

CONSUMERS' BRAND EVALUATIONS: EXPLORING INGREDIENT AND PROXIMITY
EFFECTS

by

PLAMEN PAVLOV PEEV

(Under the Direction of Piyush Kumar)

ABSTRACT

This work explores the implications of two recent phenomena in the area of marketing, namely the increased popularity of “subtracted” or “absent” ingredients and the heightened competition among extension products of different brands, for consumer brand evaluations. In the first chapter, I investigate consumer response to products with two distinct types of non-branded ingredient strategies: subtracted and added ingredients. Added (subtracted) ingredients are defined as those that are either present (absent) or purposefully included (excluded) in (from) a product and whose promotion is intended to increase the product’s attractiveness to consumers. The results suggest that a subtracted ingredient may be associated with loss-related end-states, whereas an added ingredient may cue gain-related outcomes. Based on this distinction and research on loss aversion and negativity bias, I propose a subtracted-ingredient effect whereby, *ceteris paribus*, consumers exhibit a higher preference for products featuring subtracted ingredients than for products featuring added ingredients. I find further support for the delineation between added and subtracted ingredient strategies by demonstrating that the former matches a promotion focus and the latter - a prevention focus of self-regulation, both when consumers’ regulatory focus is cued by the nature of the product category, and when it is

activated by a task unrelated to the market context. Finally, it is documented that the subtracted-ingredient effect spills over to proximal noningredient products.

The second chapter examines consumer evaluations of brand extensions in competitive contexts featuring products that are brand extensions themselves. It demonstrates that the evaluations of the focal brand extension are inversely related to the fit of the context brand extensions to their respective original categories (context fit or CF) and that the effect is mediated by perceptions of focal extension's fit with the focal brand's core product category (focal fit or FF). The results also suggest that consumers' mindset (differentiation vs. integration) and evaluation of the context extensions prior to that of the focal extension can influence the manifestation of the effect. Finally, evidence is provided that a brand extension may be affected not only by proximal direct competitors in its product category, but also by extensions into neighboring categories that happen to be in its immediate environment.

INDEX WORDS: Ingredient strategies, Gain-loss framing effects, Regulatory focus, Brand extensions, Category fit, Brand evaluations, Contrast effects, Mindsets

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PLAMEN PAVLOV PEEV

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PLAMEN PAVLOV PEEV

Major Professor: Piyush Kumar
Committee: Charlotte Mason
Scott Thompson

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
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CHAPTER 1
THE IMPACT OF ADDING VERSUS SUBTRACTING INGREDIENTS ON PRODUCT
EVALUATIONS

Marketers often position their products by drawing consumer attention to key ingredients in their offerings. The objective underlying an ingredient-based strategy is to improve a product's appeal by enhancing its perceived performance on a relevant attribute (Desai and Keller 2002). Ingredients, if unique to a product, can also serve as a means of differentiating it from competing products. Therefore, it is not surprising that products across a wide array of product categories are using ingredients to position or promote themselves. These ingredients are often branded, such as Intel microprocessors in HP personal computers, Dawn Stainscrubbers in Tide Detergent, Bose stereo systems in Audi cars, or Oreo cookies in Breyers ice-cream. However, many ingredients that marketers choose to promote are unbranded, such as calcium in Tropicana orange juice, aloe vera extract in Tresemme shampoo, vitamin A and D in many brands of milk, or extra fiber in Dannon Light'n Fit yogurt. The popularity of all unbranded ingredient-based strategies seems to be growing.

While many brands selectively promote one or more of the ingredients found in their products, others pursue an alternative ingredient strategy. They promote a lack or an absence of select ingredients in their products. These ingredients typically have negative connotations and, much like in the case of ingredient addition, their exclusion is intended to appeal to consumers. Examples of such a strategy include many products with "no MSG" (monosodium glutamate), Anchor glassware with "BPA free" (bisphenol A) lids, shampoo without SLS (sodium lauryl

sulfate), ice cream with no preservatives, body lotion with no sulfates, and waffles without cholesterol.

We label these two approaches as *added-ingredient* and *subtracted-ingredient* strategies respectively. Added ingredients are those that are either present or purposefully included in a product and whose promotion is intended to increase the product's attractiveness to consumers. By way of analogy, subtracted ingredients are those that are either absent or purposefully excluded from a product, again with the same objective of increasing its attractiveness to consumers.

The overall objective of adding and subtracting ingredients to and from products is similar in that both aim to add to a product's attractiveness by increasing the salience of either the inclusion of a positive element or the exclusion of a negative element (Lee and Aaker 2004; Meyers-Levy and Maheswaran 2004). To that extent, we would expect that consumer response to both approaches should be positive. However, we suggest that the two ingredient strategies differ fundamentally in how they frame the benefits of the products that employ them. An added ingredient is often implicitly directed at providing a benefit in the form of obtaining a positive outcome. In contrast, a subtracted ingredient is frequently associated with a benefit in the form of avoiding a negative outcome. Therefore, it is possible that, all else equal, the response to the two strategies may be different because they may cue two different types of desired end-states: gains vs. nonlosses.

In this paper, we investigate consumer response to products with added versus subtracted ingredients. Based on research on goal framing effects (Levin, Schneider, and Gaeth 1998; Meyers-Levy and Maheswaran 2004; Monga and Zhu 2005) and the two closely related concepts of loss aversion (Tversky and Kahneman 1991) and negativity bias (Kanouse and Hanson 1972),

we argue that the consumer evaluations of a product featuring a subtracted ingredient will be higher than those of a similar added-ingredient product, a phenomenon we label the *subtracted-ingredient effect*. Further, we expect that, as it influences our sensitivity to gains and losses, individuals' regulatory focus will moderate the subtracted ingredient effect whereby individuals with a promotion focus of self-regulation will demonstrate a higher preference for products with added ingredients than for those with subtracted ingredients, whereas individuals with a prevention focus of self-regulation will exhibit greater preference for products with subtracted ingredients than for those with added ingredients. In addition, we hypothesize that this moderating effect is manifested both when the regulatory focus is evoked through a manipulation task (writing about one's hopes and aspirations vs. writing about his or her duties and obligations in life) and when it is cued by the nature of the product category ("promotion" vs. "prevention"). Finally, we posit that the subtracted-ingredient effect will spill-over to products that do not employ any ingredient strategy, but are presented to consumers in the context of a subtracted- or an added-ingredient product.

We report results from four studies where we manipulate the ingredient strategy employed, consumer's regulatory focus, and the product category, and examine consumers' evaluations of the products. In study 1, we document the existence of a subtracted-ingredient effect, by virtue of which, all else equal, a product is better preferred by consumers if it features a subtracted ingredient than if it features an added ingredient.

Study 2 shows that compared to a subtracted-ingredient one, an added-ingredient strategy may result in higher product evaluations among promotion-focused and lower product evaluations among prevention-focused individuals. In study 3, we extend the results from the second experiment and find a similar effect of the inherent nature of a product category whereby

relative to a subtracted ingredient, an added ingredient works better for a promotion-oriented product (air-freshener), but not as well for a product from a prevention-oriented category (odor neutralizer).

In study 4, we provide evidence that the subtracted-ingredient effect spills over to products appearing in the context of subtracted- and added-ingredient offerings. Specifically, we find that a product featuring no ingredients enjoys better valuations when it is presented along an added-ingredient product than when it is paired with a subtracted-ingredient one. We conclude with a discussion of the limitations of our research, the theoretical and practical implications of our findings, and areas for future inquiry.

CONCEPTUAL DEVELOPMENT

Product Ingredients

The literature currently recognizes two types of product ingredients, branded and unbranded, with the former receiving more research attention. A branded ingredient is referred to as a component when it is a readily identifiable part or module of a product sold under a different brand name (Venkatesh and Mahajan 1997). The term co-branding is usually used when the components are not directly identifiable in the finished product (Park, Jun, and Shocker 1996). Branded ingredients help signal product quality when it is not easily observable prior to the actual use of the product, provide information about the presence or the level of a product attribute, or facilitate the introduction of a completely new attribute to a host brand (Desai and Keller 2002; Janiszewski and van Osselaer 2000; Rao and Ruekert 1994).

Although branded and unbranded ingredients can have an analogous function (Van Osselaer and Alba 2003), an unbranded ingredient strategy is different from one that involves either branded ingredients or co-brands in that it allows products to be promoted not only as containing an ingredient, but also as *not* containing an ingredient. Both the added- and subtracted-ingredient approaches can serve to communicate attribute information to consumers. In fact, a product's perceived performance on the same generic or abstract attribute can be boosted using either one of the two strategies. For an example, the addition of calcium to (an added ingredient) or the exclusion of sugar from (subtracted ingredient) orange juice makes the product healthier, thus boosting the product's perceived performance on the "healthiness" attribute. In that respect, subtracted and added ingredients can be akin to each other in that both types can represent comparable appeals to consumers.

However, there may be an important distinction in the types of associations the two ingredient strategies evoke in order to achieve a similar goal. An added ingredient's inherent positive nature seems to be likely to result in stronger associations with desirable end-states, whereas the inherent negative nature of a subtracted ingredient may be more likely to lead to it being associated with undesirable end-states. Consider the orange juice example above. The addition of calcium to the product may enhance its perceived healthiness by evoking the desirable implications of consuming calcium-rich food. In comparison, the exclusion of sugar from orange juice may result in perceptions of healthiness by evoking the undesirable implications of eating too much sugar which can be avoided by consuming the sugar-free juice. Therefore, we suggest that, in general, the promotion of an added ingredient is likely to cue a desired outcome, the attainment of which is facilitated by the ingredient, whereas the promotion of a subtracted ingredient is likely to bring up a potential undesirable end-state, the avoidance of

which is aided by the absence of the ingredient in the product. If we are to code the implied results of an addition or a subtraction of an ingredient in terms of what the benefits to the consumer are, we can say that the two ingredient strategies represent situations of a gain or a nonloss respectively. Research on the effects of positive vs. negative information and the ensuing framing influences briefly reviewed next provide insight into the implications for consumer evaluation of products employing these two ingredient strategies.

Gain-Loss Framing Effects

We argue that, more often than not, an added ingredient cues a desired end-state in the mind of the consumer thus framing the benefit of the ingredient in terms of a gain. In other words, the benefit of adding an ingredient tends to be perceived as providing some utility to the end user of the product. In contrast, a subtracted ingredient often prompts the consumer to think of an undesired outcome, the avoidance of which is facilitated by the subtraction, thus framing the benefit of the ingredient in terms of avoiding a loss. Hence, the potential buyer perceives the benefit of subtracting an ingredient as avoiding some disutility. Note that in both cases the end-states may be not concrete or defined, but rather vague or implicit outcomes, especially when consumers are not familiar with the characteristics of the ingredients or when the benefits associated with the ingredients are not spelled out as part of the product's promotion.

Numerous studies on negativity effects in various disciplines point to the greater perceptual salience of negative compared to positive information (Ito et al. 1998; Mittal, Ross, and Baldasare 1998; Peeters and Czapinski 1990; Taylor 1991). Consider message framing effects defined as the significant influence that the manner in which otherwise objectively

equivalent information is encoded and presented has on people's choices or evaluations (Tversky and Kahneman 1981). Research comparing gain-framed to loss-framed messages generally supports the hypothesis that loss frames are more persuasive (Apanovitch, McCarthy, and Salovey 2003; Block and Keller 1995; Krishnamurthy, Carter, and Blair 2001; Maheswaran and Meyers-Levy 1990; Meyerowitz and Chaiken 1987; Shiv, Britton, and Payne 2004). However, very few framing studies investigate the efficacy of gain vs. nonloss frames (O'Keefe and Jensen 2006). Specifically, Monga and Zhu (2005) find that buyers focus on nonlosses while sellers feel better about gains and Yi and Baumgartner (2008) provide evidence that promotion- (prevention-) focused individuals are better persuaded by a gain- (nonloss-) framed message. Notably, Liberman, Idson, and Higgins (2005) documented that the opposite is true, namely gains are perceived as more positive than nonlosses in the context of negotiations and judgments of fairness.

This issue is also central to Kahneman and Tversky's concept of loss aversion (1979, 1991) and the closely related phenomenon of negativity bias (Kanouse and Hanson 1972). Although not entirely consistent, the evidence provided by this considerable body of literature seems to support the view that people tend to be more sensitive to loss-related than gain-related outcomes. Furthermore, from an evolutionary standpoint, humans seem to be "hard-wired" to direct their attention to any stimuli that suggest any potential negative implications for their well-being (Pratto and John 1991). Hence, Levin, Schneider, and Gaeth (1998) hypothesize that frames emphasizing the potential to avoid a loss would be more persuasive than an objectively equivalent message stressing the potential to obtain a gain. If ingredient strategies really have the ability to frame the benefit of product usage in that a subtracted (added) ingredient frames the benefit of using a product in terms of attaining a gain (avoiding a loss), this rationale should

transfer to the domain of ingredient strategies and the result would be a more attractive subtracted-ingredient relative to an added-ingredient product:

H1: Consumers will exhibit preference for products with subtracted ingredients over products with added ingredients.

