participants design. Eight

participants were removed from the analyses because they did not complete the study. Therefore, 86 participants were left for the analyses.

Media context manipulation. First of all, participants were shown a media news report on their computer screen. In the death-eliciting media context, participants were shown a video clip of a news report of the 9/11 terror attack. In the control condition, participants were shown a news report about a new dental technique that could be used to fill cavities. The news reports in both conditions had approximately the same length (90 seconds). Participants were instructed to watch the video, because they would receive some questions about the video later on.

Delay manipulation. After watching the news reports, participants in the delay condition were shown another video, a short summary of a soccer game, allowing time for death-related thoughts to be removed from focal consciousness (Greenberg et al. 1994). We intentionally selected a game between an Italian soccer club and a French soccer club to exclude any potential trigger for patriotism among Dutch participants (that could potentially originate from a game with Dutch soccer teams) in this filler task. A pretest also showed that this video did not increase individuals' level of patriotism compared to condition in which individuals were not exposed to any video. Next, after the distracting video, participants received the dependent measures. Participants in the immediate condition immediately went to the dependent measures.

Dependent measures. Participants filled out the same patriotism scale as in Study 1. Then, they had to rate their liking for several brands on a 1 to 5 liking scale,

with 1 representing "dislike very much" and 5 representing "like very much". In addition to the same foreign and domestic beer brands as in Study 1, we also included three fashion store brands, composed of a domestic Dutch brand (Mexx) and two foreign brands (H&M and Zara), and three television brands, composed of a domestic Dutch brand (Philips) and two foreign brands (Samsung and Sony). At the end, participants completed the PANAS and answered a couple of questions about the videos.

Results

Brand ratings. As in Study 1, we first collapsed all domestic and foreign brands separately for beer, fashion store, and television. In particular, we collapsed the ratings of the domestic beer brands ($\alpha = 0.80$) and those of the foreign beer brands ($\alpha = 0.76$). There was only one domestic fashion store brand and one domestic television brand. Hence, we only collapsed the foreign fashion store brands ($\alpha = 0.78$) and the foreign television brands ($\alpha = 0.76$). These ratings were subjected to a 2 (media context: death vs. control) × 2 (time: delay vs. immediate) × 3 (product category: beer vs. fashion store vs. television) × 2 (origin of brand: domestic vs. foreign) ANOVA with media context and time as between-participants factors, and product category and origin of brand as within-participants factors. This analysis revealed two significant main effects. The main effect of product category ($F (2, 164) = 64.58, p < .001$) shows that participants gave higher ratings to television brands ($M = 3.75$) than to beer

brands (M = 2.91) and fashion store brands (M = 3.02). The main effect of origin of brand (F (1, 82) = 6.04, p < .05) showed that domestic brands (M = 3.37) received higher liking ratings than foreign brands (M = 3.08).

However, these main effects were qualified by a significant three-way interaction between media context, time, and origin of brand (F (1, 82) = 14.79, p < .001), which is depicted in Figure 4.2. Planned comparisons showed that, in the delay condition, domestic brands were liked more in a death-eliciting media context (M = 3.92) compared to a control media context (M = 3.00), (F (1, 82) = 19.65, p < .001), and foreign brands were liked less in a death-eliciting media context (M = 2.48) compared to a control media context (M = 3.32), (F (1, 82) = 16.12, p < .001). A death-eliciting versus control media context did not affect the liking of domestic and foreign brands in the immediate condition (Fs < 1 and ps > .80). These results support H2a.

Patriotism. We collapsed all items of the patriotism scale in a composite index of patriotism (α = 0.80), on which we conducted a 2 (media context: death vs. control) × 2 (time: delay vs. immediate) between-participants ANOVA. The analysis revealed a significant interaction effect between media context and time (F (1, 82) = 5.49, p < .03). Planned comparisons showed that media context produced a significant effect in the delay condition (F (1, 82) = 7.84, p < .01). Participants felt more patriotic after being exposed to a death-eliciting media context (M = 3.61) than after being exposed

to a control media context ($M = 3.24$). Media context did not produce a significant effect in the immediate condition ($Ms = 3.38$ and 3.32), ($F < 1, p > .62$).

Figure 4.2: Brand liking as a function of media context, origin of brand, and time
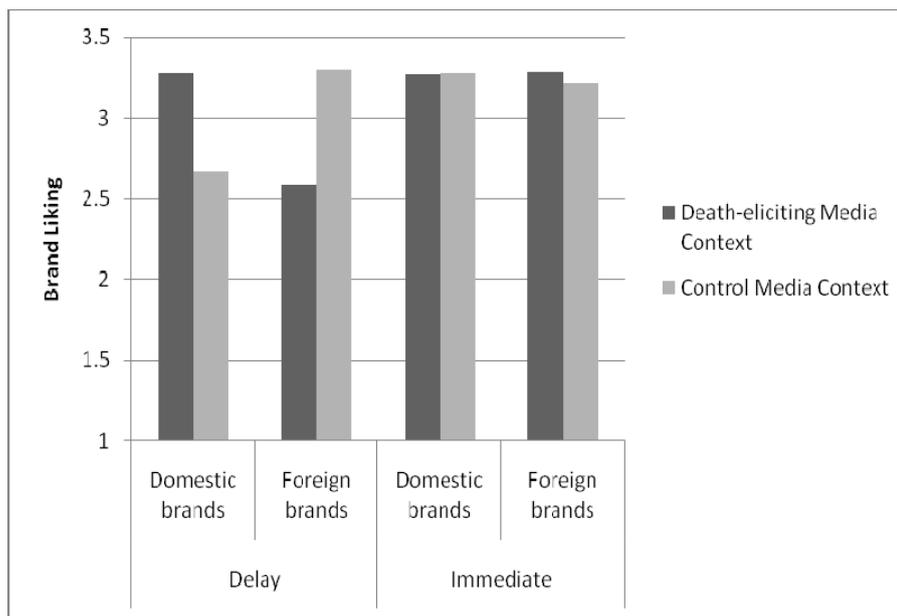
Mediation analyses. Our theoretical framework proposed a case of moderated mediation (Muller, Judd, and Yzerbyt 2005; Model 5, see Preacher, Rucker, and Hayes 2007), where time moderates the effect of MS on the mediator, patriotism, which in turn influences the liking of our brands. We ran a mediated moderation analysis for domestic brands and one for foreign brands.

We tested mediated moderation on the domestic brands with three equations (Muller et al. 2005). The first equation examines the effects of MS, time, and the MS × time interaction on the dependent variable (liking of domestic brands). This model

confirmed the earlier reported interaction between MS and time on the liking of domestic brands ($\beta = 0.45$, $t(82) = 2.65$, $p = .01$). The second equation examined the effects of MS, time, and the MS × time interaction on the mediator (patriotism), and confirmed the MS × time interaction on the mediator ($\beta = 0.42$, $t(82) = 2.34$, $p < .05$). The third equation added the mediator (patriotism), and the interaction between time and the mediator, to the first equation. This equation showed that the MS × time interaction was no longer significant, ($\beta = 0.16$, $t(82) = 0.97$, $p > .33$). Further, the equation revealed a marginally significant effect of patriotism on the liking of domestic brands ($\beta = 0.20$, $t(80) = 1.71$, $p = .09$), and a significant effect of the interaction between time and patriotism on the liking of domestic brands ($\beta = 2.29$, $t(80) = 3.17$, $p < .01$). These results indicate that the effect of MS on patriotism is moderated by time, and that the patriotism on the rating of domestic brands is also moderated by time. To further interpret these findings, we examined the conditional indirect effects at the levels of time: immediate and delay. These effects indicated that patriotism mediates the effect of MS on the liking of domestic brands in the delay ($z = 2.42$, $p = .05$), but not in the immediate condition ($z = -0.42$, $p > .67$).

The same mediated moderation model was examined in case of foreign brands. The first equation revealed an interaction between MS and time on the liking of foreign brands ($\beta = -0.50$, $t(82) = -2.93$, $p < .01$). The second showed the MS × time interaction on patriotism ($\beta = 0.42$, $t(82) = 2.34$, $p < .05$). The third equation indicated that the MS × time interaction was no longer significant, ($\beta = -0.13$, $t(80) = -0.90$, $p >$

.37). Further, the equation revealed a significant effect of the interaction between time and patriotism on the liking of foreign brands, $\beta = -3.91$, $t(80) = -5.66$, $p < .001$. These results, again, indicate that the effect of MS on patriotism is moderated by time, and that the effect of patriotism on the rating of foreign brands is also moderated by time. We examined the conditional indirect effects at the levels of time: immediate and delay. These effects indicated that patriotism mediates the effect of MS on the liking of foreign brands in the delay ($z = -2.59$, $p = .01$), but not in the immediate condition ($z = 0.15$, $p > .88$). These mediation analyses support H2b.

