

When Are Broader Brands Stronger Brands? An Accessibility Perspective on the Success of Brand Extensions

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It is common for brands to extend into additional product categories. The most successful extensions involve brands that are associated with benefits that are valued in the extension category. We propose that brand extension success also depends on the accessibility of these benefit associations and that accessibility, in turn, depends on the amount of interference by competing brand associations (e.g., category associations). One implication of this proposition is that broad brands (i.e., brands offering a portfolio of diverse products) will tend to have more accessible benefit associations than narrow brands (i.e., brands offering a portfolio of similar products) and can therefore engage in more successful brand extensions than narrow brands, even when the narrow brands are more similar to the extension category. However, when benefit associations are equally accessible and diagnostic, the evaluation of brand extensions will instead be dictated by the similarity between brand and extension category associations.

A fundamental goal of brand extension research has been to assess the attractiveness of a brand extension opportunity (Aaker and Keller 1990; Boush and Loken 1991). As the research stream has matured, the emphasis has shifted from examining individual extensions to studying the effect of each additional extension on the image of the parent brand (e.g., John, Loken, and Joiner 1998; Milberg, Park, and McCarthy 1997) and on the future extendibility of the brand (e.g., Dacin and Smith 1994; Keller and Aaker 1992). Researchers have, for instance, studied the effect of extending a brand into a wide variety of product categories. Whereas some have argued that a broad set of extensions will create more diffuse associations and weaken the image of the parent brand (e.g., Keller and Aaker 1992; Loken and John 1993), others have argued that it will increase the range of categories suitable for future extensions (e.g., Boush and Loken 1991; Dacin and Smith 1994). Consider, for example, a brand that has extended from food blenders into dissimilar categories such as hair dryers and handheld vacuums (as opposed to similar categories such as food processors and mixers). On the one hand, the diversity of these past ex-

tensions creates a more diffuse brand image, but on the other hand, it also makes the brand more acceptable in other distinct categories (such as electric shavers). In sum, a diverse portfolio of prior brand extensions appears to have both disadvantages and advantages.

Yet, a diverse portfolio of prior brand extensions may not always lead to concurrent negative and positive consequences. There are reasons to believe that a diverse series of past extensions can both strengthen a brand's positioning and increase the brand's acceptance in dissimilar extension categories. Our claims depend on the premise that a brand has both benefit associations (e.g., its positioning) and non-benefit associations (e.g., category membership, usage situations). For instance, a brand may be known for its durable products (a benefit association), all of which are kitchen appliances (a product category association). These different associations are not equally accessible and, due to interference effects in memory, the accessibility of a brand's benefit associations (and consequently the strength of its positioning) is influenced by the accessibility of the category associations. Narrow brands will have strong and consistent category associations, whereas broad brands will have weak and diffuse category associations. Consistent associations are more easily and quickly recalled than diffuse associations (Anderson and Spellman 1995; Osgood 1946, 1948). Therefore, consistent category associations have a greater potential to interfere with the retrieval of benefit associations. For example, a brand that produces durable blenders,

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food processors, and mixers will have a consistent benefit association (durability), as well as consistent category associations (e.g., kitchen appliances) that can interfere with the retrieval of the benefit association. In contrast, a brand that produces durable blenders, hair dryers, and handheld vacuums will have a diffuse set of category associations that should be less accessible and less likely to interfere with the retrieval of the benefit association.

The goal of this article is to show the conditions under which the accessibility and diagnosticity of benefit associations, versus the similarity of category associations, determine the success of a brand extension. We will argue that accessibility, diagnosticity, and similarity contribute to brand extension success and that the relative impact of any one factor depends on the amount of control exerted over the remaining factors. We will show that extensions of a similar brand will be preferred to extensions of a dissimilar brand when similar and dissimilar brands have equally accessible and diagnostic benefit associations. We will also show that when brands have equally diagnostic but differentially accessible benefit associations, the brand with the more accessible benefit associations will be preferred even if it is less similar to the extension category. Finally, we claim that the accessibility of the benefit associations decreases as a result of memory interference from competing category associations. Thus, to the extent that a broad brand has weaker competing category associations than a narrow brand, and to the extent that the benefit associations of either brand are equally diagnostic, the broad brand should enjoy an advantage in its strength of positioning and, consequently, extension success.