STUDY 1

The objective of study 1 was to test hypothesis 1. The literatures on loss aversion, negativity bias, and goal framing effects all suggest that, all else equal, there may be differences between consumer evaluations of added- and subtracted-ingredient products. We propose that there exists a subtracted-ingredient effect whereby people prefer the latter over the former.

Stimulus Development

For all our studies, we needed an ingredient towards which participants had no pre-existing attitudes and whose deployment could be executed in either an added or a subtracted form as both consumers' pre-existing attitudes and the use of different ingredients for the subtracted and added conditions would have introduced variance irrelevant to our research hypotheses. We therefore chose not to use real and familiar ingredients about which participants were likely to have prior knowledge that we could not control for. Also, the nature of many real subtracted ingredients (e.g., sugar, artificial ingredients, gluten, cholesterol, trans fat) precludes their use as added ingredients. For example, consumers are unlikely to draw positive inferences regarding the quality of a breakfast bar with added trans fat. Likewise, most real added

ingredients cannot be used as credible subtracted ingredients. Thus, to control for consumers' pre-existing attitudes toward and potential knowledge about real ingredients, we used a fictitious ingredient represented by a four-letter acronym in both the added- and subtracted-ingredient conditions. We conducted extensive pretests on brand names, product categories, and ingredient names in order to construct the stimuli for our main studies.

Pretest 1. In pretest 1, we asked 43 undergraduate students to report their overall attitude towards a number of categories (1 = unfavorable, 7 = favorable), their frequency of shopping in that category (1 = never, 7 = very often), and the relevance and importance of the category to them (five seven-point scales, 1 = unimportant/ of no concern/ irrelevant/ means nothing/ something I'm not involved with, 7 = important/ of great concern/ relevant/ means a lot/ something I'm highly involved with; $\alpha > .88$ for all of the six pretested categories). In addition, we used two questions to measure the importance of ingredients in the product category: "How important to you are the ingredients that go into the products from this category?" (1 = not important at all, 7 = very important) and "How often do you read the ingredients section on the label of products in this category?" (1 = never, 7 = always).

The breakfast bar category pretested as one evoking neutral attitudes ($M_{att} = 4.88$) and characterized by an acceptable level of shopping frequency ($M_{freq} = 3.71$). The category's mean scores on the importance of ingredients and the frequency of reading the ingredients on the label were $M_{importance} = 5.61$ and $M_{read} = 4.93$ respectively.

Pretest 2. In order to minimize the difficult-to-control variance resulting from consumers' past experiences with and pre-existing attitudes toward real brands, we employed fictitious brands in our stimulus. The purpose of pretest 2 was to identify neutral and relatively unfamiliar fictitious brand names. Familiarity was measured on a seven-point scale (1 = unfamiliar, 7 =

familiar) and attitude - on a three-item scale (1 = bad brand name/ dislike/ unfavorable, 7 = good brand name/ like/ favorable; $\alpha > .93$ for any of the 11 brand names pretested) similar to the ones employed in the first pretest. The Astra brand name satisfied the above requirements with a low familiarity ($M_{\text{fam}} = 1.81$) and neutral attitude ratings ($M_{\text{att}} = 3.76$; $\alpha = .96$). In addition, pretest 2 asked respondents an open-ended question about whether they associate each one of the list of brand names we provided with any particular product category. Astra was not consistently associated with any product category.

Pretest 3. We conducted pretest 3 with 35 undergraduate students to ensure that our fictitious four-letter ingredients were not associated with any existing substances which could potentially introduce bias to our experiment. To make the pretest more realistic, we tested the ingredients within the context of the previously pretested category of breakfast bars. Thus, respondents were asked to imagine that they come across “a breakfast bar with WXYZ” on one of their routine shopping trips and then they were asked to indicate how familiar they are with the ingredient (1 = unfamiliar, 7 = familiar), and what their overall attitude towards it is (three scales with 1 = bad ingredient/ dislike/ unfavorable, 7 = good ingredient/ like/ favorable). We chose HCOV as the ingredient for our experiment because it exhibited very low familiarity ($M_{\text{fam}} = 1.06$) and neutral ratings ($M_{\text{att}} = 3.93$; $\alpha = .91$).

Design and Participants

Forty-eight college students voluntarily participated in the study. One half of them were randomly assigned to the subtracted-ingredient condition and saw a stimulus containing an advertisement for Astra breakfast bar “with no HCOV,” while the other half were assigned to the

added-ingredient condition and saw a stimulus featuring an ad for Astra breakfast bar “with HCOV.” The ingredient was featured both on the product package and in the copy of the advertisement (figure 1.1). The advertisements were followed by measures of behavioral intent towards the Astra breakfast bar which consisted of three seven-point items gauging intent to try (1 = would never try, 7 = would definitely try), intent to use (1 = would never use, 7 = would definitely use), and intent to buy (1 = would never buy, 7 = would definitely buy). Following this activity, participants were debriefed and thanked.

Results and Discussion

A one-way ANOVA revealed that respondents in the subtracted-ingredient condition displayed stronger behavioral intent toward the product they were exposed to than did respondents in the added-ingredient condition ($M_{\text{sub}} = 3.65$ vs. $M_{\text{add}} = 2.93$, $F(1, 46) = 5.08$, $p < .03$). This finding supports the view that there exists a subtracted-ingredient effect whereby, *ceteris paribus*, products featuring subtracted ingredients receive higher consumer evaluations than products featuring added ingredients and suggest that there may be inherent advantages to employing a subtracted-ingredient strategy instead of an added-ingredient one.

Regardless of the strong support for the existence of a subtracted-ingredient effect that study 1 provides, our explication of the phenomenon in terms of gain- and nonloss-framing is just a speculation at this point. Another possibility is that the potential negative outcome cued by the subtracted ingredient was perceived to have far greater implications for respondents than the positive end-state suggested by the added ingredient. As a result, respondents understandably may have put more weight on avoiding the negative outcome than on attaining the positive one.

Kick-start your day!
ASTRA Breakfast Bar with no HCOV



Find the **Astra Breakfast Bar with no HCOV**
at a store near you

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Figure 1.1: Stimulus for study 1

In other words, the outcomes implied by each of the ingredient strategies were not equivalent, but rather significantly differed in the scope of their prospective implications to consumers. Such a situation would put into question the role of goal framing in the manifestation of the subtracted-ingredient effect as well as the very qualification of the issue as a framing one (Fagley 1993; Levin, Schneider, and Gaeth 1998). Our next two studies utilize the regulatory focus theory (Higgins et al. 1994) to investigate whether consumers' sensitivity to gain-related vs. loss-related outcomes is really at play in determining evaluations of products featuring ingredients.

REGULATORY FOCUS

The theory of regulatory focus (Higgins et al. 1994; Higgins 1997) is based on two theoretical paradigms in psychology. The first, self-discrepancy theory (Higgins 1987), stipulates how discrepancies between different aspects of the self influence the type of emotional discomfort an individual suffers. Higgins highlights two influential discrepancies, the one between the *actual self* and the *ideal self*, and the one between the *actual self* and the *ought self*. The ideal self reflects a person's beliefs about his or her own or others' hopes, aspirations, and wishes for that person and actual/ideal discrepancies signify the absence of positive end-states. The ought self reflects a person's beliefs about his or her own or others' thoughts about that person's duties, obligations, and responsibilities and actual/ought discrepancies signify the presence of negative end-states. The second paradigm serving as a basis for the regulatory focus theory is Carver and Scheier's (1990) theory of self-regulation. According to it, individuals' self-regulation is directed at approaching positive outcomes and avoiding negative ones.

Regulatory focus theory (Higgins et al. 1994; Higgins 1997) marries the two paradigms by prescribing that individuals whose ideal self-guides are more accessible (people with stronger ideals) adopt a promotion focus to self-regulation and are more sensitive to the presence and absence of positive outcomes or desired end-states. In contrast, individuals whose ought self-guides are more accessible (people with stronger oughts) adopt a prevention focus to self-regulation and are more sensitive to the presence and absence of negative outcomes or undesired end-states. Individuals demonstrate a chronic disposition towards one of the two types of regulatory focus (promotion or prevention) depending on whether they hold stronger ideal or ought selves, but regulatory focus can also be situationally induced for shorter periods through temporary increases of the accessibility of ideal or ought self-views (Higgins et al. 1994).

Research on regulatory focus has clearly demonstrated that certain behaviors, affective reactions, and goal attainment strategies are affected by our regulatory orientation. Specific domains influenced by it include motivation (Lockwood, Jordan, and Kunda 2002; Sengupta and Zhou 2007), perception (Förster and Higgins 2005), information processing (Aaker and Lee 2001; Wang and Lee 2006), cognition (Zhu and Meyers-Levy 2007), affective responses (e.g., Higgins, Shah, and Friedman 1997), consumer preferences (Chernev 2004b; Zhou and Pham 2004), branding (Yeo and Park 2006), and persuasion (Kirmani and Zhu 2007; Jain et al. 2007; Zhao and Pechmann 2007). However, our interest here is in one particular aspect of the self-regulation system described above: its ability to alter our sensitivity to gain-related (gains and nongains) vs. loss-related (losses and nonlosses) outcomes as motivating factors in our behavior (Aaker and Lee 2001; Idson, Liberman, and Higgins 2000; Jain et al. 2007; Kim 2006; Shah, Higgins, and Friedman 1998). More specifically, Tykocinski, Higgins, and Chaiken (1994) posit that such differences in sensitivity between individuals with activated actual/ideal and

actual/ought discrepancies cause the former to pay more attention to and display better memory for gain-framed messages, whereas the latter demonstrate a similar attention and retention levels relative to the loss frame. The same pattern has been observed by Shah, Higgins, and Friedman (1998) and Lockwood, Jordan, and Kunda (2002) who hypothesize that promotion-focused (vs. prevention-focused) individuals are motivated by task incentives and role models that highlight gains (losses). Further, Florack and Scarabis (2006), Lee and Aaker (2004), and Zhao and Pechmann (2007) demonstrate that such a match between the regulatory focus of respondents and the framing of a persuasive message increases persuasion as well as has a positive effect on evaluations of the message and the product described in it. Lastly, Yi and Baumgartner (2008) specifically compared a gain-framed ad to a nonloss-framed one and found that the former is more persuasive when its audience is promotion-focused, but failed to detect any significant differences between the ads when respondents were prevention-focused.

The aspect of our self-regulation system concerned with our sensitivity to gain- vs. loss-related outcomes suggests that the situational regulatory orientation of consumers may moderate the subtracted-ingredient effect manifested in our first experiment. Our concrete prediction is that individuals will tend to prefer a product that suits their current outcome sensitivity or discount a product that does not suit it. Thus, we propose that the preference for offerings employing added- and subtracted-ingredient strategies is influenced by consumers' regulatory focus whereby products with added ingredients, through their intuitive association with approaching positive end-states, resonate better with individuals with promotion goals and products with subtracted ingredients, through their general association with avoiding negative end-states, appeal more to people who have a prevention focus of self-regulation. Formally,

H2: Promotion-focused consumers are more likely to prefer products with added ingredients (relative to products with subtracted ingredients) than are prevention-focused consumers, whereas prevention-focused consumers are more likely to prefer products with subtracted ingredients (relative to products with added ingredients) than are promotion-focused consumers.

Self-regulation goals in consumption settings can be dictated not only by consumers' active self-guides, but also by the benefits a product provides. Although the benefits provided by products in most categories can be conceptualized both in terms of desired and undesired end-states, there is evidence that some products are predominantly associated with a promotion focus, whereas others - with a prevention focus of self-regulation (Florack and Scarabis 2006; Zhou and Pham 2004). Thus, some product categories are inherently promotion-oriented (i.e., air fresheners), while others inherently prevention-oriented (i.e., odor neutralizers). We propose that our regulatory focus hypothesis extends to intrinsically promotion and prevention categories whereby consumer preference is higher (lower) when the predominant focus evoked by the product category increases (decreases) consumers' sensitivity to the outcomes cued by the ingredient strategy. We formalize this prediction in the third hypothesis:

H3: Consumers are more likely to prefer products with added-ingredients (relative to subtracted-ingredients) in a promotion-oriented product category, but products with subtracted-ingredients (relative to added-ingredients) in a prevention-oriented product category.

Supporting hypotheses 2 and 3 would also indirectly discount universally greater perceived implications of the negative outcome cued by a subtracted ingredient compared to those of the positive outcome implicit to an added ingredient as a possible explanation of the

result of study 1. If that indeed was the driver of the subtracted-ingredient effect, respondents' preference for the subtracted-ingredient over the added-ingredient product should not be affected by the manipulation of their sensitivity towards gain- vs. loss-related outcomes through their regulatory focus.

STUDY 2

Study 2 was designed to test hypothesis 2. We expected that participants with a promotion focus would display higher levels of preference for a product with an added ingredient relative to a product with a subtracted ingredient. Conversely, we expected that participants with a prevention focus will display a higher preference for a product with a subtracted relative to a product with an added ingredient.