PANAS. An analysis, in both the delayed and immediate conditions, did not reveal any significant difference with respect to positive and negative affect between the death-eliciting media context and the control media context, as in the rest of the studies reported in this paper (all Fs < 1). Hence, it is clear that affect cannot account for any differences between the death-eliciting media context and control conditions.

Discussion

The findings of Study 2 replicated and extended those of Study 1. We demonstrated that a media news report, about a terror attack, increases the liking for domestic brands and decreases the liking for foreign brands compared to a control news report. The effects, however, only occurred when there is a delay between the media news report and the brand evaluations. In addition, these effects were mediated by patriotism.

Study 2 revealed two striking media context effects. First, instead of diminishing over a short period, the death-eliciting media context effect on brand evaluations only appears after a temporal delay and distraction. Second, we showed that this effect cannot be explained by differences in affect between the death-eliciting and control media conditions. This is because the priming effects of MS enhance patriotism and consequently alter brand evaluations in a rather nonconscious manner.

Study 3

The first two experiments corroborated the essential role of patriotism in mediating the effects of MS on brand perceptions. As a chronic trait, however, the level of patriotism varies across consumers. For those with chronically low patriotism, their cultural worldviews do not necessarily comprise much patriotic sentiment. Therefore, as MS activates one's culture worldview defense, this activation may occur to a weaker extent among those consumers with a low level of patriotism. Indeed, Greenberg et al. (1992) revealed that, upon an MS activation, not everyone exhibits negative reactions to out-groups, contingent on what composes one's culture worldview. In particular, one of their studies found that death accessibility only increased the rejection to dissimilar others among conservatives but not among liberals who highly value tolerance and open-mindedness. Hence, because patriotism plays a crucial role in establishing MS effects on brand evaluations, we hypothesize that an

MS induction will only affect highly patriotic consumers' brand evaluations but not low patriotic consumers' brand evaluations.

The present study also had two other objectives. First of all, we used a different media context manipulation of MS. In Study 2, we used a news report about the 9/11 terror attack to make the concept of death accessible. One could argue that this report is about a very specific and unusual situation, which elicited very extreme reactions in many individuals. This could limit the generalizability of our results. In addition, the 9/11 terror attacks on the United States are not only associated with death, but also entangled with other confounding factors, such as religion, specific country images, etc, which may influence our results as well. Further, the 9/11 terror attack occurred in another country (i.e., the United States) than the country where Studies 1 and 2 were conducted (i.e., the Netherlands). Just the simple fact of referring to another country might lead to stronger patriotic feelings with the own country. For all these reasons, in Study 3, we used a report about a deadly car accident that occurs more frequently in news reports and does not contain such confounding facts as the ones just mentioned. Second, to assure that our obtained media context effects are in fact due to the activation of death-thoughts, we included a cognitive task measuring the accessibility of these thoughts.

Method

Eighty-seven undergraduates from a Dutch university were paid €5 to participate in this study. They were randomly assigned to either a death-eliciting media condition or a control condition. Two participants were removed from the analyses because they did not complete the study. Therefore, 85 participants were left for the analyses.

Patriotism measure. Participants filled out the same patriotism scale as in the first two studies. However, this time they completed it before the MS manipulation, because we wanted to examine the moderating influence of the chronic patriotism level. We conducted a median split on the patriotism scale (*median* = 3.45), and used it to run an ANOVA. The results of the ANOVA were highly similar to a regression analysis in which we included patriotism as a continuous variable. Therefore, we will only report the ANOVA findings in the results section of this study.

Media context manipulation. Participants were exposed to either a death-eliciting or a control media manipulation. In the death-eliciting media context, participants were shown a video of a news report of a deadly car accident. In the control media context condition, participants were shown the same news video as in Study 2 (i.e., about a new dental technique). The news reports in both conditions had approximately the same length (90 seconds). Participants were instructed to watch the video, because they would receive some questions about the video later on.

Dependent measures. To make the effects of our MS manipulation delayed, participants first watched a news report of a soccer game summary. Then, they had to rate their liking (on a 1 to 5 liking scale) of a set of domestic and foreign brands, which were the same as in Study 2.

Finally, participants were presented with a "Word Completion Task" that was ostensibly being tested for future studies but was actually a death thought accessibility measure (cf. Arndt et al. 1997). The measure presented participants with ten word fragments, five of which could be completed with a Dutch neutral or death-related word. For example, the fragment GRA_ could be completed as the death-related word GRAF (grave) or the neutral word GRAS (grass). The other possible death-related words were *dood* (dead), *lijk* (corpse), *moord* (murder), and *sterven* (die). Death-thought accessibility scores were computed by summing the number of death words created by each participant. Higher scores thus indicate greater accessibility of death-thoughts.

At the end, participants filled out the PANAS and a couple of questions about the video.

Results

Death-thought accessibility. A 2 (media context: death vs. control) × 2 (patriotism: high vs. low) between-participants ANOVA was conducted on the death-thought accessibility measure. This analysis only revealed a significant main effect of

media context (F (1, 81) = 6.43, $p < .01$). Participants in the death-eliciting media context condition ($M = 2.06$) filled out more death-related words compared to those in the control condition ($M = 1.38$). Both the main effect of patriotism and the media context × patriotism interaction were not significant (Fs < 1 and ps > .55). This confirms that our media manipulation succeeded in activating death-thoughts for all consumers.

Brand ratings. As in the previous studies, we collapsed all domestic and foreign items in case there were multiple brands: beer brands (αdomestic = 0.74 and αforeign = 0.82), fashion store brands (αforeign = 0.84), and television brands (αforeign = 0.79) respectively. These ratings were subjected to a 2 (media context: death vs. control) × 2 (patriotism: high vs. low) × 3 (product category: beer vs. fashion store vs. television) × 2 (origin of brand: domestic vs. foreign) ANOVA with media context and patriotism as between-participants factors, and product category and origin of brand as within-participants factors.

This analysis disclosed a significant main effect of product category (F (2, 156) = 24.07, $p < .001$). Participants gave higher ratings to television brands ($M = 3.83$) than to fashion store brands ($M = 3.37$) and beer brands ($M = 3.07$). This main effect was however embedded in a significant three-way interaction between media context, patriotism, and origin of brand (F (1, 78) = 15.82, $p < .001$), as depicted in Figure 4.3.

Figure 4.3 Brand liking as a function of media context, origin of brand, and

consumers' patriotism
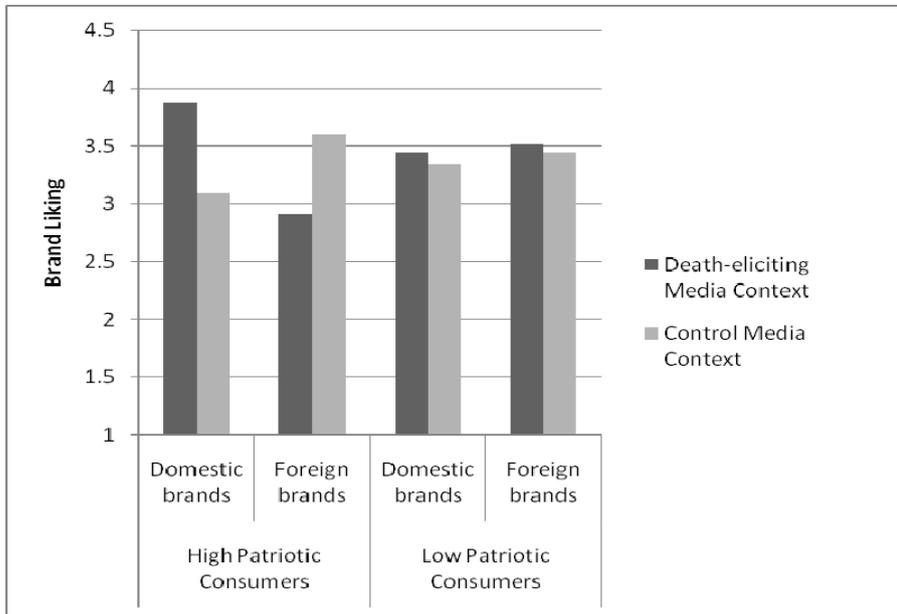
Planned comparisons showed that, for highly patriotic consumers, domestic brands were liked more in a death-eliciting media context (M = 3.87) compared to a control media context (M = 3.09), (F (1, 78) = 15.27, p < .001), and foreign brands were liked less in a death-eliciting media context (M =2.91) compared to a control media context (M = 3.60), (F (1, 78) = 9.17, p < .001). However, for low patriotic consumers, a death-eliciting and a control media context did not differ significantly in affecting the liking of domestic and foreign brands (Fs < 1 and ps > .59).