BRAND EXTENSIONS

All investigations into the determinants of successful brand extensions begin with the assumption that a brand is a collection of associations (Keller 1993). These associations consist of attributes, benefits, and attitudes that have become connected to the brand name as a consequence of marketing communications, personal interactions, and direct experience with the brand. Brands that have favorable, strong, and unique associations are better differentiated from competing brands and can be more easily extended into other product categories (Keller 1993).

Similarity and Diagnosticity

Two explanations have been advanced to explain the success and failure of brand extensions. First, the similarity explanation proposes that the success of a brand extension depends on the fit or similarity between brand name associations and extension category associations (Boush and Loken 1991; Keller 1993). These similar associations can include product-related features, usage situations, and target market overlap (Herr, Farquhar, and Fazio 1996; Keller 1993). When brand associations and extension category associations are highly similar, attributes and attitudes associated with the brand automatically generalize to the new

brand extension (Boush and Loken 1991). As the similarity between the brand associations and extension category associations declines, so will the schematic fit between the brand and the extension category. A reduction in schematic fit in turn limits the transfer of the brand attributes and attitudes to the new extension (Boush and Loken 1991; Fiske and Pavelchak 1986).

A second perspective suggests that the success of a brand extension depends on the diagnosticity of existing benefit associations for making inferences about the performance of the brand in the extension category (Broniarczyk and Alba 1994; Dacin and Smith 1994; Park, Milberg, and Lawson 1991). Park et al. (1991) argue that consumers prefer brand extensions that are consistent with a brand's existing positioning. They demonstrate that the Rolex (Timex) brand name extends better into product categories where prestige (functionality) is valued. Broniarczyk and Alba (1994) further argue that benefit diagnosticity will have more influence on a successful brand extension than category similarity. They demonstrate that people prefer an extension into a dissimilar product category where the brand's benefit association is diagnostic for the extension product performance (e.g., Fruit Loops cereal extended into the lollipop category) over an extension into a similar product category where the brand's benefit association is nondiagnostic for the extension product performance (e.g., Fruit Loops cereal extended into the hot cereal category).

The findings of Broniarczyk and Alba (1994) suggest that the success of brand extensions is primarily determined by the diagnosticity of the benefit associations. We propose that this description of the process is incomplete for two reasons. First, diagnostic benefit associations may vary in their accessibility. If two brands with equally diagnostic benefit associations extend into the same product category, consumers will tend to prefer the brand that has the most accessible benefit association. The accessibility of the benefit associations will, among other factors, depend on the strength of competing category associations. Second, when multiple brands with equally diagnostic and accessible benefit associations extend into the same product category, consumers will tend to prefer the brand that is most similar to the extension category. In summary, extension success depends on brand benefit association accessibility and diagnosticity and, to the extent that these factors are controlled for, similarity between the brand associations and the extension category associations.

Accessibility and Diagnosticity

According to Feldman and Lynch (1988), accessibility is the degree to which a piece of information can be retrieved from memory for input into a judgment and diagnosticity is the degree to which that piece of information is relevant for that judgment. A fundamental assumption of accessibility-diagnosticity theory is that consumers are "cognitive misers," in that they will not retrieve all possible information to make a judgment. Instead, they will first try to retrieve the most accessible information. The accessibility of infor-

mation depends on (1) the degree to which the information has been elaborated upon, (2) retrieval cues, and (3) the degree of interference from other associations (Feldman and Lynch 1988). As such, two concepts that have been activated to the same extent (due to equivalent prior elaboration and activation of retrieval cues) can still differ in accessibility because of differences in the level of interference from competing associations.