Design and Participants

We employed a 2 X 2 between-subjects, factorial design to investigate the effects of regulatory focus (promotion vs. prevention) and the type of ingredient strategy employed by a product (subtracted- vs. added-ingredient strategy) on the evaluation of the product. Eighty-four college students voluntarily participated in the study. To manipulate the first factor, evoked regulatory focus, we incorporated a procedure based on the work of Higgins and his colleagues (Higgins et al. 1994; Higgins 1997), and used by Chernev (2004a, 2004b). The manipulation for respondents in the prevention focus condition consisted of listing three duties or obligations they had at the time, while the manipulation for respondents in the promotion focus condition asked

for a list of three hopes or aspirations. We manipulated the second factor, the type of ingredient, at two levels using stimuli identical to the ones in study 1. One half of the respondents were randomly assigned to the subtracted-ingredient condition and exposed to the ad for Astra Breakfast Bar featuring a subtracted (“with no HCOV”) ingredient, while the other half was shown the ad featuring an added (“with HCOV”) ingredient.

After seeing the respective ad, participants reported their preference for the Astra bar on the same three seven-point scales used in our first study. Following this activity, participants were debriefed and thanked.

Results and Discussion

We averaged participants’ scores on the three preference items to form a composite behavioral intent score ($\alpha = .93$). We then examined the pattern of this score, reported in figure 1.2, using a 2 (evoked regulatory focus: promotion vs. prevention) x 2 (type of ingredient: added vs. subtracted) between-subjects ANOVA. Consistent with hypothesis 2, we found a significant interaction between regulatory focus and type of ingredient employed by the product ($F(1, 80) = 9.67, p < .01$). Neither one of the main effects was statistically significant. Planned contrasts revealed that, among participants in the promotion-focus conditions, those who were presented a product with an added-ingredient reported higher intent than those who were presented the same product but with a subtracted ingredient ($M_{\text{add}} = 3.13$ vs. $M_{\text{sub}} = 2.32; t(42) = 2.16, p < .04$).

Conversely, among participants in the prevention focus conditions, those who were presented with a product with a subtracted ingredient reported higher levels of behavioral intent

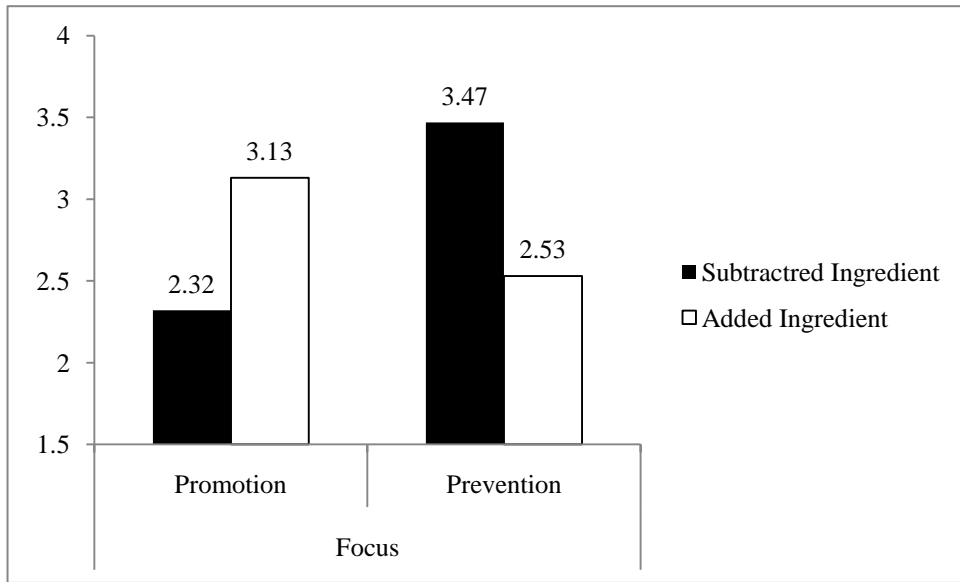


Figure 1.2: Results of study 2

than those who were presented with a product with the same ingredient added ($M_{\text{sub}} = 3.47$ vs. $M_{\text{add}} = 2.53$; $t(38) = 2.23$, $p < .04$).

The results from study 2 were consistent with our prediction that regulatory focus moderates the subtracted-ingredient effect on product evaluations. In line with hypothesis 2, the heightened sensitivity to gain-related (loss-related) compared to loss-related (gain-related) outcomes of respondents in the promotion (prevention) focus condition resulted in this group's higher valuations of the added-ingredient (subtracted-ingredient) product. What is more, this analysis excludes the possibility that the subtracted-ingredient effect documented in study 1 is a consequence of the perceived extremity of the negative outcome addressed by ingredient subtraction being greater than that of the positive outcome obtained through ingredient addition. Rather, the fact that the promotion focus induction reversed the subtracted-ingredient effect to an added-ingredient one provides support for our proposition that ingredient strategies have the ability to frame a product's benefit in terms of either a gain or a nonloss and that this framing effect can in turn interact with an individual's self-regulatory system by virtue of the relationship between one's regulatory focus and his or her sensitivity to gains vs. losses.

In study 2, we manipulated respondents' regulatory focus by having them think and write about either their hopes and aspirations or their duties and responsibilities in life. This procedure is only one of many stimuli that can put our self-regulatory system in a promotion or prevention mode. Much more relevant in consumption settings however, promotion and prevention goals may also be primed or cued by the inherent nature of some product categories (Florack and Scarabis 2006; Zhou and Pham 2004). The explicit or implicit benefits that some products provide may temporarily trigger a promotion or prevention focus. For example, consider the difference between an investment account and an insurance policy. The former has a focus on

attaining a positive outcome, while the latter is concentrated on avoiding a negative outcome. In the next study, we examine whether an interaction similar to the one demonstrated in study 2 between the inherent orientation of a product category and a product's ingredient strategy can influence consumer preferences.

STUDY 3

The objective of study 3 was to test hypothesis 3. Whereas study 2 examined the interaction between evoked regulatory focus and type of ingredient strategy, study 3 investigates whether the findings from our second experiment extend to consumption settings in which promotion and prevention goals are activated by cues (such as category specificities) that are characteristic of the market environment. The difference between the two studies is that instead of manipulating participants' regulatory focus, we employ comparable products from intrinsically prevention- and promotion-oriented categories that prime the respective self-regulation goals.

Design and Participants

Sixty-six undergraduate students voluntarily participated in the study. We employed a 2 x 2 between-subjects factorial design. To manipulate the first factor, regulatory focus of the product category, we exposed participants to an advertisement for one of two products—either an inherently promotion- (air freshener) or an inherently prevention-focused product (odor neutralizer). These two product categories were selected on the basis of a pretest involving 17

graduate students who were provided definitions of a promotion- and a prevention-oriented product and asked to rate each of a list of categories on a seven-point scale (1 = prevention product, 7 = promotion product). The results of the pretest demonstrated that the ratings of air fresheners are significantly higher than the ratings of odor neutralizers ($M_{\text{air}} = 5.47$ vs. $M_{\text{odor}} = 2.82$; $t(16) = 4.71, p < .001$) and that both ratings are significantly different from the mid-point of the scale in the expected direction ($t_{\text{air}}(16) = 3.92, p < .01$ and $t_{\text{odor}}(16) = 2.79, p < .02$). The commonalities between the two product categories allowed us to employ identical stimuli for the two conditions except for the advertisement copy containing the ingredient information. We manipulated the second factor, the type of ingredient, at two levels. One half of the respondents were exposed to a product featuring a subtracted ingredient, while the other half was shown a product featuring an added ingredient. The ingredient was featured both on the visual of the product and in the copy of the advertisement. The brand of the product and the ingredient were the same as the ones used in study 1.

After seeing their version of the advertisement, participants reported their preference for the featured product. Preference was operationalized as attitude towards the product, and participants were asked to indicate their reaction to the product on four, seven-point items (1 = dislike very much/ unfavorable/ bad product/ negative, 7 = like very much/ favorable/ good product/ positive). Participants were then debriefed and thanked.

Results and Discussion

We averaged participants' scores on the four attitude items to form a composite evaluation score ($\alpha = .78$). A 2 (type of ingredient: subtracted vs. added) x 2 (nature of product:

promotion vs. prevention) between-subjects ANOVA revealed a significant interaction effect ($F(1, 62) = 10.52, p < .01$) between the two independent variables on consumer preferences (figure 1.3). No main effects were statistically significant. Consistent with our hypothesis, planned contrasts revealed that participants in the promotion-focused product condition reported higher evaluations of the added-ingredient compared to the subtracted-ingredient product ($M_{\text{add}} = 4.31$ vs. $M_{\text{sub}} = 3.73; t(30) = 2.49, p < .02$). In contrast, participants in the prevention-focused product condition indicated higher evaluations of the subtracted-ingredient than the added-ingredient product ($M_{\text{sub}} = 4.46$ vs. $M_{\text{add}} = 3.93; t(32) = 2.13, p < .05$).

The results of study 3 show that a product can benefit from having its ingredient strategy aligned with the orientation of the product category from a regulatory focus perspective. The findings maintain that consumers may respond more favorably to a subtracted- compared to an added-ingredient approach for prevention-oriented categories, but that the reverse may be true for promotion-oriented categories. The evidence is consistent with the results of study 2, and suggests that categories may be able to activate promotion or prevention regulatory goals which, in turn, may be matched or mismatched with the ingredient strategy deployed. As a result of the alignment or misalignment of the ingredient type with consumers' sensitivity to positive or negative outcomes as triggered by the nature of the product category, significantly higher product evaluations were reported by participants in the aligned conditions compared to those reported by participants in the misaligned conditions.

The results from studies 2 and 3 support our prediction regarding the interaction between the ingredient strategy and the regulatory focus of the consumer. Furthermore, they represent evidence that ingredient strategies may really have the power to frame product benefits in terms of presence of gains or absence of losses. Despite the intriguing results, the focus of our studies

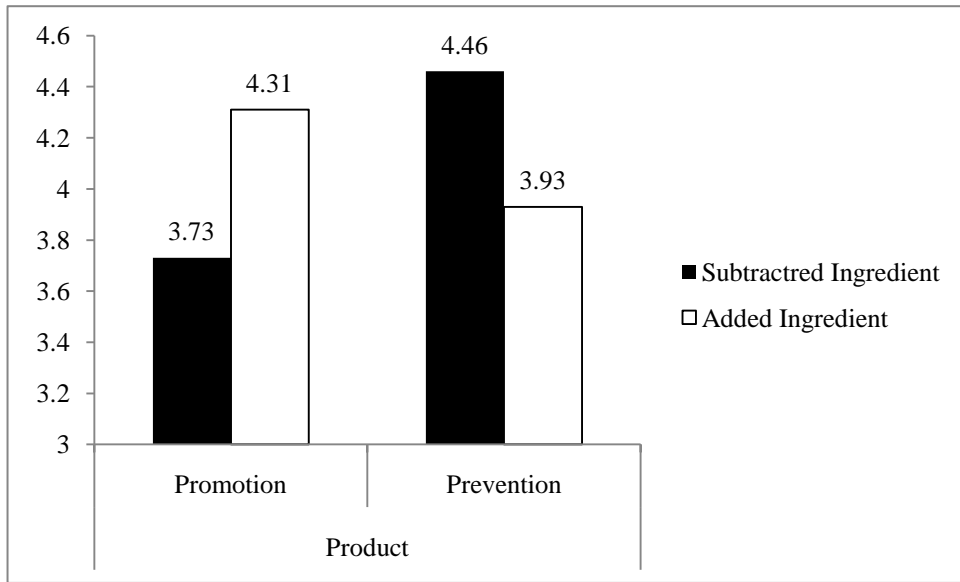


Figure 1.3: Results of study 2

up to this point has been the very product that features the ingredient. However, as contextual cues have been demonstrated to affect judgment in many areas of life (Martin 1986; Meyers-Levy and Tybout 1997; Schwarz and Bless 1992), we should expect that ingredients' influence spills over to adjacent competitive products. Evidence in support of such a spillover will not only suggest that ingredient strategies can play a role in product evaluations even when part of the context, but also indirectly demonstrate the robustness of the subtracted-ingredient effect in the presence of non-ingredient alternatives (Hsee 1996).

While they have been well documented over the years, context effects on product evaluations generally have two diametrically opposite forms: assimilation and contrast (Meyers-Levy and Sternthal 1993). One of the most important factors in determining whether the context will result in assimilation or contrast is the category membership of the target and context objects. Evidence strongly suggests that evaluation of the target is inversely related to the evaluation of the context (contrast) when both are part of the same category, but that the evaluations are directly related (assimilation) when target and context are members of dissimilar categories (Nam and Sternthal 2008; Raghunathan and Irwin 2001; Simonson and Tversky 1992). As we are interested in competing offerings implying same-category membership of target and context, we expect the manifestation of a contrast effect between an ingredient-featuring context product and a non-ingredient target. Hence, we predict that in the context of a single product category, products that do not feature any ingredients will be contrasted to ingredient products. Specifically,

H4: Consumers will exhibit preference for a product whose context consists of a competing subtracted-ingredient product over one presented in the context of a competing added-ingredient product.