Discussion

The results corroborated the findings of the previous studies. By using a news report about a fatal car crash, which may occur daily in the news, instead of about a specific terrorism attack, we were able to replicate and generalize the effects of MS on preferences for domestic and foreign brands. This is important because it indicated that any event that increases the accessibility of death in consumers' minds can have these effects on consumers' brand perceptions.

We also demonstrated, in this study, that our reported MS effects on preferences for domestic versus foreign brands mainly occur for consumers who are high on patriotism, but not for consumers who are low on patriotism. This again confirmed the role of patriotism in establishing the MS effects. The first two studies showed that MS increases consumers' patriotic feelings, which can determine their preferences of brands. Therefore, if patriotism becomes important following a MS induction, especially those who are chronically high on patriotism should be more susceptible to such an induction. This is what we found in Study 3.

Further, the data in the control condition revealed some unexpected findings. Specifically, low patriotic consumers gave equal ratings to domestic and foreign brands in the control condition, whereas highly patriotic consumers gave slightly higher ratings to foreign brands than to domestic brands (Tukey HSD, $p < .05$), although not in case of television brands (post-hoc Tukey HSD, $p > .96$). The reasons for this result could be that: (1) country-of-origin information only influences brand

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evaluations when consumers' processing goals are directed to it (see Gürhan-Canli and Maheswaran 2000b); and (2) consumers from an individualistic culture (Netherlands) are not likely to intentionally assess their brand preference based on the country-of-origin information, even if it is salient (see Gürhan-Canli and Maheswaran 2000a). In the control condition, participants were simply asked to evaluate brands without further instruction. Hence, it seems plausible to assume that country-of-origin information was not salient in the brand evaluations. Further, since the behavior of consumers from individualistic cultures is often guided by their personal preferences, even if the country-of-origin information is salient, it is not likely to bias consumers' brand evaluations. Finally, chronic patriotism may not play an active role in steering brand preferences when there is no situational trigger of patriotic feelings. Put differently, without a death-eliciting prime that boosts patriotic concerns, consumers may not translate their chronic patriotism ("I love my own country." etc) to brand evaluations. However, when a situational trigger is present, one is more motivated to engage in worldview validation, and very sensitive to the country-of-origin information that signals group identities. Hence, under this circumstance, those with a chronically high level of patriotism should be more susceptible, as is demonstrated by the results.

Study 4

Previous studies converged on the fact that a death-eliciting media context decreases the liking of foreign brands and increases the liking of domestic brands, compared to a control media context condition. The last study was conducted to examine whether this negative effect for foreign brands could be eliminated or even reversed. This has important marketing implications, certainly if (foreign) companies want to advertise after news programs, frequently reporting about death-related causes (Boomgaarden and de Vreese 2007). One possible way to remove the negative impact of a death-eliciting media context on foreign brand evaluations may be through ad appeals, particularly a pro-domestic ad appeal. In short, study 4 aimed to replicate the MS effect on evaluations of brands placed in an advertisement. More importantly, by manipulating the content of ad appeals, we examined whether a pro-domestic ad appeal could counteract the negative influence of a death-eliciting media context on foreign brand evaluations.

Recently, See and Petty (2006) argued that acceptance or rejection of out-group members is not only influenced by the other's membership identity but also by the belief the other upholds. More specifically, although an out-group individual's identity implies a different worldview, individuals also deem the specific attitudinal position of out-group members as a relevant cue for their evaluation of these members.

Consequently, it may happen that under MS, when out-group members express a pro in-group attitude that validates one's own cultural worldview, people ignore their out-group identity and show a more favorable attitude towards them than when they do not express a pro in-group attitude (See and Petty 2006). In this respect, a brand's country-of-origin may signal a domestic (worldview confirming) or foreign (worldview threatening) identity, whereas the content of an ad appeal may indicate the attitudinal position a brand upholds. What would happen then if a foreign brand adopts a pro-domestic country ad statement (a claim expressing a favorable attitude towards the domestic country)? Would that be able to counteract the negative evaluations rendered by the death-eliciting media context?

A brand that includes a pro-domestic ad appeal shows a favorable attitude towards the domestic country and worldview. Hence, if consumers take the attitudinal position of the foreign brand into account, this could reverse the negative evaluation of foreign brands induced by a death-eliciting media context. Then, consumers should exhibit a higher liking of the foreign brand in the death-eliciting media context condition than in the control media condition. However, if consumers do not take the attitudinal position of the foreign brand into account, then we should obtain the same negative effects on the liking of the brand, independent of the attitudinal position (i.e., ad appeal) of the brand. Moreover, ad appeals may sometimes trigger the correction of evaluations. This may occur when consumers perceive the ad appeal as a blatant persuasion attempt, and then apply their persuasion knowledge to correct for their

evaluations (Campbell and Kirmani 1994; Friestad and Wright 1994). Failed persuasion attempts strengthen individuals' original attitudes (Friestad and Wright 1994). Hence, the use of a pro-domestic ad claim by foreign brands may even strengthen the negative evaluations induced by death accessibility. In this case, we expected to find negative evaluations on foreign brands under MS, as in the previous studies.

Concerning the extent to which the use of a pro-domestic ad claim affects the evaluation of the domestic brand in an MS context, we expect that the evaluation of a domestic brand will be independent of using a pro-domestic ad appeal. Consumers already have a favorable perception towards domestic brands due to their in-group identity, and they should not deem the pro-domestic claim as a relevant cue for the evaluation of a domestic brand when the death concept is accessible.

Furthermore, Study 4 also served several other purposes. First of all, in the previous studies, participants had to rate both domestic and foreign brands within a product category (beers, fashion brands, television brands), which may have led to comparison processes while evaluating. In this study, we exposed participants to an advertisement containing either a domestic or a foreign brand, which was manipulated between-participants. Second, in addition to brand liking ratings, we also measured purchase intentions of the advertised brand. Finally, Study 4 also assessed the evaluations of the advertisement. Most media context literature suggested that evaluations of the advertisement mediate the context effect on the evaluation of the

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brand (Coulter and Punj 1999; Goldberg and Gorn 1987). However, given that in the previous studies positive and negative affect did not play a role, and that brand evaluations were mainly influenced by accessibility of death concepts and the brand's in-group or out-group identity, we do not expect that a death-eliciting media context will alter consumers' ad evaluations.

Method

One hundred thirty-five students from a Belgian university college were paid €5 to participate in this study. Participants were randomly assigned to a 2 (media context: death vs. control) × 2 (origin of brand: domestic vs. foreign) × 2 (ad claim: pro-domestic vs. neutral) between-participants design.

Media context was manipulated in the same way as previously. Participants watched a news broadcast containing either a death-related content or a report about a new dental technique (i.e., the control media context). After exposure to these news reports, participants watched a news report of a soccer game, implemented to remove death-thoughts out of focal consciousness.

Next, participants filled out the PANAS followed by the patriotism scale as in the previous studies. Then, participants were exposed to an advertisement of either a domestic Belgian brand (Stella Artois) or a foreign brand (Budweiser). The slogan of the ad was either a pro-domestic slogan (Stella Artois/Budweiser, made for Belgian!), or a neutral slogan (Nothing is as fresh as Stella Artois/Budweiser). Participants had

sufficient time to look at the ad. Following exposure to the ad, participants were requested to assess their liking of the brand, their purchase intention of the ad, and their liking of the ad on a 1-9 scale.

Finally, participants were presented with the same "Word Completion Task", as in Study 3, to measure death-thoughts accessibility.

Results

Death-thought accessibility. To test whether the intended media manipulation indeed made death-thoughts cognitively accessible, we conducted a 2 (media context: death vs. control) × 2 (origin of brand: domestic vs. foreign) × 2 (ad claim: pro-domestic vs. neutral) between-participants ANOVA on the death-thought accessibility measure. This analysis revealed, as expected, only a significant main effect of media context (F (1,127) = 47.79, $p <$ .01). Participants who were exposed to a death-eliciting media context (M = 2.62) completed more death-related words compared to those exposed to a control context (M = 1.35).

Patriotism. We conducted an ANOVA on patriotism (α =0.86) with media context as a between-participants factor. The analysis showed a significant effect of this factor (F (1, 131) = 25.56, $p <$ .01). Participants in the death-eliciting media context condition (M = 3.96) showed a higher level of patriotism compared to those in the control media condition (M = 3.51).