The concepts of retrieval and interference are fundamental to any theory of memory and help to identify factors that will influence the accessibility of brand associations. First, the retrieval of information that is associated with a cue (e.g., a brand name) will facilitate the retrieval of similar information that is also associated with that cue (cf. Anderson, Green, and McCulloch 2000). Thus, if a brand is associated with a number of similar product categories, as is the case with a narrow brand, the retrieval of information about one of the categories will promote the retrieval of information about the other categories. Second, the retrieval of information that is associated with a cue will interfere with the retrieval of unrelated information that is also associated with that cue (Anderson et al. 2000; Anderson and Spellman 1995). Thus, unless the brand's product category information is strongly related to the brand's benefit, increased recall of the product category information will reduce recall of the benefit information. This interference is equivalent to a cue-overload effect (e.g., Mueller and Watkins 1977; Watkins 1978).

Hypotheses

The accessibility of a brand's benefit associations may vary as a function of the characteristics of the brand's category associations. The category associations of narrow brands should be more accessible, and thus create more interference, than the category associations of broad brands. As a consequence, the benefit associations of broad brands should be more accessible, and broad brands should be preferred in brand extensions where the benefit association is desirable. However, when brands have equally desirable benefit associations that are also equally accessible, owing to equal interference from category associations, the success of the brand extension will be determined by the similarity between the brand associations and the extension category associations.

H1: Accessibility hypothesis: If two brands have equally desirable benefit associations, consumers will prefer the extension from the brand with the more accessible benefit associations.

H2: Similarity hypothesis: If two brands have equally desirable and accessible benefit associations, consumers will prefer an extension from the more similar brand.

Suppose a brand producing durable food processors and a brand producing durable hair dryers are both considering

using their existing brand names to introduce a new coffeemaker. The accessibility hypothesis predicts that if consumers want a durable coffeemaker, and the durability association of the hair dryer brand is more accessible than the durability association of the food processor brand, then consumers will prefer the extension of the hair dryer brand. On the other hand, if both host brands have equally accessible durability associations, consumers will rely on the similarity between the brands' existing category associations and the extension category associations. Thus, consumers will prefer the extension of the food processor brand, because this product is more similar to coffeemakers, suggesting that this brand is more likely to deliver durable kitchen appliances.

Suppose now that two manufacturers of a portfolio of products are also considering extending their brand names to the coffeemaker category. The first is a narrow brand that offers durable blenders, food processors, and mixers. The second is a broad brand that offers durable blenders, hair dryers, and handheld vacuums. We predict that the similar, easily accessible category associations of the narrow brand will interfere more with the brand's durability association than will the diffuse associations of the broad brand. Thus, compared to the narrow brand, the broad brand will have a more accessible and influential benefit association. Therefore, if this benefit association is desirable in the extension category, consumers will prefer the extension of the broad brand to the extension of the narrow brand.

EXPERIMENT 1

Experiment 1 investigated the effect of benefit association accessibility and brand extension category similarity on consumers' brand extension preference. Each participant was presented with both portfolio brands and single-category brands according to a mixed design. In the portfolio brand conditions, participants were shown information about three products produced by two fictitious brands, after which they were asked to choose between extensions of each of these brands to the same product category (e.g., coffeemakers). Participants were first presented with a narrow brand that sold three products that were all similar to the extension category and to each other (e.g., blenders, food processors, and mixers). Next, they were presented with a broad brand that sold one product that was similar to the extension category (e.g., blenders) and two products that were dissimilar to the extension category (e.g., hair dryers and handheld vacuums). The narrow and the broad brand had the same, consistent positioning across product categories (e.g., durability). After viewing the brand information, the participants chose between extensions of these two brands in a category where the brands' benefit was valued (e.g., coffeemakers). Consistent with the accessibility hypothesis, we expected that participants would prefer the broad brand extension because the benefit associations of the broad brand would be more accessible.

In single product conditions, both brands produced only one product. Participants were first presented with a brand that sold a product that was similar to the extension category

(e.g., food processors or mixers). Next, they saw a brand that sold a product that was dissimilar to the extension category (e.g., hair dryers or handheld vacuums). Both brands offered a similar benefit in these product categories (e.g., durability). After having read the information for both brands, participants chose between extensions of these two brands in a category where the host brands' benefit was valued (e.g., coffeemakers). Consistent with the similarity hypothesis, we expected that the similar host brand extension would be preferred because the benefit association would be equally accessible and diagnostic for each brand.