STUDY 4

The purpose of study 4 was to test hypothesis 4. It shifts our focus from the ingredient product to its context. Following the model of a supermarket shelf where competing products from the same category are displayed next to each other, we predict that a non-ingredient product will be better off presented in the company of an added-ingredient product than coupled with a subtracted-ingredient one. Our hypothesis is in line with norm theory's proposition for default contrasts in within-category comparisons (Kahneman and Miller 1986).

Design and Participants

Fifty-nine undergraduate business students were randomly assigned to one of two conditions and asked to imagine that they find themselves in the snack aisle during a routine shopping trip to the supermarket. Respondents in one of the cells saw an Astra breakfast bar with ACPT and an Avensis breakfast bar featuring no ingredient, while those in the other cell saw an Astra bar with no ACPT and the same Avensis product. The Astra bar was identical to the product used in the stimuli for study 1 with the only difference being the ingredient: ACPT instead of HCOV. Both the Avensis brand name and the ACPT ingredient were pulled from pretests 2 and 3 respectively and satisfy the requirements for neutrality and unfamiliarity imposed to the Astra moniker and HCOV ingredient. Following the images, students were asked to indicate their behavioral intent toward the *non-ingredient product* (Avensis) on two seven-point items (1 = would never try/buy, 7 = would definitely try/buy).

Results

A one-way ANOVA revealed a significant effect of context product's ingredient strategy on respondents' behavioral intent toward the non-ingredient target ($M_{\text{sub}} = 3.27$ vs. $M_{\text{add}} = 4.27$, $F(1, 57) = 7.48$, $p < .01$). This result supports the idea that the subtracted-ingredient effect documented in study 1 has the potential to spill-over to proximal products. In settings where “ingredient” and target products are members of the same category, contrast effects lead to higher evaluations when the non-ingredient target is coupled with an added-ingredient offering than when it is displayed in combination with a subtracted-ingredient one. What is more, the finding from this study provide additional evidence that, everything else equal, consumer may prefer subtracted-ingredient products over added-ingredient ones.

GENERAL DISCUSSION

While non-branded ingredients are widely deployed in product packaging and in advertising, there is virtually no research on their impact on consumer preference and decision-making. In this paper, we examined the effect of two polar opposite ingredient branding strategies—added-ingredient versus subtracted-ingredient—on consumer evaluation of products. We speculated that subtracted ingredients can cue a negative outcome or a loss, whereas added ingredients can draw associations with positive outcomes or gains. Consequently, the implied benefits of the two types of ingredients are fundamentally different: an added ingredient is implicitly directed at obtaining a gain, while a subtracted ingredient implies the avoidance of a loss. Based on previous research on negativity effects (Ito et al. 1998; Kahneman and Tversky

1991) and gain vs. loss framing (Levin, Schneider, and Gaeth 1998), we posited a subtracted-ingredient effect described as a higher consumer preference for products with subtracted ingredients than for products with added ingredients. The main goal of our first study was to test this prediction which was supported by the data.

Prior research has also demonstrated that an individual's regulatory focus can shift his or her sensitivity from gain- to loss-related outcomes and vice versa with a promotion focus characterized by heightened attention to the former and a prevention focus associated with greater consideration of the latter (Lee and Aaker 2004; Lockwood, Jordan, and Kunda 2002; Shah, Higgins, and Friedman 1998; Yi and Baumgartner 2008; Zhao and Pechmann 2007). In light of our assumption that added-ingredient (vs. subtracted-ingredient) products tend to represent a gain (vs. nonloss) situation from consumer perspective, we predicted that an added-ingredient (subtracted-ingredient) strategy will be more effective with promotion (prevention) oriented consumers. We also suggested that similar pattern exists when it comes to the effectiveness of ingredient strategies in conjunction with inherently promotion vs. prevention product categories (Florack and Scarabis 2006; Zhou and Pham 2004). Studies 2 and 3 found support for the above predictions.

Going beyond the influence ingredient strategies have on perceptions of the products employing them, study 4 investigated whether ingredients can affect the evaluations of non-ingredient products placed in proximity to products featuring ingredients. Our specific expectations were that non-ingredient offerings would be contrasted to their ingredient counterparts when both are part of the same product category resulting in higher valuation of a non-ingredient product when it is coupled with an added-ingredient one compared to when it is presented in the company of a product featuring a subtracted ingredient.

Summary of Findings

Based on our proposition that ingredients have the ability to frame the benefit of using a product in terms of either obtaining a gain or avoiding a loss and the prevailing evidence that loss frames may be more persuasive, memorable, and attention-grabbing relative to gain frames, we hypothesized the existence of a subtracted-ingredient effect whereby consumers prefer a product featuring a subtracted ingredient over a comparable added-ingredient product. Study 1 confirmed our prediction by documenting that people exhibit a higher level of behavioral intent towards a product with a subtracted-ingredient relative to a product featuring an added ingredient. This finding suggests that products employing a subtracted-ingredient strategy may, *ceteris paribus*, have an inherent advantage over products using an added-ingredient strategy.

Incorporating the theory of regulatory focus, studies 2 and 3 relied on the fact that promotion (prevention) focus of self-regulation is associated with a heightened sensitivity to gains (losses) to demonstrate that products with added (subtracted) ingredients may be perceived as better relative to products with subtracted (added) ingredients in promotion (prevention) consumer contexts. Specifically, our findings demonstrate that an alignment between ingredient strategy and consumers' regulatory focus (study 2) and between ingredient strategy and a product category's inherent promotion or prevention nature (study 3) is beneficial to consumer preferences. As a result, participants exhibited higher levels of behavioral intent (study 2) and product evaluations (study 3) in the alignment compared to misalignment conditions. Although the strength of the observed effects can also depend on other internal and external factors operating in the marketplace, the results of these two studies suggest that in situations in which they have a choice of whether to emphasize a subtracted or an added ingredient, marketers may

be able to enhance a product's appeal by aligning the ingredient strategy it employs with characteristics of the consumer and the product.

Extending the focus of the study beyond products employing ingredient strategies, study 4 concentrated on their environment. The outcome of our fourth experiment suggests that consumers contrast non-ingredient to ingredient products when both are members of the same category and presented together. This allows the subtracted-ingredient effect to spillover to neighboring offerings. As a result, these proximal non-ingredient products fare better in terms of consumer evaluations when coupled with added-ingredient compared to when paired with subtracted-ingredient products. This finding bares implications for any product marketed through websites, catalogues, or brick-and-mortar stores where it or its image may be found in close proximity to ingredient products or their images.

Implications and Future Research

The existing research on the effects of product ingredients on consumer behavior focuses largely on branded ingredients (Janiszewski and van Osselaer 2000; Park et al. 1996; Rao and Ruekert 1994; Venkatesh and Mahajan 1997). The current research contributes to the study of product ingredients in at least three ways. First, it examines non-branded ingredients, a type that has not been studied separately from branded ingredients. Despite non-branded ingredients' popularity and their ensuing significance to consumer behavior, they have only been researched as a backdrop for their branded versions. To the best of our knowledge, this inquiry represents the first attempt at exploring non-branded ingredients in their own right. Second, this study defines two distinct categories of non-branded ingredients: subtracted and added ingredients. The

added-subtracted ingredient dichotomy can serve as a basis for other meaningful ways of classifying non-branded ingredients which may have an effect on consumer behavior. Third, this research provides some evidence in support of the view that ingredients have the potential to frame a product's benefit in terms of either gain attainment or loss avoidance. The result of this phenomenon is the subtracted-ingredient effect which we document. This effect's manifestation consists of a higher level of behavioral intent expressed by consumers towards products with subtracted ingredients relative to products with added ingredients.

Our research adds to the gain-loss framing literature, which has been providing conflicting evidence as to the efficacy and persuasiveness of gain vs. loss frames. Moreover, there are very few studies that compare gain vs. nonloss frames in particular. Our findings suggest that, *ceteris paribus*, nonloss frames as defined by subtracted ingredients may draw higher consumer valuations relative to gain frames as represented by added ingredients, a result which is in line with other research on goal framing and negativity effects.

That said, we believe there is considerable scope for future research to investigate the implications of our findings for different areas of research and to delineate boundary conditions to the effects measured here. For instance, we confirmed the moderating role of consumers' momentary regulatory focus both when it was invoked by an unrelated activity or by the characteristics of the product category. Future research can potentially examine other possible moderators such as consumer involvement with the category (Maheswaran and Meyers-Levy 1990), processing motivation (Monga and Zhu 2005; Shiv, Britton, and Payne 2004), and perceived risk (Lee and Aaker 2004).

The assumption that added and subtracted ingredients would *generally* be associated with gain- and loss-related end-states respectively by no means implies that the mapping of ingredient

strategies with the corresponding end-states will be universal. If an ingredient is widely believed to be primarily associated with avoidance of an undesirable end-state, its addition may still emphasize the loss avoidance benefits of using a product. In other words, the framing provided by the characteristics of an ingredient can counteract the framing resulting from the deployment of a particular ingredient strategy. For example, if vitamin C is strongly associated with avoiding the common cold, its mention may stress the cold prevention strength over other qualities of the product to which vitamin C is added. The reverse may be true for ingredients whose absence is widely associated with desirable end-states. Examining the possible interaction between ingredient's inherent associations and the type of ingredient strategy it is deployed through presents another avenue for future studies.

One important question we did not address is whether the way in which subtracted and added ingredients are presented linguistically has an effect on the phenomena we observed (Maheswaran and Meyers-Levy 1990; Peeters and Czapinski 1990). It must be noted that our experiments employ only one of the several linguistic expressions through which a subtracted ingredient can possibly be formulated; namely "with no HCOV". Some of the other variations include "without HCOV", "no HCOV", and "HCOV free". While all of these variants are similar semantically, there may be subtle language differences affecting the ability of ingredients to frame a product's benefit in a certain way.

A separate matter is how the subtracted ingredient effect and the moderating role of regulatory focus we observed would be affected if familiar ingredients are used instead of four letter acronyms. Particular ingredients' ability to frame a product will change as knowledge about and sensitivity to them vary among consumers. A consumer with extensive knowledge about the negative health effects of cholesterol or someone with an existing heart condition

would be much more sensitive to the exclusion of cholesterol from a product than would be a person unaware of those effects. Consequently, cholesterol as a subtracted ingredient may provide a strong loss-avoidance framing for the former, but not the latter. Familiar added ingredients would operate in a similar way. In sum, ingredients about which consumers generally are knowledgeable would bring a new layer to our analysis and their research from a subtracted-added ingredient perspective would provide both marketing practitioners and consumers with more specific insight about their influence on consumer preferences.

Last but not least, future research should investigate the interplay between framing effects stemming from ingredient strategies and framing effects originating from the promotional message. Do they cancel each other, is one type stronger than the other, what happens when they work in the same or the opposite direction are some of the questions that need to be addressed.

Managerial Implications

Most products are bundles of attributes or ingredients and marketers have some discretion over which ones to actively promote or suppress in order to generate the most favorable consumer evaluation. Our findings provide several pointers for how marketers may deploy added versus subtracted ingredient strategies. First, we find that the promotion of subtracted ingredients may have a greater positive impact on consumers than the promotion of added ingredients. This may be good news for marketing practitioners because they may have more flexibility in finding an appropriate subtracted ingredient to promote due to the fact that the ingredients that are not part of a product usually far outnumber the ingredients that are part of the product's contents.

Second, the moderating role of an individual's regulatory focus on the subtracted-ingredient effect implies that the promotion of ingredients should be executed with attention to consumers' individual proclivity to a particular self-regulation pattern and potential environmental influences on their regulatory focus. Further, the results of our study 3 suggest that categories themselves may possess an intrinsic regulatory orientation where some are more prevention-oriented while others are more promotion-oriented. One implication of this finding is that marketers should align their ingredient strategy with the underlying regulatory orientation of the product category; promotion-oriented categories are likely to be well-served by an added-ingredient strategy, while a subtracted-ingredient strategy is likely to be more suitable for prevention-oriented categories. Although they were not tested here, other elements of the marketing mix, such as the advertising message, can also be expected to affect the effectiveness of subtracted and added ingredient strategies.

Last, this work provide evidence that evaluations of non-ingredient products can vary as a consequence of competition's employment of subtracted and added ingredients. This spillover effect is a result of a contrast between the non-ingredient offering and ingredient products that happen to be in immediate proximity at the time the consumer is exposed to it. Therefore, marketers should take into consideration the ingredient strategies utilized by neighboring and competitor products in all types of retail settings.

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CHAPTER 2

EXTENSION AMONG EXTENSIONS: THE IMPACT OF CONTEXT EXTENSIONS ON CUSTOMERS' EVALUATION OF A BRAND EXTENSION

Information Resources Inc.'s 2009 publication of *New Product Pacesetters* reported that brand extensions constituted 93% of all new food and beverage products whose first-year sales exceeded \$7.5 million following a launch across all mass channels excluding Wal-Mart (Dolliver 2010). In an increasing number of product areas, the majority of new selections are extensions of brands from other categories. This is especially true for innovative categories, such as yogurt bars, where the vast majority of new launches are from existing brands such as Nature Valley, Kellogg's, Nestle, Pillsbury, Weight Watchers, Blue Bunny, Yoplait, Wallaby, Häagen-Dazs, Quaker, or even private brands such as Safeway's Eating Right.