Brand liking. The brand liking ratings were subjected to a 2 (media context: death vs. neutral) × 2 (origin of brand: domestic vs. foreign) × 2 (ad claim: pro-domestic vs. neutral) between-participants ANOVA. This analysis revealed a significant three-way interaction between media context, origin of brand, and ad claim (F (1, 127) = 13.57, p < .001), as presented in Figure 4.4. To test our predictions, we ran two separate 2 (media context: death vs. control) × 2 (ad claim: pro-domestic vs. neutral) between-participants ANOVAs for the foreign and domestic brand.

The analysis for the foreign brand indicated a significant two-way interaction between media context and ad claim (F (1, 60) = 20.38, p < .001). Planned comparison showed that when the foreign brand ad had a neutral slogan, participants liked the foreign brand less following exposure to a death-eliciting media context (M = 3.42) than following exposure to a control media context (M = 4.67), (F (1, 60) = 11.63, p < .001). However, when the foreign brand ad had a pro-domestic slogan, participants liked the foreign brand more following exposure to a death-eliciting media context (M = 6.36) than following exposure to a control media context (M = 5.28), (F (1, 60) = 8.84, p < .001). These results support that when death-related thoughts are accessible, individuals perceive the attitudinal position as a relevant cue for evaluation. Although the attitudinal position of a brand was presented as a very blatant persuasion attempt, participants did not correct their evaluation. Hence, under MS, individuals are very sensitive to relevant cues that validate their cultural worldview (in this case, the pro-domestic ad claims).

The analysis for the domestic brand revealed only a main effect of media context (F (1, 67) = 35.09, p < .001). Participants liked a domestic brand more after exposure to a death-eliciting media context (M = 6.63) than after exposure to a control media context (M = 5.22).

Figure 4.4: Brand Liking as a function of media context, ad appeal, and origin of brand
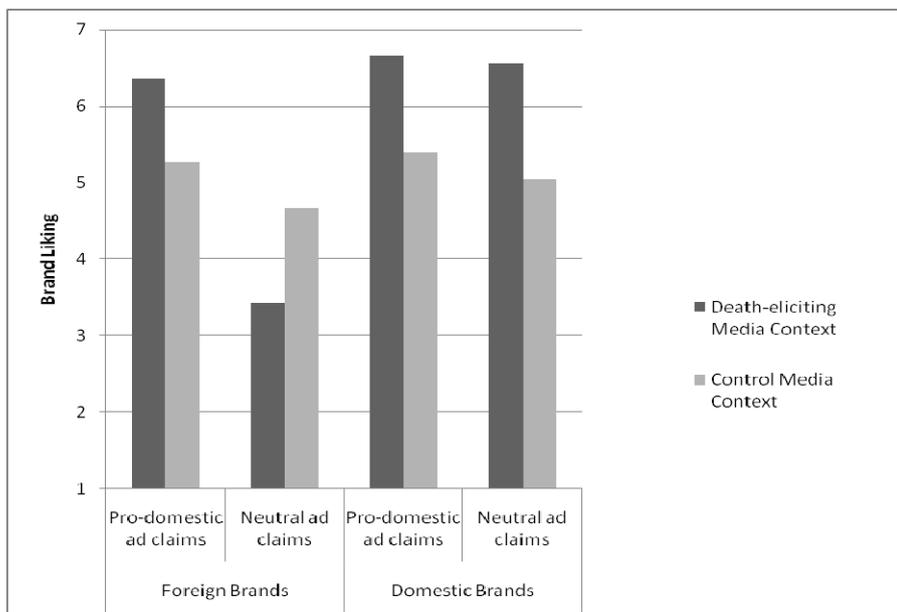
Purchase intention. We also conducted the same 2 (media context: death vs. control) × 2 (origin of brand: domestic vs. foreign) × 2 (ad claim: pro-domestic vs. neutral) between-participants ANOVA on participants' intention to purchase the advertised brands. The analysis showed the expected three-way interaction between media context, origin of brand, and ad claim (F(1, 127) = 8.81 = p < .01). As for the

brand liking ratings, we carried out two separate 2 (media context: death vs. neutral) ×

2 (ad claim: pro-domestic vs. neutral) between-participants ANOVAs for the foreign

and domestic brand.

The analysis on the foreign brand showed a significant interaction between

media context and ad claim (F (1, 60) = 18.67, p < .001). A planned comparison

disclosed that when the foreign brand ad had a neutral slogan, participants were less

likely to purchase the foreign brand after exposure to a death-eliciting media context

(M = 4.07) compared to a control media context (M = 4.83), (F (1, 60) = 6.12, p

< .001). However, when the foreign brand ad had a pro-domestic slogan, participants

were more likely to purchase the foreign brand following a death-eliciting media

context (M = 6.28) compared to a control media context (M = 5.33), (F (1, 60) = 13.21,

p < .001).

The analysis for the domestic brand revealed only a main effect of media

context (F (1, 67) = 18.95, p < .001). Participants were more likely to purchase a

domestic brand after exposure to a death-eliciting media context (M = 6.23) compared

to a control media context (M = 5.31).

Ad liking. A 2 (media context: death vs. control) × 2 (origin of brand:

domestic vs. foreign) × 2 (ad claim: pro-domestic vs. neutral) between-participants

ANOVA on the ad liking ratings did not generate any significant effects (ps > .26).

Mediation analyses. We examined the role of patriotism (the mediator) in

mediating the effects of a death-eliciting media context (the independent variable) on

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the liking of the domestic and foreign brand (the dependent variable) that either had a pro-domestic or neutral slogan (the moderator) in their ad. We conducted separate mediations for foreign and domestic brands. Further mediation analyses conducted on purchase intentions revealed similar findings. Therefore, we only report the mediation analyses on the brand likings.

We first conducted a mediation analysis for the foreign brand. Here, we conducted moderated mediation analyses, because whether patriotism leads to increased or decreased liking of the foreign brand depends on the ad claim (Model 3, Preacher et al. 2007). A first equation, which tested the effect of media context, ad claim, and the interaction between media context and ad claim on the liking of the foreign brand, revealed a significant interaction effect ($\beta = 0.68$, $t\,(60) = 4.51$, $p < .001$). A second equation revealed a significant effect of media context on patriotism ($\beta = 0.30$, $t\,(62) = 2.49$, $p < .05$). A third equation added patriotism and the interaction between patriotism and ad claim to the factors examined on the liking of the foreign brand in equation 1. This analysis revealed that the interaction between media context and ad claim was largely reduced, ($\beta = 0.25$, $t\,(57) = 2.00$, $p = .05$), whereas the interaction between patriotism and ad claim was significant ($\beta = 0.45$, $t\,(57) = 3.64$, $p < .001$). To further interpret these findings, we examined the conditional indirect effects at the levels of ad claim: pro-domestic and neutral. These effects indicated that patriotism mediates the effect of MS on the liking of foreign brands when they used a

pro-domestic ad claim (z = 1.99, p < .05), but not when they used a neutral ad claim (z = -0.26, p > .80).

Next, we conducted a mediation analysis for the domestic brand. We did not expect any moderating role of ad claim, and hence did not conduct a moderated mediation approach. A first equation confirmed the significant effect of media context on the liking of the domestic brand (β = 0.58, t (69) = 5.91, p < .001). A second equation showed that media context has a significant effect on patriotism (β = 0.51, t (57) = 4.86, p < .001). A final equation simultaneously entered media context and patriotism in the regression and examined the effect on the liking of the domestic brand. This analysis showed that the effect of media context was largely reduced but still significant, (β = 0.46, t (68) = 4.18, p < .001), and that patriotism had a significant effect on the liking of the domestic brand (β = 0.23, t (68) = 2.04, p < .05). A Sobel test showed that patriotism mediated the effect of media context on the liking of the domestic brand (z = 1.98, p < .05).

Discussion

Study 4 reported findings on the moderating role of ad appeals on the impact of a death-eliciting media context on brand perception, purchase intention, and ad evaluation. The results clearly indicated that the effect of a death-eliciting media context on the liking of a foreign brand was moderated by whether the brand made a pro-domestic claim in the ad. When the ad made a neutral claim, we replicated the

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negative effect obtained in the previous studies. However, when the ad utilized a pro-domestic claim, a foreign brand is liked more and more likely to be purchased when it is advertised after exposure to a death-eliciting media context compared to a control media context. MS, or a death-eliciting media context, leads to stronger feelings of patriotism, which results in stronger preferences for what supports the in-group, even if it is a blatant persuasion attempt. Further, a death-eliciting media context always leads to stronger preferences and purchase intentions for domestic brands compared to a control media context, irrespective of whether brands make a pro-domestic claim.