Method

Participants and Design. Participants were 115 undergraduate students who participated in the experiment in exchange for extra credit. The design was a two (product set: similar or dissimilar) by two (number of products in the portfolio) by two (order and brand name counterbalancing factor) by eight (category replicates) mixed design. Each participant was presented with four different replicates (randomly drawn from a total of 13 replicates).¹ For each replicate, participants were shown information for one brand that sold product(s) similar to the extension category and another brand that sold product(s) dissimilar to the extension category. Two of the replicates were assigned to the portfolio condition (both brands sold three products), and two of the replicates were assigned to the single product condition (both brands only sold one product). The presentation order of the narrow and broad brands, the similar and dissimilar single-category brands, the names assigned to these brands, and the wording of the benefit information in the product descriptions was counterbalanced. Replicates were selected randomly and the four replicates seen by an individual participant were unique.

Stimuli. To independently test the effects of benefit accessibility and brand extension category similarity, these two factors needed to be negatively correlated. Our stimuli were created so that the broad brand was less similar to the extension category than the narrow brand. In this way, any influence of increased benefit accessibility for the broad brand relative to the narrow brand should work in opposition to any influence of brand extension category similarity. Likewise, reducing the brand portfolio to a single product equated the benefit accessibility (by equating the interference from the category associations) and thus allowed us to isolate the influence of similarity on brand extension evaluations.

For each of the eight replicates, six product categories had to be selected. One product category served as extension category (e.g., coffeemaker). A second category, similar to the extension category (e.g., blender), served as the original product category in the product portfolios of both the narrow and the broad brand. Another two categories were selected

as additional products of the narrow brand (e.g., food processors and mixers). These two product categories had to be similar to the extension category, as well as similar to each other and to the original product category. Finally, two other categories were selected as additional products of the broad brand (e.g., hair dryers and handheld vacuums). These two products had to be dissimilar to each other, to the extension category, and to the original product category.

Three pretests were used to confirm that the stimuli had the proper characteristics. In each pretest, similarity was assessed on a seven-point semantic differential scale (1 = very dissimilar, 7 = very similar). First, 21 participants confirmed that products in the narrow portfolio were more similar to each other ($M = 5.71$) than those in the broad portfolio ($M = 3.37$; $F(1, 20) = 281.7$, $p < .01$). Second, 16 participants confirmed that the extension category (e.g., coffeemakers) was more similar to the original product category (e.g., blenders) and each of the two similar categories (e.g., food processors and blenders; $M = 4.76$) than to each of the two dissimilar categories (e.g., hair dryers and handheld vacuums; $M = 2.26$; $F(1, 15) = 212.2$, $p < .01$). Third, 21 participants confirmed that the extension category was more similar to the entire narrow brand portfolio than to the entire broad brand portfolio ($M_{\text{narrow}} = 5.66$, $M_{\text{broad}} = 2.88$; $F(1, 20) = 228.4$, $p < .01$).

Procedure. The entire experiment was administered on a personal computer. Each session started with a training trial in which participants received product descriptions for two different brands, followed by uncued and cued recall questions about these brands. After the training trial, participants were presented with the first two replicates. For the first replicate, participants were shown product descriptions for a narrow brand and a broad brand that had the same benefit positioning (portfolio condition). For the second replicate, participants were shown information for a similar and dissimilar brand that had the same benefit positioning (single product condition).² After viewing information about the four brands, participants were asked, for each replicate, to write down their spontaneous associations for the two brands of that replicate. Next, they were presented with the extension products and were asked to choose the extension that would better deliver a benefit consistent with the positioning of both brands. After making a choice for both replicates, participants proceeded with the second set of replicates. An example of this procedure can be found in the appendix, including a schematic overview of the procedure, detailed product descriptions, and the instructions for the extension choice.