Thus, almost every offering in such a competitive grouping is a brand extension of parent brands whose original, core categories are highly diverse. Because perceptions of fit between a brand's parent and extension categories affect customers' evaluation of an extension (Batra, Lenk, and Wedel 2010), the simultaneous co-existence of multiple extensions within product areas raises an important question. Is the evaluation of a new extension into a category affected by customers' assessment of the relationship between the current extensions and their respective parent brands?

Although previous research has examined the influence of competition on the evaluation of brand extensions, such investigations have proceeded indirectly, addressing variables such as market share (Oakley et al. 2008; Smith and Park 1992; Sullivan 1992). With one notable,

recent exception (Milberg, Sinn, and Goodstein 2010), extant research has attempted neither to measure directly the effects of placing brand extensions among competing extensions nor to analyze the factors contributing to brand performance. The lack of such research is surprising given the fact that, not only do consumers rarely encounter brand extensions in isolation, but also the competition itself very often consists of other brand extensions.

This paper intends to begin filling this gap in the literature. In a general way, the present work investigates first the degree to which, and second the way in which, surrounding point-of-sale competitor-extensions affect consumer evaluation of a particular company's own brand extension. To further this overall approach, we refer to the perceived fit between the focal brand extension and its parent brand as focal fit (FF). Along the same lines, we refer to the perceived fit between a context extension and its parent brand's core category as context fit (CF).

Our results appear in the form of four studies. Study 1 demonstrates a twofold point. First, a focal brand extension generates a higher evaluation and its fit with the brand's core product category (FF) seems better when the fit of the context brand extensions to their respective original categories (CF) is worse than the FF. Dovetailing intuitively with this finding is that lower brand evaluations and worse perceived FF emanate from a better CF vis-à-vis FF. Moreover, the perceived FF plays a mediating role in defining the relationship between CF and the evaluation and choice share of the focal extension.

Study 2 illustrates a dual contention. First, the evaluation of competitor extensions prior to that of a focal brand's extension results in higher levels of perceived focal brand expertise and FF when CF is worse than FF. Second, such an order of evaluation has no clear effect when CF is better than FF.

Study 3 demonstrates that a focus on the differences (commonalities) between extensions and their brands' core products works better for the focal brand compared to a focus on extension-core commonalities (differences) when CF is better (worse) than FF. Concomitantly, an integration compared to a differentiation mindset produces a stronger effect of CF on brand evaluations as manifested through the difference between "CF better" and "CF worse" conditions.

Finally, Study 4 shows that proximity context effects on brand extension evaluations spill over even from neighboring extension categories. Such influences are especially strong when CF is worse than FF. Taken together, these findings may lay a foundation for strategic approaches to contextualizing a focal firm's extension products in an optimal fashion.

CONCEPTUAL DEVELOPMENT

Launching products in new categories has been a popular strategy for leveraging a brand's equity and increasing its revenues (Loken and John 1993). The most influential determinant of consumer evaluation of brand extensions is the similarity between the brand's core and extension categories (Aaker and Keller 1990; Volckner and Sattler 2006). Additional factors that affect the success of extensions include customers' processing styles (Kim and John 2008; Monga and John 2010), emotions associated with the brand (Broniarczyk and Alba 1994; Fedorikhin, Park, and Thomson 2008), the use of co-branding strategies (Desai and Keller 2002; Lafferty 2007; Park, Jun, and Shocker 1996; Simonin and Ruth 1998), and the nature of the product extension (Hagtvedt and Patrick 2009; Sood and Dreze 2006). Environmental factors that influence the acceptance of brand extensions include the characteristics of parent brand's

product portfolio (Boush and Loken 1991; Dacin and Smith 1994), prior exposure to extensions (Klink and Smith 2001) and counter-extensions (Kumar 2005a; 2005b), and the stage in the product category's lifecycle at the time of the extension's introduction (Sullivan 1992).

Context effects have also received extensive attention within the broader domain of consumer research. Some of the documented contextual influences on brands and products include advertising by other-category brands (Kim and Meyers-Levy 2007; Nam and Sternthal 2008; Raghunathan and Irwin 2001), physical location (Meyers-Levy and Sternthal 1993), unrelated affective states (Meyers-Levy and Tybout 1997; Raghunathan and Irwin 2001), and past attribute trade-offs made by consumers (Priester, Dholakia, and Fleming 2004). Closer to our research question, Hsee and Leclerc (1998) have demonstrated that two attractive competing products' evaluations suffer when the products are presented jointly, but if the products are unattractive, their evaluations benefit from the proximity. Simonson and Tversky (1992) provide evidence that adding an option to a choice set can drastically change consumer choice due to people's aversion to extreme options and preference for intermediate ones.

The only work that directly examines brand extensions in the context of competing brands is a recent study by Milberg, Sinn, and Goodstein (2010). Their analysis shows that the fit between a focal brand's parent and extension categories depends to an extent on the familiarity of the competitor brand; just as a more familiar competitor results in lower brand extension evaluations, so too a less well-known competitor yields higher focal brand assessment. In either case, perceived risk mediates the effect. In a somewhat related vein, Tversky and Gati (1978) earlier examined country dyads such as Canada-U.S.A. and Italy-Switzerland. Eight of the dyads consisted of American countries and eight consisted of European countries. The authors demonstrated that participants in the experiment indicated lower levels of perceived

similarity between the countries in each pair when the set of eight pairs they saw consisted of countries from the same continent (only Europe or only America) compared to when the set consisted of four European and four American dyads. Tversky and Gati (1978) suggested a “diagnosticity” explanation for this phenomenon, maintaining that when all the countries in the set are from the same continent, the characteristic “European” or “American” is not diagnostic of the similarity between them. However, when both American and European countries appear in the same cohort, this geographical factor becomes predictive and provides an extra and previously unconsidered dimension, through which intra-continental similarities assume import not present when only one continent’s nations are part of an investigation.

Along the same lines, because of differences in “diagnosticity,” the fit between frozen pizza and potato chips may be perceived very differently depending on whether its comparison is either to the fit between tortilla chips and potato chips, or to the fit between yogurt and potato chips. Therefore, we propose that consumer perceptions of the fit between a brand extension and the brand’s original category (FF) and, consequently, the evaluations of the extension itself will depend on whether the surrounding context extensions form a better or worse fit with their respective brands’ original categories (CF). In other words, perceptions of FF and evaluations of the focal extension would depend on how CF compares to FF. Our prediction is that a context consisting of brand extensions which represent close stretches from their context brands’ core categories will make a focal extension characterized by a worse fit to its brand’s core product category look “bad.” In contrast, a context featuring far extensions would make a focal extension seem better-fitting and “good.” Further, we expect that perceptions of FF will, in turn, affect focal brand and extension’s evaluations. We specify our predictions in the following hypotheses:

H1: Evaluations of the focal brand and extension will be higher (lower) when CF is worse (better) than FF.

H2: The effect of CF on focal brand and extension evaluations is mediated by FF.

Repeated exposure to a stimulus has been demonstrated to increase stimulus-relevant processing and elaboration (Lane 2000). Having respondents evaluate all context extensions prior to submitting their evaluations of the target extension should be equivalent to exposing them to CF multiple times before their introduction to FF. Such a sequence should reinforce comparisons between CF and FF regardless of which fit is better. Consequently,

H3: Evaluation of the context extensions prior to the evaluation of the focal extension will result in higher (lower) evaluations of the latter when CF is worse (better) than FF.

While context evaluation occurs fairly often in retail settings, here hypothesized to have an effect on brand extension evaluations through highlighting comparisons between CF and FF, its analysis would not give us information on whether consumers focus on similarities or differences between parent and extension products and how such a focus affects extension evaluations. As research suggests that the relationship between CF and FF may be viewed differently depending on whether consumers are integration- or differentiation-oriented (Murray et al. 1990; Stapel and Koomen 2005; Tversky and Gati 1978), we decided to disentangle the effects of each of the two mindsets.

An important characteristic of consumer product evaluations in a competitive context is that they often involve attribute comparisons (Bettman, Luce, and Payne 1998). One consideration in any discussion involving attribute-based comparisons is how easily aligned are the “attributes” of the compared entities (Johnson 1984; Markman and Medin 1995). In general, objects that fit better with each other tend to have more dimensions in common that a consumer might align. This factor is especially important for the settings studied here because they feature different extents of fit between items. “Alignable” elements are more accessible in memory than are “non-alignable” ones (Gentner and Landers 1985; Zhang and Markman 1998), their processing happens faster (Gentner and Wolff 1997), and they are weighed more heavily in preference judgments (Zhang and Markman 2001). In fact, structure-mapping theory (Gentner 1983) specifically postulates an increased focus on information about corresponding structures regardless of whether it concerns similarities or differences (Markman and Gentner 1997; Markman and Wisniewski 1997). This property of “alignable” elements has likely effects on both integration and differentiation mindsets. An integration mindset would tend to make the fit between a core and an extension category seem better because it draws attention to the similarities between the categories. However, the effect will be stronger for core categories that share more “alignable” elements with the extension category they are compared to. When CF is better than FF, the context core categories C’s are the ones that share more elements with the extension category; when CF is worse than FF, the focal core category F would have more in common with the extension category (figure 2.1).

Unlike for an integration mindset, the effect of a differentiation mindset on the perceived fit between core and extension categories is counterintuitive. The premise is still that the mindset will have a bigger influence on core categories that are perceptually closer to the

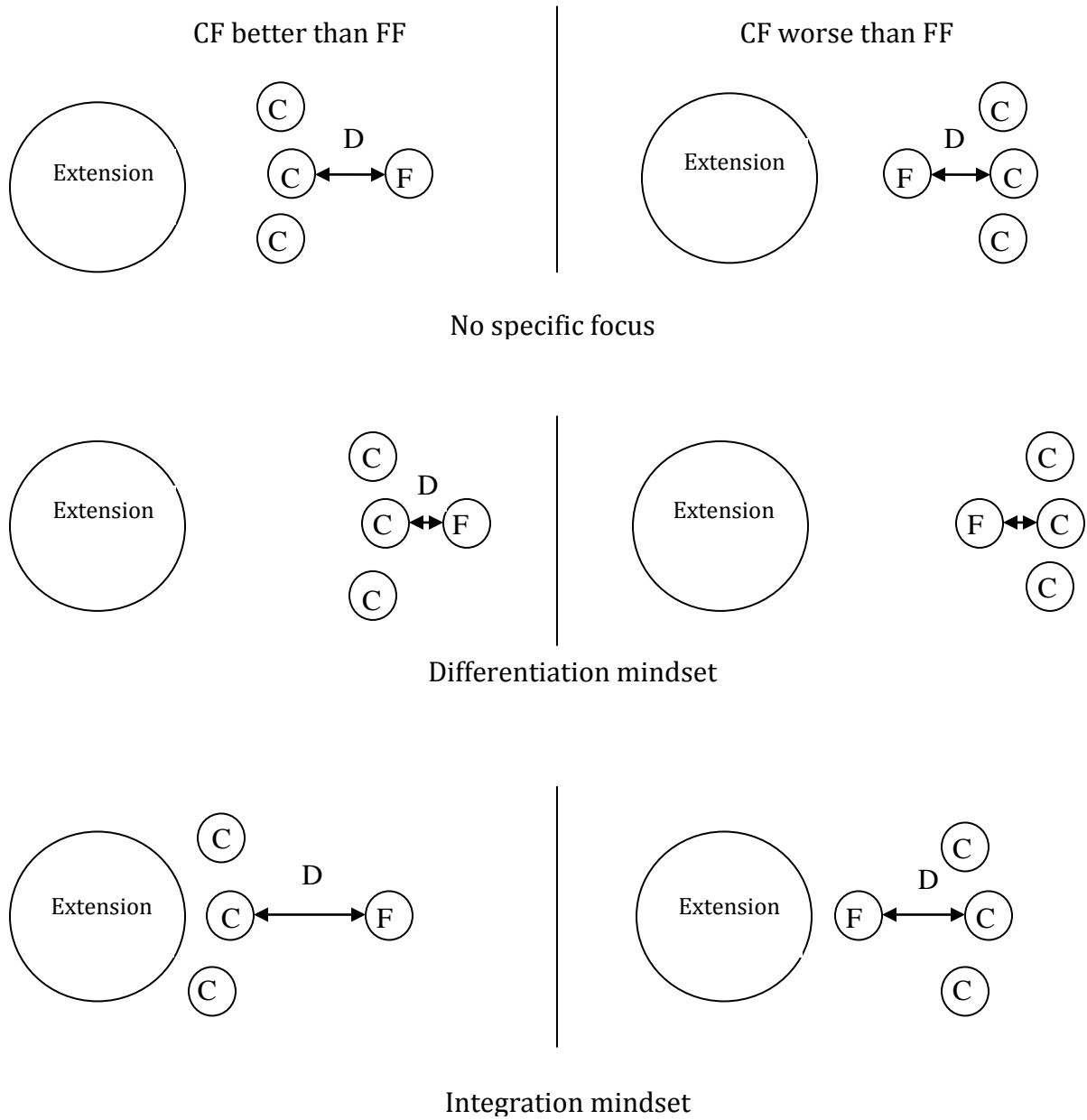


Figure 2.1: Effect of Differentiation vs. Integration Mindsets on psychological distances among objects in a competitive brand extension environment

extension category, but the end result is that a focus on disparities between core and extension categories hurts the perceived fit of the *better-fit* core category more than the worse-fit one (figure 1). This prediction is in accord with extant research that demonstrates that it is “easier to find the differences between pairs of similar items than to find the differences between pairs of dissimilar items” (Gentner and Markman 1994, p. 152).