General Discussion

Media context has often been highlighted as a crucial factor in media planning (Murry et al 1992), due to the carryover effects of affective responses rendered by the context. The current paper proposed that media programs (e.g., news reports) may also influence ad effectiveness by priming a specific mindset (Mortality Salience), whereas affect does not play any role in this media context effect. Throughout four studies, we consistently found that death-eliciting program in a media context (newscast) enhanced consumers' feelings of patriotism that defend them against the anxiety instigated by mortality salience, which in turn increased the liking of domestic brands and decreased the liking of foreign brands. Further, we extended the main effects by (a) showing that these effects are in fact stronger with a temporal delay between

exposure to the media context and the moment of the brand evaluation (Study 2), (b) demonstrating that highly patriotic consumers, but not low patriotic consumers, are susceptible to these effects (Study 3), and (c) showing that the use of a pro-domestic ad claim can turn the negative effect of a death-eliciting context on the evaluation of a foreign brand into a positive effect (Study 4).

The delayed effect of media context on the evaluation of the brand found in Study 2 is striking, because previous studies showed that the effect of media context is strongest when the evaluation of the brand takes place immediately after exposure to the media context (Murry et al. 1992). Indeed, the media context effect is claimed as rather trivial and can even be ignored after a temporal delay (Coulter and Punj 1999). The reason why news programs presenting death-related topics (such as fatal car accidents, terror attacks, homicides, natural disasters) affect brand evaluations even after a delay is that death-related thoughts often have the strongest effects on people when they are outside focal consciousness (Greenberg et al. 1994). This may occur when consumers are distracted for a while after the activation of the death concepts. In real life, news programs do not always end with death-related topics, but often with neutral topics or sports items, which are programmed before consumers are exposed to a series of advertisements. This might be enough to push such death thoughts out of one's conscious awareness. Furthermore, in none of our studies, affect played a role in influencing brand evaluations. The death-eliciting media context did not lead to less positive affect or more negative affect compared to the control media context. Hence,

this paper illustrates that a media program that is not likely to instigate much changes in affect (compared to the control media program) may also influence brand evaluations by priming an abstract mindset.

Our findings also contribute to country-of-origin literature that proposes consumers from individualistic cultures do not intentionally base their brand evaluations on whether the brand is domestic or foreign (Gürhan-Canli and Maheswaran 2000a). The results from the control conditions of Studies 1 and 3 indeed confirmed this view, showing that participants reported equal or even higher preference for foreign brands and items compared with domestic ones. However, we demonstrated that, on a nonconscious level, country-of-origin information may play an essential role in determining consumers' preference. Specifically, death-induced anxiety turned country-of-origin information as a crucial factor for brand evaluations, because a favorable or unfavorable attitude towards domestic (worldview validation) or foreign brands (worldview threatening) can facilitate in attenuating this anxiety. Further, post-experimental questionnaires indicated that none of our participants were aware that exposure to the media context affected their brand evaluations, again indicating the nonconscious role of country-of-origin.

Limitations and ideas for future research

As with any research, there are several potential limitations and issues for future research. First of all, as media reports bringing bad news (e.g., terrorism, natural

disasters, fatal car crashes) can potentially prime the concept of death, these reports can temporarily influence our perceptions and purchase intentions of domestic and foreign brands, even if these death-thoughts are outside focal consciousness. It would also be interesting to know whether our effects also occur in other media contexts (e.g., crime scene investigations shows, movies) than news broadcasts. Another interesting follow-up would be to examine how long-lasting our effects are. Will the effects still be steady after several days (e.g., when participants have to make a choice between a domestic and foreign brand in the store), or is there an inverted U-shape relationship such that MS effects disappear after a certain time delay.

Our empirical findings were all obtained in an experimental context for undergraduates, though we tried to generalize our findings on several levels. We manipulated MS by asking participants to write about their own death (Study 1) or expose them to different death-related media contexts (Studies 2-4). We showed the MS effects on evaluations of brands, recipes, and sports (Studies 1-3), and on brands placed in an ad (Study 4). Furthermore, the effects were found on both Dutch and Belgian individuals. It would be interesting to observe if the effects, found in this study, also apply to domestic brands produced in foreign countries and foreign brands produced in the home country. Similarly, it is still an open issue whether brands' "degree of foreignness" influences the evaluations. For instance, would Dutch consumers like Belgian brands more than American brands following a death-eliciting media context, because they are more familiar with the former brands?

Future research may also explore the role of consumer ethnocentrism (Shimp and Sharma 1987), which is the belief that the purchase of foreign products is unpatriotic. We conducted two pilot studies (the data are available upon request) in which we examined effects of MS on patriotism and ethnocentrism. We consistently found no significant effects on ethnocentrism. We believe there are two reasons for this finding. First, patriotism is a more general component of one's worldview and, hence, should become faster activated than ethnocentrism upon death accessibility. Second, Douglas and Nijssen (2003) gathered evidence that ethnocentrism does often not play a role in countries with a smaller market structure (like the Netherlands or Belgium).

Finally, our main goal was to demonstrate that media contents that activate the concept of death have profound influences on the evaluation of brands. We found our effects are not due to enhanced negative affect or lowered positive effect, but mainly to the accessibility of death-related constructs. Yet, death constructs are probably not the only mental constructs that can become accessible during exposure to media contexts. It is interesting to examine whether our effects still hold in the presence of other activated constructs. However, the fact that MS effects become stronger after a delay strongly suggests that our effects are quite powerful and substantial.

Managerial implications

Media planning is an indispensable consideration to increase the efficiency of advertising and, thereby, increase a company's profitability (Luo and Homburg 2007; Moorman, Neijens, and Smit 2005). The evidence from this paper suggests that practitioners need to take into account the placement of their advertisements even after media programs that are seemingly neutral and unrelated. Our research, for instance, showed that a news report about a fatal car crash activated death concepts in consumers' minds, which then affects their evaluation of domestic and foreign brands. Particularly, domestic brands may strongly benefit from placement after media contents activating death concepts, but foreign brands may be affected negatively by such contents. Importantly, media context covering death-related issues tends to have high coverage, and therefore the findings reported in this paper may occur frequently (Boomgaarden and de Vreese 2007). Moreover, our effects are quite subtle in that the strongest effects appeared with a temporal delay after exposure to the death-related media content, without participants' conscious awareness. We intensively debriefed and asked our participants to fill out post-experimental questionnaires. None of them raised any suspicion about relatedness among the different phases from the study. These subtle contextual effects, as presented in this paper, are likely to be overlooked when creating media plans.

A remarkable finding of this negative influence of death-related media on advertised foreign brands is that instead of diminishing in a short period, the effect

appears stronger after a delay. This signals practitioners that placing ads a while after death-related media content cannot avoid the negative effects. A solution to counteract such negative effects is to use a pro-domestic ad claim that highlights brands' cultural worldview validation position. The results from Study 4 show that a pro-domestic ad appeal is harmless to domestic brands, while it leads to increased preference of the foreign brand in a death-related media context compared to a control condition. Hence, it seems that the inclusion of a pro-domestic ad appeal is rather safe for domestic brands in that even if it may not increase brand liking but at least it does not harm the brand. For foreign brands, managers may need to trade off between the benefit of being foreign and the risk of being disliked due to media-context induced MS. In the control condition of Study 1, consumers indeed reported higher evaluations of foreign sports and meals, but MS completely reversed this effect. Therefore, this paper cautions brand managers that media context, even a seemingly neutral and unrelated one, needs to be taken into account when executing strategies to enter a foreign market.

5. CONCLUSIONS

As a vehicle to carry out marketing strategies, a brand constitutes a strategic capsule tailored to meet the needs of rational consumers, and brand management has responded to diverse aspects of consumers' conscious and reasoned decision-making (Aaker 1996; Kardes 2002). However, the influence of automaticity on consumers' brand evaluations and purchase intentions and, consequently, on branding strategies, appears to be largely neglected. The aim of this dissertation is to stress how automatic processes can be intertwined with brand attributes and influence brand performance, thereby highlighting the urge to account for the influence of automaticity in brand management.

Three essays, each focusing on a different type of brand attribute (brands' core product characteristics – typicality, brand value proposition – self-expressiveness, and brands' country-of-origin and communication activities – ad context), shed light on automatic processes and their interaction with these brand attributes. The essays further examine how these processes influence brand performance, and provide suggestions on how to integrate them into appropriately tailored branding strategies. To summarize the main findings, I will subsequently describe the automatic processes involved in each study, the interplay with brand attributes, their influence on brand

performance, and their implications for managerial decision-making. An overview of

the main findings is presented in Table 5.1.

Table 5.1 Summary of the dissertation

	Brand attributes	**Automatic processes**	**Interplay of automaticity and brand attributes**	**Influence on brand performance**	**Suggestions for branding strategies**
Chapter 2	Typicality	Categorization and recall of instances	Brand attributes determine the speed of automatic processes	Brand recall	Emphasize the advantage of very typical and atypical brands, and upgrade moderately typical brands
Chapter 3	Self-expressiveness	Influence of accessible self-concept on perception	Non-conscious effect of self-construal depends on the self-expressiveness of the brand	Self-brand connection, and purchase intention	Segment consumers according to their self-construal
Chapter 4	Country-of-origin	Priming	Brands' communication activities prime a specific mindset	Brand preference and purchase intention	Be cautious with death-related media context, and apply a pro-domestic ad appeal (for foreign brands) when promoting after a death-related media program

Automatic Processes

Chapter 2 examines the asymmetry of brand typicality effects in the brand-to-category direction ("How fast are brands categorized?") and category-to-brand direction ("How fast can one name a brand belonging to a specific category?"). Central to this chapter is the automatic categorization response upon exposure to a brand name, and the unintentional brand activation in the presence of a category name. The links and associations between brand names and category labels have been learned over time and established in consumers' memory, and hence the spread of activation from one concept to another is rather effortless, efficient, and automatic (Anderson 1983; Bargh 1992). Thus, exposure to brand cues or category cues can be the onset of various automatic cognitive processes in consumers.

The relationship between a consumers' level of self-construal (independent vs. interdependent) and perceptions of a brand's self-expressive attribute is the focus of chapter 3. The findings of this chapter reveal that (chronically accessible or situationally primed) self-construal has strong effects on the closeness of the connection between a consumer and a self-expressive brand: independent selves develop stronger connections with such brands than interdependent consumers. This automatic influence of an accessible self-concept on the evaluation of self-concept (in)consistent brands occurs without intention and seems even uncontrollable (Wegner and Bargh 1998).

The third essay demonstrates that a seemingly unrelated media context can activate a certain mindset (mortality salience) that automatically influences the perceptions of an advertised brand. After watching a news report on a fatal car

accident or a terrorist attack, which elicited death-related thoughts, consumers rate foreign brands more negatively and domestic brands more positively, compared to a neutral news report. Although these evaluation differences are rendered by increased patriotism due to mortality salience, consumers are not aware of this link and the effect is found to only occur when death-related thoughts are outside focal consciousness.

Furthermore, the automatic processes presented in this dissertation seem to require few conditions to take place. Specifically, the only condition for the (brand or category) automatic recall to occur is a trigger, i.e. the presence of a category or brand name. Similarly, exposure to brands with self-expressive attributes is sufficient for the effect of self-construal on self-brand closeness to take place. Finally, merely a death-related media context that activates mortality salience can alter consumers' preference for foreign and domestic brands. Given that the fewer conditions an automatic process requires to be in place the more constant and general the effect is (Bargh 1992, 1994), the results found in this dissertation should be fairly prevalent and stable.

Interplay of Brand Attributes and Automaticity

Apart from revealing the prevalence of automatic processes in consumers' brand evaluations, the chapters also demonstrate how these processes interact with brand attributes.

In chapter 2, brand typicality and its two antecedents gears the speed of the automatic recall of brand names and activation of category labels. Focusing on real brands, chapter 2 identifies three types of brand typicality levels, each defined by

different levels of FR (family resemblance; the degree to which a category member shares common attributes with other category members) and FOI (frequency of instantiation; how often one has experienced an entity as a member of a particular category): very typical brands (with high FR and high FOI), moderately typical brands (with high FR and moderate FOI), and atypical brands (with low FR and low FOI). In the presence of a brand name, FR is more essential in determining the automatic activation of the category it belongs to, whereas upon exposure to a category name, FOI is of more importance in influencing the automatic recall of brands belonging to the category. Thus, the automatic processes that lead to categorization or brand recall depend on the brands' level of FR and FOI.

In chapter 3, the unintentional influence of chronically accessible or primed self-construal on brand perceptions only materializes for self-expressive brands. Because independent consumers perceive themselves as separate from the social context and value expressing the inner self as a vital means to distinguish themselves from others, they feel closely connected to brands that help them achieve their need for self-expression. In contrast, as interdependent consumers define their self-concepts in relation to other social actors (and aim to keep harmony with others), expressing the inner self is trivial and may even damage their social relationships. Hence, these consumers appreciate the self-expressive value of brands less than independent consumers, which translates into less close connections to such brands.

In the last chapter, the automatic process is not only induced by a specific brand media strategy (advertising shortly after program content that activates mortality salience), its effect also strongly depends on brand attributes, such as whether the brand is domestic versus foreign, or whether the advertisement in

which the brand is placed, adopts a pro-domestic slogan. It is this country-of-origin association that determines whether mortality salience leads to positive brand evaluations (in case of domestic brands) or negative brand evaluations (in case of foreign brands).

Influence on brand performance

Each chapter provides evidence on the influence of the interaction between brand attributes and automatic processes, on brand performance.

Brand recall is the key performance measure in chapter 2. In the brand-to-category direction (where a fast activation of the category name may dilute the focal brand's own effect), very typical and moderately typical brands activate the category name equally fast, while atypical brands trigger the category name with a slower speed. In the category-to-brand direction (where fast recall of brand names may translate to a high probability of being included in the consideration set for choices), the order of brand recall from the fastest to the slowest is very typical, moderately typical, and atypical brands.

Chapter 3 examines how likely a brand with or without a self-expressive value is incorporated into consumers' self-concept (self-brand connections), and the purchase intention of the brand. Independent consumers are found more likely to incorporate self-expressive brands into their self-concepts and also report higher purchase intentions than interdependent consumers. Interdependent consumers are actually more interested in purchasing non self-expressive brands compared to self-expressive brands, which is the opposite pattern from independent consumers.

Finally, chapter 4 investigates the impact of the automatic process on brand preference and purchase intentions. It demonstrates that consumers have an increased liking of domestic brands and a decreased liking of foreign brands when death-related thoughts are nonconsciously accessible, due to enhanced patriotic concern elicited by these thoughts. It further shows that the decreased liking of a foreign brand under mortality salience conditions can be countered by adopting a pro-domestic ad claim.

Suggestions for Branding Strategies

This dissertation highlights the importance of automatic processes in consumer behavior, thereby urging brand managers to take possible effects of such processes into account when exerting branding strategies. As a double-edge sword, automatic processes, in their interaction with brand attributes and target audience characteristics, may constitute a brand asset but may also damage brand performance.

For very typical brands, the unintentional activation of the entire category (and, consequently, competitive brands) upon seeing a focal brand ad seems to constitute a threat. However, as very typical brands have both high FR and FOI, they probably contain most of the attributes that consumers seek from the category. Hence, the activation of other competitors does not necessarily translate into a loss of sales, especially if very typical brands invest in building premium quality to enhance consumer preference. Atypical brands, on the other hand, appear to occupy an inferior position when consumers consider buying products from a

category, because of the slow automatic recall of their brand names. However, since atypical brands often target a niche market and aim to meet consumers' specific needs, sacrificing the "top of mind" advantage may not be that bad after all. Instead, atypical brands should rather emphasize their uniqueness and increase the frequency of appearing as a special instance of the category, accommodating specific demands. It is rather the moderately typical brand that finds itself in a fairly disadvantageous position among the three types of brands, because it does not benefit from the "top of mind" effects of very typical brands, yet suffers more from spillover effects than niche brands. Brand managers might avoid this pitfall by upgrading such brands, either by investing in increasing their FOI, so as to benefit from fast recall, or by enhancing the quality of key attributes, in order to enhance uniqueness and minimize spillover effects.

The different preference for self-expression associated with independent and interdependent self-construal alerts managers that, as a brand value proposition, self-expressiveness may not be appreciated by all consumers. In particular, an obviously self-expressive brand image may decrease interdependent consumers' purchase intentions of the brand. Although the two self-construals coexist in individuals, extant research has affirmed that independent self-construal dominates in Western cultures, whereas Eastern cultures are characterized with and appreciate interdependent values (Markus and Kitayama 1991). Therefore, an easy way out may be to emphasize brands' self-expressive functions in Western countries, but avoid a "standing-out" image in Eastern countries.

In terms of media planning, most managers are aware of the carry-over effects of media contexts – the mood or emotions elicited by media contexts continuing to influence subsequent ad effectiveness. However, the findings from

the last chapter caution managers that a seemingly unrelated neutral media program may also influence brand evaluation without affecting consumers' mood. For instance, news reports appear to be an ideal context to embed ads, because of their wide coverage and neutral context. Yet, this dissertation demonstrated that death-related news reports increase the liking of domestic brands but decrease the liking of foreign brands. Managers unaware of this effect could therefore make wrong investments when promoting their foreign brands in a death-eliciting media context in a domestic market. However, our findings also suggest that applying a pro-domestic country ad appeal can reverse the negative effects of mortality salience on foreign brands, and even increase the liking for those brands, because the ad appeal satisfies consumers' patriotic needs.