Figure 2.1 provides a visualization of the effects described above. We postulate that the strength of the effect of focusing on the similarities or differences between objects will be dependent on the psychological distance between the objects in the mind of the individual, such that the greater the distance, the weaker the effect. This phenomenon affects the relationship between focal and context brand extensions when CF is different from FF, which is the case in our conceptual development.

As the schematic representation shows, differentiation and integration processes differentially affect the psychological distance between proximal and distal product categories. Thus, an integration mindset “draws” both the focal (F) and context (C) core categories closer to the extension category in perceptual space, but the “draw” is stronger for the entities which have a better fit with the extension category: C’s when CF is better than FF and F when FF is better than CF. In contrast, differentiation instructions “push” the entities that were initially closer to the extension category more strongly away from it. In sum, on the one hand, an integration mindset should increase the perceptual distance, whereas, on the other hand, a differentiation approach should decrease the perceptual distance between the extension category and both focal and context brands’ core categories regardless of the circumstances.

However, hypotheses 1 through 3 suggest that in competitive environments, the relative positions of the focal core and context core categories in the perceptual space should be

considered in addition to the direct measure of the perceptual distance or fit between original and extension categories. In Figure 2.1, the relative psychological distance between focal and context core categories is denoted as D , and we expected it to change even though the mindset of consumers should be influencing their perceptions of similarities and differences between core and extension categories and not between focal core and context core categories. Readers may notice that the absolute value of the perceptual distance between C and F is smaller under the differentiation mindset condition compared to the integration mindset condition. Consequently, as C's and F "switch places" relative to the extension category, a differentiation (integration) focus will result in higher evaluations relative to an integration (differentiation) focus when CF is better (worse) than FF. In other words, the difference between the evaluations in the "CF better" and the "CF worse" condition should be greater when consumers are in an integration mindset compared to when they are in a differentiation mindset. Formally,

H4: Differentiation (integration) compared to integration (differentiation) focus will result in higher brand evaluations when CF is better (worse) than FF.

Brand extensions may be observed not only against a backdrop of other extensions into the same category, but also in the context of extensions into a neighboring category. For an example, the section in a supermarket where potato chips are displayed may be right next to the pretzel section. While the products in both the chip and pretzel categories may be influencing a focal potato chip extension, the conclusion ought to follow that chips will have a stronger influence on the focal product because of both their greater physical and conceptual proximity to it. By the same token, the fit of neighboring category extensions with their brands' core categories (CNF) is conceptually distinctive from CF. In the example above, CF would

correspond to the fit between the chip context extensions and their parent categories and CNF would correspond to the fit between the pretzel context extensions and their parent categories. CF and CNF should have a differential effect on evaluations of the focal extension with the influence of the former superseding that of the latter. More formally,

H5: Better (worse) CNF relative to FF will result in lower (higher) choice share of the focal extension.

STUDY 1

Design and Participants

Study 1 was designed to test hypotheses 1 and 2. We picked potato chips as the extension category to use in our stimuli because of its familiarity with the college student population we were going to draw our sample from. In order to manipulate the relationship between CF and FF so that one is better than the other in one condition, but worse in the second condition, we conducted a pretest with the goal of identifying food product categories that fit with the potato chip extension category to variable extents. Thirty-nine undergraduate students participated in the pretest and were asked to indicate their perceptions of the similarity between the potato chips and several other food products on a five-point scale (very similar / very dissimilar). Our pick for the original category of the focal extension had to have a medium fit relative to the chip category, and frozen pizza met that condition ($M = 3.05$, $s.d. = .97$). Breakfast bars ($M = 1.59$, $s.d. = .94$), yogurt ($M = 1.23$, $s.d. = .43$), and ground coffee ($M = 1.38$, $s.d. =$

.63) were our choices for context extensions' parent categories to test the condition in which CF is worse than FF. For the condition in which CF had to be better than FF, our picks were pretzels ($M = 4.18$, $s.d. = 1.02$), tortilla chips ($M = 4.51$, $s.d. = .64$), and crackers ($M = 3.72$, $s.d. = .94$).

We conducted a separate pretest which was designed to help us pick among several fictitious brand names. We decided to employ "fake" rather than "real" brands because we wanted to minimize the influence of any pre-existing preferences of our respondents as well as control for brands' perceived extendibility to and fit with the product categories we wanted to use. All the brand names that ended up being used in our stimuli (Zatto, Benko, Wilks, and Sonnen) scored low on familiarity, did not evoke any positive or negative reactions, and were not consistently associated with any particular product category.

Study 1 featured a two-cell design and the only factor manipulated was the relative comparison between FF and CF. Its stimulus consisted of two parts. In the first, all 78 undergraduate students who participated were asked to imagine they were visiting a grocery store in a foreign country and were shown some of the products they would see on the shelves. At this stage, those assigned to the "CF worse than FF" condition were exposed to Sonnen yogurt, Wilks coffee, and a Benko breakfast bar, whereas those assigned to the "CF better than FF" were shown Sonnen pretzels, Wilks tortilla chips, and Benko cheese crackers. These sets of three brands represented the context brands. In addition to them, respondents in both conditions saw a Zatto frozen pizza, which represented our focal brand. These four products were meant to implicitly cue the core products for these brands.

Respondents were exposed to the extensions of the above brands in the second part of the stimulus, during which they were asked to imagine that, shortly after their visit to the grocery store, they went to visit some local attractions and got hungry. As part of the scenario, they were

also asked to imagine that they were directed to a potato chip vending machine with four products inside carrying the brand names Sonnen, Wilks, Benko, and Zatto. The visual cues included an image of the machine with the four brands of potato chips, where each pack's color scheme was consistent with that of the same brand's original product, which the participants had seen earlier. Dependent variable measurement followed the exposure to this image.

Data were collected on the perceived overall fit between the focal brand and its extension or FF (two seven-point semantic differential items anchored at "bad fit"/"good fit" and "very atypical"/"very typical"), perceived conceptual fit (two items: "not at all logical"/"logical" and "not at all appropriate"/"appropriate"), choice share of each brand, focal brand's perceived expertise to produce the extension ("no expertise whatsoever"/"more than sufficient expertise"), purchase likelihood ("would definitely NOT buy"/"would definitely buy"), and perceived similarity between focal core (frozen pizza) and extension (potato chips) categories ("not at all similar"/"very similar").

Analysis and Results

A series of ANOVAs revealed a significant effect of the way CF is positioned relative to FF on perceptions of FF ($M_{\text{worse}} = 4.16$; $M_{\text{better}} = 3.37$; $F(1,76) = 4.78$; $p < .04$), conceptual focal fit ($M_w = 4.24$; $M_b = 3.36$; $F(1,76) = 6.70$; $p < .02$), and the perceived similarity between the focal parent and extension categories ($M_w = 2.90$; $M_b = 1.92$; $F(1,75) = 9.03$; $p < .01$) and marginally significant effect on purchase likelihood ($M_w = 3.82$; $M_b = 3.13$; $F(1,75) = 3.46$; $p < .07$) and brand expertise ($M_w = 3.54$; $M_b = 3.08$; $F(1,75) = 2.98$; $p < .09$). A logistic regression with CF as an independent variable and choice share of the focal brand as a dependent variable resulted in a

significant effect as well (Worse CF = 35%; Better CF = 13%; Model $\chi^2 = 5.22$; $p < .03$; CF Wald statistic = 4.73; $p = .03$).

A mediation analysis (Baron and Kenny 1986) established that FF fully mediates the effect of CF on the perceived brand expertise and purchase likelihood (figure 2.2 and figure 2.3 respectively) and partially mediates the effect of CF on choice share (figure 2.4). These results provide insight into the process underlying the effect observed in study 1.

Discussion

Study 1 provides evidence that the fit of context extensions with their brands' core categories (CF) can influence the focal brand and extension evaluations as well as the choice share of the focal brand extension relative to its contextual competitors. Our analysis suggests that a brand extension's evaluations and choice share would be higher when CF is worse, or lower when CF is better, than consumers' perceptions of the focal brand – focal extension fit (FF). Furthermore, the observed effect is mediated by FF.

By and large, these results support hypotheses 1 and 2 and suggest that consumers may be contrasting the fit that competing and simultaneously presented brand extensions in the same category form with their respective brands' parent categories. Consequently, an extension appears to be evaluated as better when accompanied by an extension that represents a relatively far stretch for its brand. In contrast, an extension presented in proximity to an extension that represents a close stretch for its brand is seen as not as good. Because the entities being contrasted are the parent brand – extension dyads and the fit within them, effects of CF (one of

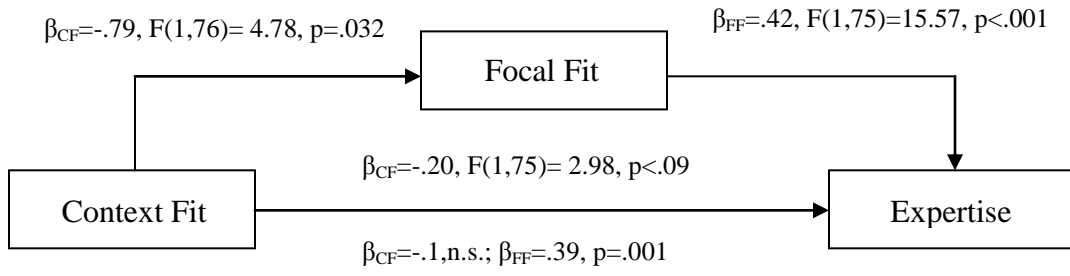


Figure 2.2: Mediation analysis: CF on Brand Expertise

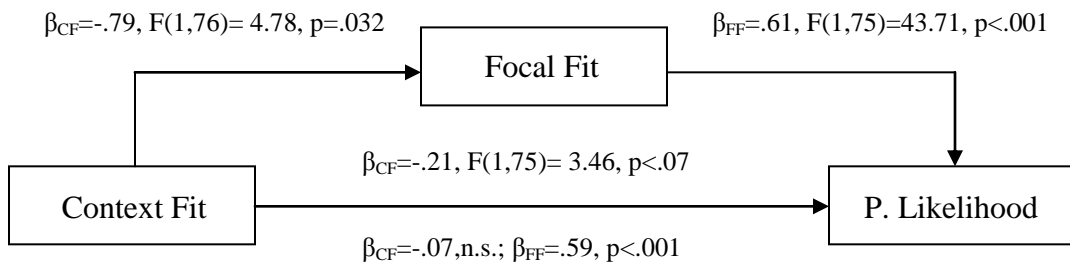


Figure 2.3: Mediation analysis: CF on Purchase Likelihood

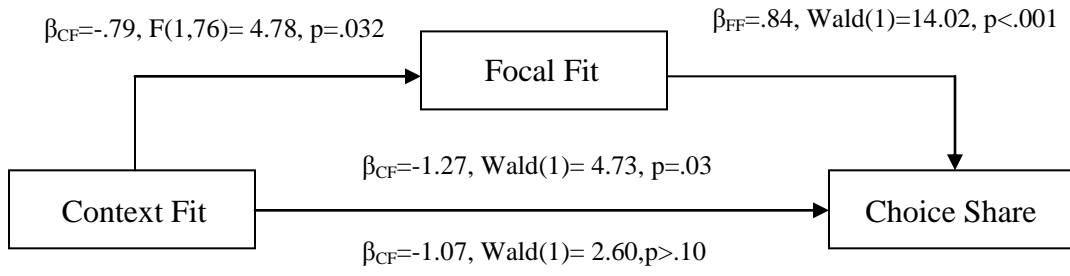


Figure 2.4: Mediation analysis: CF on Choice Share

the compared items) on variables related to the focal brand and extension are mediated by FF (the other compared item). The next study addresses the question whether the main effect of CF can be reinforced by evaluation of the context extensions prior to evaluation of the focal extension.

STUDY 2

In Study 2 we investigated the moderating role of the evaluation of context extensions on the effect demonstrated in Study 1 and tested H3. Our expectation was that evaluation of the context extensions and their fit with their respective brands' core categories would highlight the differences between CF and FF in the mind of the consumer, thus strengthening the effect observed in our first study.

Design and Participants

One hundred forty undergraduate students participated voluntarily in this experiment, and all but one completed it. In a 2 x 2 design, the first factor was the comparison between CF and FF (CF better vs. worse than FF) and it was manipulated precisely as it was in study 1. All the scenarios, brands, and product categories used were the same. The second factor was the presence of prior context evaluation (yes versus no) before measures of the dependent variables related to the focal extension. The manipulation consisted of questions about each context extension (7-point scales anchored at "bad product"/"good product", "low quality"/"high quality", "undesirable product"/"desirable product", and "negative"/"positive" overall

evaluation) and its fit with its brand and its original category (identical to the fit items we had in the first study). “No context evaluation” conditions’ stimuli were identical to the ones in study 1. Dependent variables included overall fit between the focal brand and its extension or FF, perceived conceptual fit, focal brand’s perceived expertise to produce the extension, and perceived similarity between focal core and extension categories; their measurement involved the same items as did the measurement of these variables in the first experiment.