Future Research

Automaticity and conscious decision-making

While rational and deliberate utility maximization is still the dominant paradigm in consumer decision-making and behavior literature (Simonson 2005), there is increasing evidence that automaticity is an indispensable facet of behavior (Bargh 1994, 2002; Dijksterhuis et al. 2005; Moors and De Houwer 2006). My dissertation fits into this last stream of literature, by showing that brand attributes may trigger and strongly interact with automatic processes, and influence brand performance. One of the reasons why rational and conscious decision-making seems overwhelming in everyday life is that we are aware of and can recall the decision processes we have been through, whereas, by definition, automaticity

needs very limited or even no attention, effort, or conscious awareness and is easily dismissed as an accidental or noisy influence. Taking the first project of this dissertation as an example, a final brand choice is very likely based on complicated decision rules, but the automatic brand recall is a crucial first step for this choice. While consumers probably are not aware of this recall process because it is effortless and unintentional, the findings in this dissertation show that this automatic recall is very prevalent or even uncontrollable.

Even so, while this dissertation stresses the essential role of automaticity in consumer decision-making and consequently brand strategies, I do not claim that conscious elements are unimportant. Rather, future research should examine the relative importance of conscious and unconscious attributes for brand evaluation. For instance, in the last project, we primed mortality salience and measured consumers' evaluations and purchase intentions of foreign and domestic brands. To investigate the relative effectiveness of automatic influences and conscious thinking, future research may manipulate other product attributes such as price and quality, which may potentially override automatic processes. Specifically, it would be interesting to investigate if an advantage that is noted on a conscious level (e.g., low price or high quality) could override the non-conscious dislike of foreign brands induced by mortality salience.

Also, the interplay between automaticity and the type and stage of decision-making (e.g., decision for self vs. others, need recognition stage vs. information searching stage), or decision makers (e.g., maximizers vs. satisficers, Schwartz et al. 2002), may warrant further attention. For example: does automaticity play a more important role in the decisions of satisficers (who choose the first option that exceeds their acceptable thresholds) compared to maximizers (who process all

relevant information and strive to optimize the outcome of decisions), as satisficers do not try to be in control of all information and influences on their choice? Or, ironically, could it be that maximizers are more subject to automatic processes, because their conscious resources do not suffice to handle a very complicated choice situation, and they unconsciously rely on simplifying mechanisms?

A framework for automaticity in consumer research

Skepticism about the ubiquitous role of automaticity in consumer decision-making can be partly attributed to the lack of a systematic framework and a clear classification of automaticity in consumer research. Various processes such as unconscious thinking, habitual choices, and priming have been identified as automatic, but what are the differences and similarities between them? Which of them are more automatic? What are the general consequences and sustainability of automatic processes?

After decades, most psychologists agree on the feature-based definition of automaticity (Bargh 1994; Moors and De Houwer 2006). Bargh (1992) argued that behavior or thought is an automatic process when it contains one or several of the following features: it is unintentional, it occurs outside of awareness, it is uncontrollable, and it is efficient in the use of attentional resources. He further categorized three levels of automaticity. Preconscious processes require no conscious input and no intention. Postconscious processes need a conscious input but not an intention. Goal-dependent processes demand both conscious input and intention or a processing goal to start. Since most consumer behavior entails an intention to purchase or consume something, this classification may not be completely instructive in consumer studies. Chartrand (2005) proposed a more

appropriate classification for consumer behavior research, in which she decomposed a decision process into three parts: stimuli, influence of the stimuli on the decision process (mechanism), and the outcome. Automatic processes and behavior can then be classified based on which part consumers are unaware of. This categorization makes the generalization of the consequence and effectiveness of automaticity more feasible. For instance, if consumers are not aware of a stimulus and, consequently, most likely not aware of the mechanism, then the automatic process should be fairly stable and general. This is because consumers cannot avoid the influences of automaticity and, hence, the outcome. When consumers are aware of a stimulus and the outcome but not the exact mechanism, the automatic process may be less stable: as consumers know the situational cue (e.g., chic and fast music in the store) has some effects on their choices, they may circumvent it even if it is not clear how the process works. Future research can test if this categorization indeed leads to better generalization of automatic processes and their effectiveness in consumer research, or delineate a systematic framework for automaticity that comprises the types of automaticity, the general mechanism, the consequences, and the boundary conditions.

Nederlandstalige Samenvatting (Dutch Summary)

Merken hebben een grote bedrijfseconomische waarde en hebben vaak een belangrijke rol in de marketingstrategie van bedrijven. Een merk bestaat uit een aantal, voor consumenten cruciale, functionele of hedonistische attributen en een merkimago dat tegemoet moet komen aan de wensen en verzuchtingen van, vaak rationele, klanten. Een belangrijke assumptie hierbij is dat consumenten met een erg rationele blik kijken naar deze constitutie van enkele kernattributen en communicatiestrategieën, en op basis daarvan de utiliteit van hun keuzes trachten te maximaliseren. Men gaat er vaak van uit dat consumenten bewust en doelgericht marketinginformatie (bv., prijspromoties, merkimago) verwerken en op basis daarvan bewuste beslissingen nemen. De vraag is of men wel altijd bewust is van invloeden op het eigen gedrag. Recent onderzoek heeft uitgewezen dat consumenten vaak niet bewust zijn van de invloed van omgevingsfactoren op hun gedrag (Bargh 2002; Dijksterhuis et al. 2005). Men kan zich dan ook de vraag stellen of consumenten wel altijd bewust reageren op marketingstrategieën en hun beslissingen rationeel nemen. Onderzoek is daar tot nu toe vaak aan voorbij gegaan. Bestaande literatuur beschouwt onbewuste invloeden op consumentengedrag vaak als triviale omgevingsfactoren, die onafhankelijk zijn van bestaande merkstrategieën (Simonson 2005). Recent onderzoek heeft echter aangetoond dat sommige aspecten van een marketingstrategie toch onbewuste effecten kunnen hebben. Een studie van Shiv, Carmon, en Ariely (2005) toonde aan dat consumenten een energiedrankje aan een normale prijs als effectiever beschouwden (voor het verhogen van de energie) dan hetzelfde drankje aan een verlaagde prijs. Geen enkele van de consumenten in dat onderzoek gaf aan dat prijs hun gedrag beïnvloedde, terwijl dat in werkelijkheid wel het geval was. Deze interessante bevinding geeft aan dat men onbewuste effecten van marketingstrategieën

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niet zomaar als irrelevant of triviaal kan beschouwen. Daarom is het belangrijk meer onderzoek te verrichten naar mogelijke onbewuste effecten (die zowel positief als negatief kunnen zijn) op de reacties van consumenten ten aanzien van merken. In welke mate zijn onbewuste processen afhankelijk van merkattributen of van consumentenkarakteristieken? Onderzoek kan een antwoord bieden op de vraag in welke mate merkstrategieën rekening moeten houden met zulke onbewuste effecten.

Dit proefschrift bestaat uit drie onafhankelijke essays die elk hun licht laten schijnen op drie belangrijke marketingvragen. In een eerste essay zal ik onderzoeken of het oproepen van een merknaam of categorienaam afhankelijk is van de typicaliteit van een merk. In een tweede essay onderzoek ik hoe consumenten reageren op merken met een sterk expressief imago, en of dat afhankelijk is van consumentenkarakteristieken (namelijk of consumenten een independent of interdependent zelf-concept hebben). In het derde essay onderzoek ik de mogelijk onbewuste effecten van een media context die het concept "dood" activeert op reacties van consumenten ten aanzien van binnenlandse versus vreemde merken.

Het eerste essay (**Hoofdstuk 2**) bestudeert merktypicaliteit, wat weergeeft of een merk typisch is voor de productcategorie waartoe het behoort (Loken en Ward 1990). Het doel van het onderzoek was na te gaan in welke mate de typicaliteit van een merk een rol speelt bij (a) de snelheid waarmee de naam van de product categorie (bv., chips) cognitief wordt opgeroepen wanneer men denkt aan een bepaalde merknaam (bv., Lays, Doritos), en (b) bij de snelheid waarmee een merk cognitief wordt opgeroepen wanneer men denkt aan de product categorie. In het onderzoek onderscheiden we drie niveaus van merktypicaliteit: zeer typische merken, gemiddeld typische merken, en atypisch merken. Deze drie niveaus worden gekarakteriseerd

door verschillende scores op twee onderliggende dimensies van brand typicaliteit (Barsalou 1985): *family resemblance* (FR, de mate waarin een lid van een categorie overlappende attributen heeft met andere leden van de categorie) en *frequency of instantiation* (FOI, de mate waarin men een entiteit ervaren heeft als lid van een categorie). Uit een eerste studie bleek dat zeer typische merken hoge scores hadden op zowel FR als FOI, dat gemiddeld typische merken hoge scores hadden op FR en gemiddelde scores op FOI, en dat atypische merken lage scores hadden op zowel FR als FOI. Vervolgens ging ik na in welke mate deze twee onderliggende dimensies (FR en FOI) van merktypicaliteit een rol speelden bij het cognitief oproepen van een merk (wanneer men denkt aan de product categorie) en het cognitief oproepen van de product categorie (wanneer men denkt aan een merk). In dit onderzoek maakte ik gebruik van vrije associatietaken en reactietijdexperimenten. Uit de studies bleek dat FOI een belangrijke rol speelde bij het oproepen van merken wanneer men dacht aan de naam van de productcategorie. Merken die hoog scoorden op FOI (zeer typische merken) werden sneller opgeroepen dan merken die gemiddeld scoorden op FOI (gemiddeld typische merken) die op hun beurt weer sneller werden opgeroepen dan merken die laag scoorden op FOI (atypische merken). Verder bleek FR vooral een rol te spelen bij het oproepen van de naam van de product categorie bij het denken aan merken die verschilden in merktypicaliteit. De categorie werd sneller opgeroepen bij merken die gelijk scoorden op de dimensie FR (zeer typische en gemiddeld typische merken) dan bij merken die lager scoorden op FR (atypische merken). Deze studies laten zien dat niet alle merken even sneller worden opgeroepen uit het geheugen, wat dus betekent dat niet alle merken een even grote kans hebben om opgenomen te worden in de consideratie van set van consumenten. De mate waarin merken opgeroepen worden wanneer men denkt aan de categorie is sterk afhankelijk van de

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mate van merktypicaliteit. Het onderzoek laat ook zien dat een hoge merktypicaliteit niet altijd positief is. Een merk met een hoge typicaliteit (vanwege een hoge score op FR) leidt tot snelle categorisatie, wat op zich makkelijker de aandacht kan richten op concurrenten.

In het tweede essay (**Hoofdstuk 3**) onderzoek ik hoe consumenten reageren op merken die zelf-expressief van aard zijn (wat wil zeggen dat deze merken gemakkelijk kunnen gebruikt worden om zich uit te drukken aan anderen). Verder wil ik onderzoeken of deze reacties afhankelijk zijn van het zelf-concept van consumenten. In deze context bestudeer ik het verschil tussen independente en interdependente consumenten (Markus en Kitayama 1991). Consumenten met een independent zelf-concept zijn vaak vooral op zichzelf gericht en hechten veel belang aan het zich onderscheiden van anderen. Interdependente consumenten daarentegen hechten veel belang aan het onderhouden van goede en nauwe relaties met anderen. Uit sociaal psychologisch onderzoek blijkt bijvoorbeeld dat independente mensen meer belang hechten aan het houden van afstand ten aanzien van andere mensen dan interdependente mensen (Holland et al. 2004). In dit essay onderzoek ik de hypothese dat independente consumenten een nauwere band ontwikkelen met merken die een zelf-expressief karakter hebben dan interdependente mensen. De reden hiervoor is dat independente mensen veel belang hechten aan het zich uitdrukken aan en onderscheiden van anderen (Kim en Sherman 2007). Deze hypothese wordt bevestigd in drie studies. In een eerste studie hebben consumenten met een chronisch independent zelf-concept een nauwere band met hun favoriet merk van sneakers dan consumenten met een chronisch interdependent zelf-concept. In een tweede studie werd het zelfbeeld van consumenten tijdelijk geactiveerd, en ook hier vond ik dat

consumenten met een tijdelijk geactiveerd independent zelf-concept een nauwere band met hun favoriet merk van sneakers of tassen hebben dan consumenten met een tijdelijk geactiveerd interdependent zelf-concept. Dit effect werd statistisch gemedieerd door de neiging om zich zelf uit te drukken (waar de independente consumenten hoger op scoorden dan interdependente consumenten). In een laatste studie werd aangetoond dat independente consumenten zich ook nauwer verbonden voelen (en een hogere aankoop intentie hadden) t.a.v. een jeans merk dat een zelf-expressief imago kreeg in een advertentie maar niet t.a.v. hetzelfde merk dat geen zelf-expressief imago kreeg. Opmerkelijk was de omgekeerde reactie bij interdependente consumenten die een lagere aankoopintentie hadden t.a.v. het zelf-expressieve merk dan t.a.v. het neutrale merk. In geen enkel van deze studies waren consumenten zich bewust van het feit dat het zelf-expressieve attribuut hun gedrag beïnvloedde. Dit onderzoek laat duidelijk zien hoe een productattribuut (zelf-expressiviteit) tot zowel positieve (voor independente consumenten) als negatieve effecten (voor interdependente consumenten) kan leiden.

In het derde essay (**Hoofdstuk 4**) verrichtte ik onderzoek naar de invloed van de media context op productevaluaties. Ik keek in het bijzonder naar de invloed van een media context die berichtte over doodsgerelateerde onderwerpen (bv., terroristische aanvallen, verkeersongevallen, natuurrampen). Zulke berichten kunnen mensen bewust maken van het feit dat ze sterfelijk zijn ("mortality salience", MS). Wanneer de MS bij mensen hoog is trachten ze om te gaan met de angst betreffende hun sterfelijkheid. Vroeger onderzoek heeft uitwezen dat mensen vaak sterker belang hechten aan hun eigen cultuur en zich negatiever opstellen tegenover de cultuur van anderen (Greenberg et al. 1992). Op basis van deze bevindingen verwachtte ik dat

consumenten met een hoge MS zich negatiever zouden opstellen t.a.v. vreemde merken maar positiever t.a.v. binnenlandse merken. Uit een eerste studie bleek dat inderdaad zo te zijn. Consumenten die een nieuwsbericht i.v.m. een terroristische aanslag hadden gezien hadden een positievere attitude t.a.v. binnenlandse merken zoals Heineken of Philips en een negatievere attitude t.a.v. vreemde merken zoals Corona of Sony, in vergelijking met consumenten die een neutraal nieuwsbericht (over een nieuwe tandartstechniek) hadden gezien. Uit vervolg studies bleek dat patriotisme een belangrijk rol speelt in dit effect. Mensen die MS zijn worden patriotistischer dan mensen die niet MS zijn. Dat verhoogde patriotisme in de MS condities verklaarde de positievere (negatievere) reacties t.a.v. binnenlandse (vreemde) merken. Het effect bleek nog sterker op te treden bij consumenten die zelf sterk patriotistisch van aard zijn. In een laatste studie konden we echter aantonen dat het effect van MS op de houding (en aankoopintentie) t.a.v. vreemde merken niet altijd negatief hoeft te zijn. Wanneer vreemde merken, in hun advertentie, een slogan gebruiken die zich positief opstelt t.a.v. de binnenlandse markt zal MS tot een positieve houding t.a.v. die vreemde merken leiden. Deze studies laten zien dat bepaalde media contexten vaak onbewuste en onbedoelde effecten kunnen hebben op de evaluatie van bepaalde merken. Het kan daarom belangrijk zijn voor vreemde merken om niet vaak te adverteren na nieuwsuitzendingen (omdat die vaak MS kunnen verhogen).

In dit proefschrift heb ik onderzocht hoe onbewuste processen interageren met product attributen (merktypicaliteit, zelf-expressiviteit van een merk, land van herkomst). Uit het onderzoek blijkt dat onbewuste processen verschillende effecten kunnen hebben op het gedrag van consumenten afhankelijk van het productattribuut.

In het eerste hoofdstuk bleek dat het oproepen van merknamen versus de namen van een productcategorie asymmetrische patronen vertoonden. De effecten in een richting werden sterker bepaald door "frequency of instantiation" terwijl "family resemblance" een belangrijkere rol speelde in de andere richting. In het tweede hoofdstuk werd aangetoond dat de onbewuste effecten van een independent versus interdependent zelf-concept op de verbondenheid met een merk afhankelijk zijn van of een merk een expressief karakter heeft of niet. Tenslotte werd in het derde hoofdstuk aangetoond dat de onbewuste effecten van een MS context op merkevaluaties afhankelijk zijn van het land van herkomst van het product. In het conclusie hoofdstuk van dit proefschrift wordt ingegaan op de marketing implicaties van dit onderzoek.

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