Analysis and Results

A MANOVA revealed a significant CF by Context Evaluation interaction effect on the perceived similarity between the frozen pizza and potato chip categories ($F(1,135) = 5.91, p < .02$) and a marginally significant interaction effect on perceived brand expertise ($F(1,135) = 3.03, p = .084$). Although the interaction failed to reach significance at the .05 level for FF and perceived conceptual fit ($F(1,135) = 2.00, p = .16$ and $F(1,135) = 2.11, p = .15$ respectively), these two variables were significantly influenced by CF ($F(1,135) = 9.36, p < .01$ and $F(1,135) = 7.21, p < .01$ respectively). In addition, the analysis established a main effect of context evaluation on conceptual fit ($F(1,135) = 3.92, p = .05$).

Planned contrasts demonstrated that, indeed, in the “CF worse” condition, participants manifested higher levels of all dependent variables when they had to evaluate context extensions prior to evaluating the new focal products compared to outcomes in which they did not address context extensions first. The results were as follows: FF ($M_{\text{yes}} = 4.77$ vs. $M_{\text{no}} = 3.93; F(1,68) = 5.98, p < .02$), conceptual fit ($M_y = 4.78$ vs. $M_n = 3.94; F(1,68) = 5.90, p < .02$), brand expertise ($M_y = 4.44$ vs. $M_n = 3.54; F(1,68) = 9.10, p < .01$), and pizza-chips similarity ($M_y = 4.00$ vs. $M_n =$

2.77; $F(1,68) = 12.45$, $p = .001$). However, context extension evaluation did not make any difference in the “CF better” condition for any of the DVs (figures 2.5 through 2.8).

Discussion

The results of study 2 partially support hypothesis 3. Specifically, a context evaluation preceding the assessment of the focal brand and extension led to higher levels of the dependent variables (similarity between the chips and pizza categories, perceived brand expertise, FF, and conceptual fit) relative to when such prior evaluation was not required. This outcome is in line with our expectation that thinking about the context extensions and their brands may accentuate the discrepancies between CF and FF in the mind of the consumer and thus enhance the effect of CF on focal extension and brand evaluations. However, this effect was only observed when CF was worse, but not when it was better than FF. A ceiling effect inherent to the scales used to measure the dependent variables could have concealed the effect. Our next experiment was intended to test a potential moderator of the effect demonstrated in our first study.

STUDY 3

Study 3 was aimed at exploring the potential moderating influence of integration and differentiation mindsets on the effect of CF documented in study 1. It was designed to address H4 which postulates that differentiation (integration) focus will be more beneficial to the focal brand and extension when CF is better (worse) than FF. This prediction draws on structure-mapping theory (Gentner 1983), which maintains that items that are similar to each other share

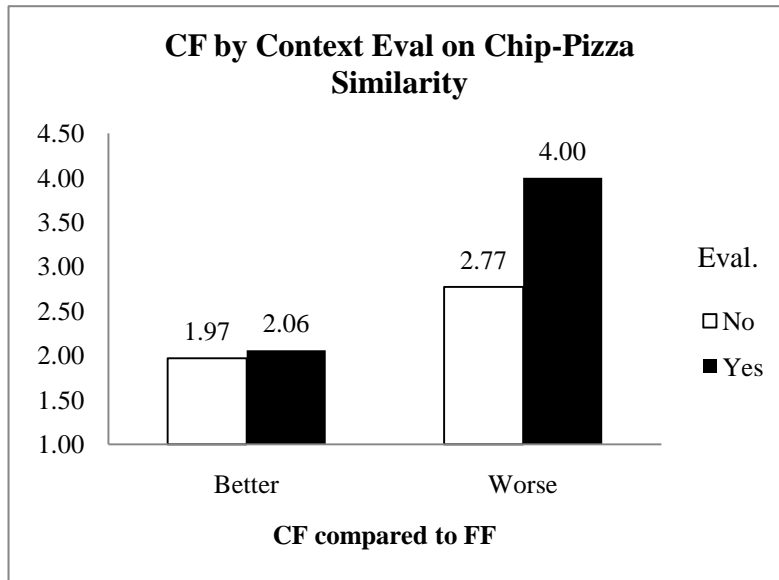


Figure 2.5: Interaction of CF by Context Evaluation on Similarity between focal core and extension categories

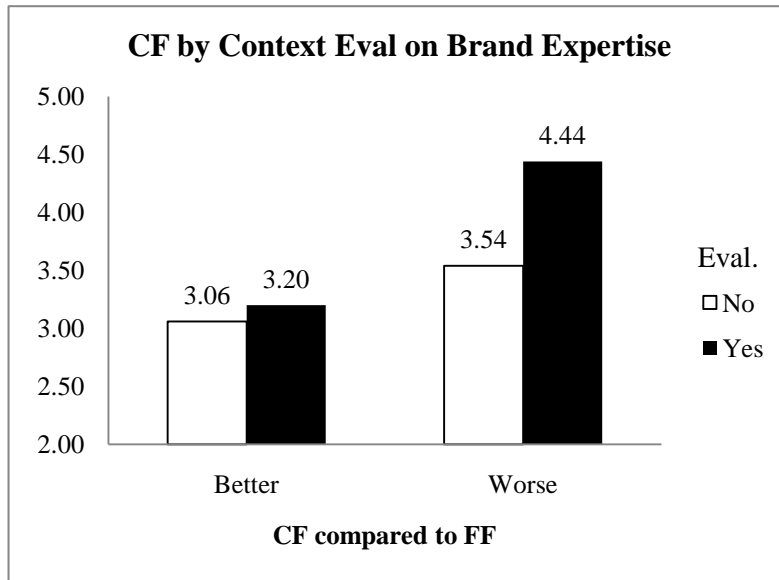


Figure 2.6: Interaction of CF by Context Evaluation on Expertise of focal brand to produce the extension

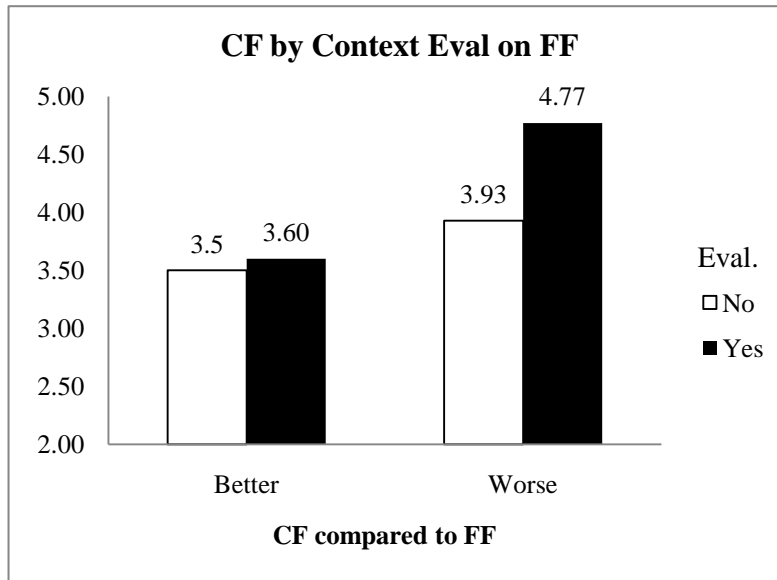


Figure 2.7: Interaction of CF by Context Evaluation on FF

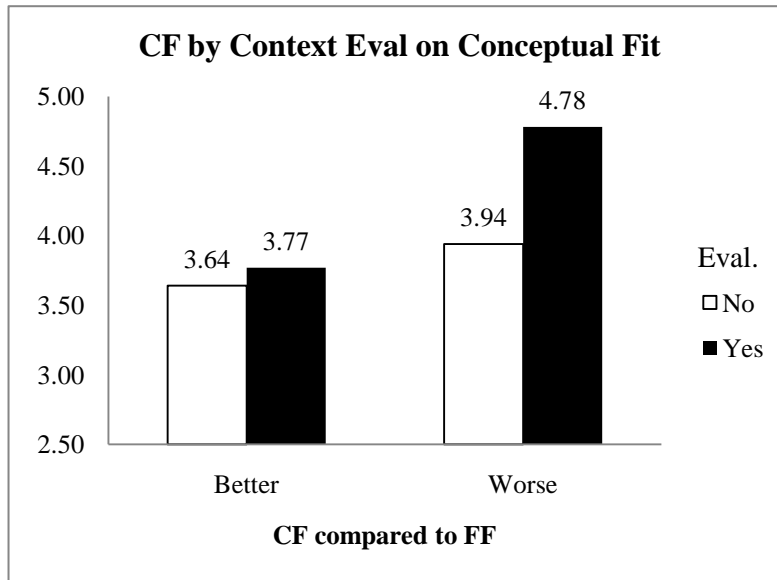


Figure 8: Interaction of CF by Context Evaluation on Conceptual Fit between focal brand and extension

more “alignable” dimensions, which permit easier comparisons. The theory further posits that, as a result, both more similarities and more disparities are significantly likelier for closely fit items than for loosely fit items.

Design and Participants

One hundred fifty-four undergraduate students, who voluntarily participated in the study, were randomly assigned to four cells forming a 2 (CF compared to FF: CF better vs. CF worse) x 2 (Mindset: Differentiation vs. Integration) design. The stimulus was identical to the one used in study 1 with one exception: before answering the questions constituting the dependent variables measures, participants received a short instruction. Those assigned to the differentiation mindset condition were told to “think about all the things that make each pair of products sold under the same brand name ... different [or], in other words, think about the disparities between paired products sold under the same brand name”. Individuals in the integration mindset condition were told to “think about all the things that make each pair of products sold under the same brand name ... similar [or], in other words, think about the commonalities between paired products sold under the same brand name”. Measurements followed, first of the perceived similarity between the focal core and extension categories (frozen pizza and potato chips), and then of the perceived expertise of the focal brand to make the extension product.

Analysis and Results

A MANOVA with pizza-chip similarity and brand expertise as dependent variables revealed no main effect of mindset and a significant main effect of CF on both criterion variables ($F(1,147) = 46.23, p < .001$ and $F(1,147) = 14.18, p < .001$ respectively). More importantly, the analysis identified a significant CF x Mindset interaction effect on pizza-chip similarity ($F(1,147) = 4.48, p < .04$) and brand expertise ($F(1,147) = 4.28, p = .04$). However, planned contrasts did not demonstrate significant differences at the .05-level between the means of the two groups having a different focus in the “CF better” condition for either pizza-chip similarity ($M_{\text{Diff}} = 1.89$ vs. $M_{\text{Int}} = 1.55; F(1,74) = 2.53, p < .12$) or brand expertise ($M_{\text{Diff}} = 3.05$ vs. $M_{\text{Int}} = 2.68; F(1,74) = 1.76, p < .19$). The results of contrasts of the “CF worse” condition were very similar: pizza-chip similarity ($M_{\text{Diff}} = 2.92$ vs. $M_{\text{Int}} = 3.46; F(1,74) = 2.15, p < .15$); brand expertise ($M_{\text{Diff}} = 3.39$ vs. $M_{\text{Int}} = 3.86; F(1,74) = 2.54, p < .12$). Although the contrasts came out non-significant at the .05-level, the directionality of the relationship (figures 2.9 and 2.10), the relatively low p-values, and the significance of the interaction term in the overall MANOVA provide partial support to our hypotheses.

Discussion

The analysis of study 3 suggests that a focus on commonalities vs. differences between core and extension categories can affect brand evaluation and fit perceptions relative to the focal brand differently when CF is better vs. when it is worse than FF. Specifically, integration instructions may be more beneficial to the focal brand than differentiation instructions when CF

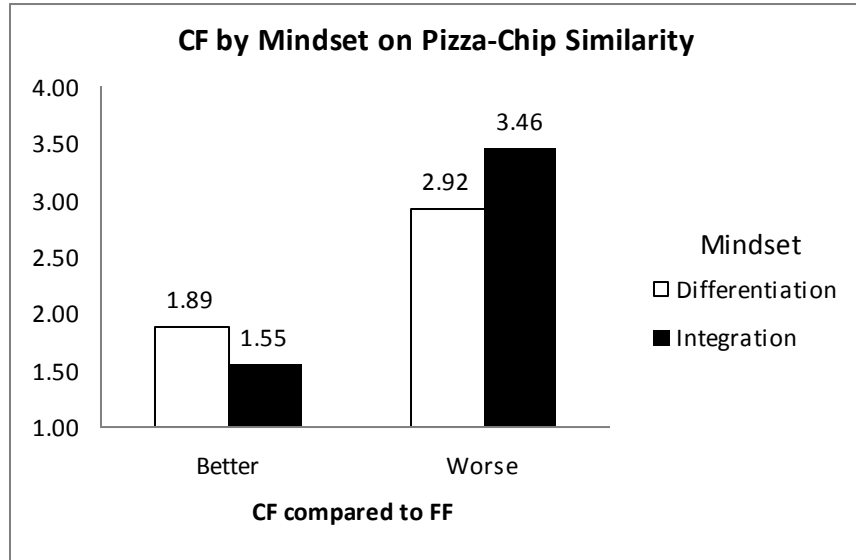


Figure 2.9: Interaction of CF by Mindset on Focal Core – Extension Category Similarity

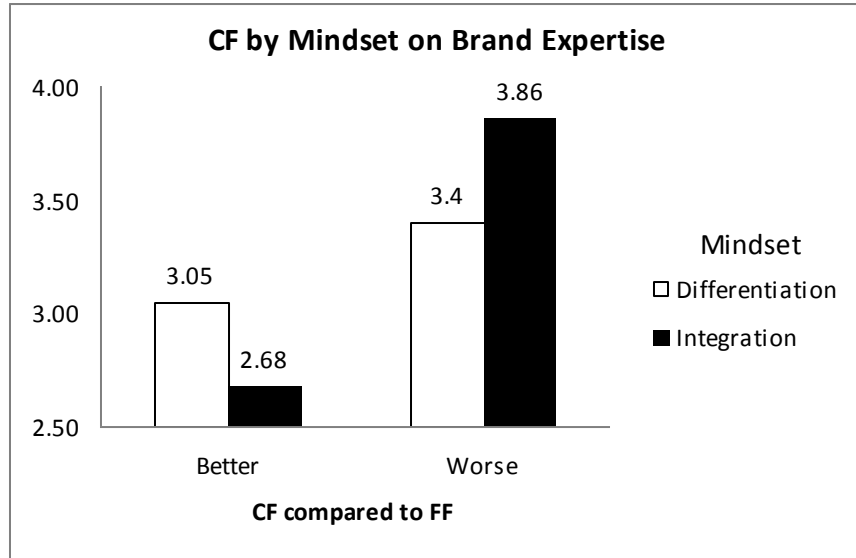


Figure 2.10: Interaction of CF by Mindset on Focal Brand Expertise to Make Extension

is worse than FF, but differentiation instructions may result in higher evaluations when CF is worse than FF. Moreover, the relationship between the evaluations of consumers exposed to “CF better” and those of consumers exposed to “CF worse” patterns may be affected differently based on whether consumers are focused on commonalities or differences between core and extension categories. Specifically, an integration mindset, focused on similarities, may result in larger differences between “CF better” and “CF worse” consumers than will a differentiation mindset focused on differences. Study 4 continues the quest for identifying moderators of the CF effect by examining situations in which part of the context extensions are not from the same product category as the focal extension.

STUDY 4

The aim of study 4 was to test H5. It added a second extension category (pretzels) which represents a neighboring category to the one used in all previous experiments (potato chips) and investigated whether the fit of the neighboring category extensions with their brands’ core categories (context neighboring fit or CNF hereafter) would influence consumer choice for the focal extension over and beyond the effect of CF.

Design and participants

Seventy-nine undergraduate students participated in this study. They were exposed to a stimulus very similar to the one employed in study 1 with one notable exception. Because, in addition to CF, we manipulated the fit between the neighboring extension category and the

neighboring core categories (CNF), we had to add more products to those from study 1's stimulus in order to have a main extension category context and neighboring extension category context of at least two products each. Thus, the vending machine contained six products for this study: three chip brands (main extension category) including the focal extension and three pretzel brands (neighboring extension category). Logically, there were also six "original" products for each of the six extensions to which participants were exposed prior to seeing the vending machine, all of which should have implicitly cued each brand's core category. The neighboring category needed to be conceptually close to potato chips and as pretzels had been pretested to form a good fit with the potato chip category, they were picked to serve in that role.

Participants were randomly assigned to four cells in line with the 2 (CF: Better vs. Worse than FF) X 2 (CNF: Better vs. Worse than FF) design of the study. Following the stimulus exposure, they picked one of the six extension products as their snack of choice. The choice of the focal brand was later coded as 1 and the choice of any of the rest of the brands – as 0.

Analysis and Results

A logistic regression with the choice of the focal brand as a criterion variable and CF and CNF as predictors rendered a significant model χ^2 of 9.65 ($p < .03$). As expected, a main effect of CF was readily apparent (Wald statistic = 6.17, $p < .02$). To the extent that the statistics of the logistic regression are considered, our hypothesis is supported because the result points to a main effect of CNF on choice (Wald = 4.63, $p=.031$). However, a test of the differences between proportions indicated that H5 is supported only in the "CF worse" condition, whereas CNF had no effect on the focal extension's choice share when CF was better than FF (figure 2.11).

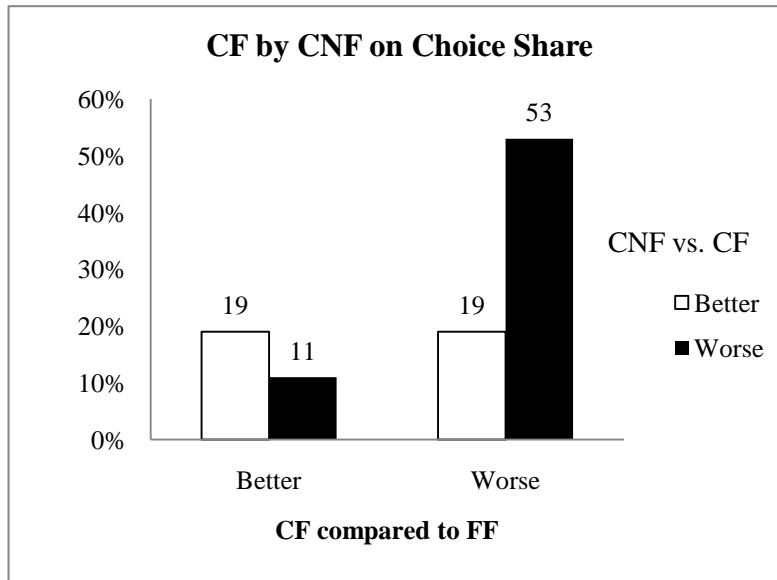


Figure 2.11: Interaction of CF by CNF on Choice Share of Focal Extension

Specifically, the 95% confidence intervals of the difference of the proportions in the “CF worse” and “CF better” conditions were between .11 and .57 and between -.09 and .25 respectively. An interval including zero indicates a non-significant difference between proportions, whereas an interval excluding the zero value indicates a significant difference.

Discussion

The results of study 4 suggest that brand extensions may be influenced by physically proximal context brand extensions even when those are not members of the focal extension’s product category. This finding has significant implications for many kinds of retail settings including brick-and-mortar, online, and catalog. It broadens the “sphere of influence” on brand extensions delineated by the first three studies here, as well as widens the possible impacts of what many past researchers have discerned. The importance of the results is not diminished by the fact that the neighboring category extensions’ influence was not manifested in the “CF better” condition of our experiment. In fact, the lack of an effect in that condition should probably not be all that surprising as we never expected its magnitude to be as great as that of context extensions in the category of the focal extension. In fact, CF’s being better than FF may actually impose low upper limits onto focal extension’s choice share, thus creating a ceiling which the CNF effect could not break through. Observers may also note that the results of study 2 followed a similar pattern.

GENERAL DISCUSSION

While, in retail settings, brand extensions are often presented to consumers in the context of other brand extensions, extant research does not provide any insight about the influence of context extensions on a target extension. This paper investigated the effects of the fit between a context parent category and an extension category (context fit or CF) on consumer perceptions of a focal brand, its extension, and the fit between them (focal fit or FF) in situations where several brands coming from diverse categories launch extensions in the same extension category. Based on psychological research on context effects on within-dyad similarity perceptions (Tversky and Gati 1978), we hypothesized that consumers contrast FF and CF and that this process affects their perceptions of the focal brand and extension. Consequently, we postulated that when CF is manipulated to be either better or worse than FF, consumer perceptions of the latter mediate CF's effect on focal and brand extension evaluations. Further, we tested three variables that we thought would accentuate or attenuate this effect. First, we speculated that evaluation of the context products prior to the evaluation of the focal extension would highlight any differences between CF and FF resulting in a stronger effect (Lane 2000). Next, based on structure-mapping theory (Gentner 1983), we predicted that an integration (differentiation) mindset will result in higher focal evaluations compared to a differentiation (integration) mindset when CF is worse (better) than FF. Last, we extended the context to include extensions to a neighboring (perceptually close, but different) category which were characterized by the neighbor-extensions' own fit with their parent brands' products (context neighboring fit or CNF). Our expectation was that CNF would have an effect on focal

extensions' choice share that would be directionally similar to the predicted effect of CF on focal extension and brand evaluations.

Summary of Findings

Four studies addressed our predictions. Study 1 confirmed the expectation that CF can have an effect on brand and context evaluations and that the effect is mediated by perceptions of FF. Specifically, the findings of the study suggest that FF is perceived as better (worse) and brand and extension evaluations are higher (lower) when CF is worse (better) than FF. In other words, the focal brand and extension are better off when they are more similar to each other than other brands extending to the same category are to their extensions. The results of study 2 partially supported our expectations of the role of context evaluations in that participants who evaluated context extensions prior to evaluating the focal extension gave higher marks for the focal brand and extension compared to the people who did not evaluate the context when CF was worse than FF. However, context evaluations did not make a difference when CF was better than FF. Study 3 revealed an interaction between CF and consumer focus on similarities vs. dissimilarities between parent brands and their extensions, whereby a focus on similarities resulted in higher ratings of FF and focal brand expertise, and conversely, a focus on dissimilarities elicited lower FF ratings and perceived brand expertise, when CF was respectively worse, or better, than FF. Finally, our last experiment suggested that CNF may also be influencing brand and context evaluations in much the same way as CF does (better/worse CNF corresponds to worse/better evaluations, respectively). However, our context extension choice

share measure only registered significant differences due to changes in CNF when CF was worse, but not when it was better than FF.

Implications and Future Research

The existing research on brand extensions either examines them in isolation (Boush and Loken 1991; Dacin and Smith 1994) or in the context of other core products (Sullivan 1992; Oakley et al. 2008; Milberg, Sinn, and Goodstein 2010). This study contributes to the brand extension literature in at least three ways. First, to the best of our knowledge, this effort is the first attempt at studying brand extensions in the context of products that are brand extensions themselves. The presence of contextual extensions brings a new layer of complexity to the analysis of brand extensions. In addition to the brand-related factors traditionally taken into consideration such as brand familiarity (Milberg, Sinn, and Goodstein 2010; Simonin and Ruth 1998) and brand portfolio's breadth and depth (Dacin and Smith 1994), each contextual extension is characterized by its unique match to its brand and its parent category. Incorporating the fact that perceptions of similarity can be very much contextually dependent (Tversky and Gati 1978), this paper is the first to experimentally examine the interplay of all the brand-extension fits that a choice set consisting of brand extensions features to consumers.

Along these lines, another reason why our studies provide a different perspective on brand extensions is that the unit of analysis we employ differs from that of past research. Our experiments were designed to shift the focus from the individual product, whether extension or core, to the parent-extension dyad and the perceptual fit between its constituents. Comparing fits

rather than products allowed us to broaden the scope of our study. We are also hoping that it will increase the generalizability of our findings.

Last, various areas of marketing, such as innovation and advertising research, have already adopted and are making use of the structure-mapping theory. We contribute to this literature by applying it to a new subfield--brand extensions. Our third study provides support for the counterintuitive prediction that this theory makes about the relative difficulty people encounter when trying to identify differences between items that do not share “alignable” attributes compared to identifying differences between well-aligned items. In line with the theory, we found that our instructions to participants to concentrate on the differences between parent and extension affected more similar parent-extension pairs to a greater extent than less similar ones.

While our study is a pioneering one when it comes to investigating the dynamics of choice sets consisting of competing extensions from various brands, it leaves ample opportunities to advance the knowledge about such settings. For instance, investigators might now consider the effect of context extensions into neighboring areas, such as in the case of the focal extension categories that we detected in study 4. In our experiment we only used a neighboring category which was perceptually very similar to our focal extension’s category. Future research should explore how consumers’ fit perceptions change as the context extensions become less and less similar to the focal extension, thus adding an extra fit dimension to our analysis here.

Our findings can also be extended through adding real instead of fictitious brands to the analysis. Quite probably, certain aspects of brands, such as their familiarity and the breadth of their product portfolio, may play major roles in the phenomena we observed. In addition,

replicating our results using categories outside of packaged foods would establish the robustness of the effects. More work is needed to identify any individual differences that variables such as cognitive fluency and categorization width may potentially have, in ways that could powerfully impact this discussion.

Managerial Implications

The managerial implications of this research are quite obvious. The current retail environment is characterized by a large number of brand extensions which present a somewhat different set of challenges as competitors. This paper suggests that brand managers responsible for brand extensions should analyze competing extensions beyond their immediate characteristics and look at their parent brands' associations and fit with the extension category. Moreover, our findings could easily apply to all forms of retailing – brick-and-mortar, catalog, online – as long as the extension products or their images appear in the same context.

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