Results

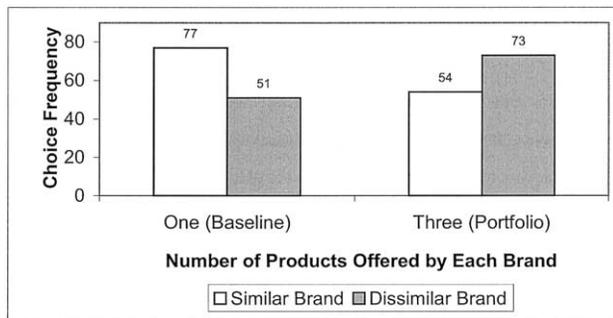
The number of selections of the similar and dissimilar brand extensions is shown in figure 1. Preference for the

¹The results were only analyzed for eight of the 13 replicates. The five remaining replicates had to be excluded because of programming errors.

²For each participant, the similar (dissimilar) product presented in the single product condition was randomly drawn from the two unique similar (dissimilar) products in that replicate's product set (e.g., food processors and mixers).

FIGURE 1

EXPERIMENT 1: CHOICE OF EXTENSIONS FROM SIMILAR AND DISSIMILAR PRODUCT CATEGORIES



similar or dissimilar brand depended on whether the brand was a portfolio or single-category brand ($\chi^2 = 7.94$, $df = 1$, $p < .01$). This interaction did not vary across category replicates ($\chi^2 = 4.21$, $df = 7$, $p > .20$). As predicted by the accessibility hypothesis, participants preferred the dissimilar, broad brand extension to the similar, narrow brand extension on 57% of the choices ($z = 1.69$, $p < .05$).³ As predicted by the similarity hypothesis, participants preferred the similar single-category brand extension to the dissimilar single-category brand extension on 60% of the choices ($z = 2.30$, $p < .05$).

Discussion

The results of experiment 1 show that benefit accessibility and brand extension category similarity both contribute to brand extension success. Participants' preference for the dissimilar, broad brand extension is consistent with the view that the strong category associations of the narrow brand interfered with the accessibility of the brand's benefit association. The broad brand's benefit association was more accessible, so people preferred the broad brand extension. Yet, when benefit accessibility was equivalent, as in the single product condition, people preferred an extension from a similar brand.

Although the results in the portfolio conditions are indeed more consistent with the accessibility-diagnostics perspective, they cannot rule out the possibility that participants relied on similarity judgments. First, one could argue that the differences in similarity in the single product condition were attenuated in the portfolio condition. For example, it is possible that a portfolio consisting of blenders, hair dryers, and handheld vacuums is less dissimilar to coffeemakers than a portfolio that consists only of hair dryers. Thus, the similarity manipulation may have been weaker in the portfolio condition than in the single product condition. Consequently, the disadvantage of the dissimilar brand would have been smaller in the portfolio condition, explaining the

observed shift in preference toward the extension of the broad brand.

Although problematic, such an alternative account of the results is not consistent with two important findings. First, the third pretest found that participants do find the extension category more similar to the complete narrow portfolio than to the complete broad portfolio. Second, a weaker similarity manipulation in the portfolio condition would explain a reduced preference for the narrow brand in the portfolio condition, but not the observed preference reversal: the majority of participants in the portfolio condition preferred the broad brand to the narrow brand.

A second, more problematic alternative explanation for the results of experiment 1 may be that participants were using a more advanced similarity-based process than the one described earlier. It may be that participants did not simply generalize associations from the host brand to the extension category depending on the similarity between the extension category and the products in the brand's portfolio. Instead, participants may have assessed the likelihood that the consistent benefit offered in the brand's other products would generalize to the new extension category by relying on category-based induction, and in particular on the diversity principle (Lopez 1995; Osherson et al. 1990). According to the diversity principle, hypotheses receive greater confirmation if they are supported by diverse rather than similar sets of data. For example, Osherson et al. (1990) argue that if one knows that lions have property X and giraffes have property X, one should have more confidence in the conclusion that rabbits will also have property X than if one instead knows that lions have property X and tigers have property X.

It seems reasonable that participants in the portfolio condition could have used the diversity principle to evaluate the brand extensions. If participants know that brand A produces durable blenders, durable hair dryers, and durable handheld vacuums, they should have more confidence in the conclusion that A will also produce durable coffeemakers than if they know that brand A produces durable blenders, durable food processors, and durable mixers. To test this alternative hypothesis, we can manipulate participants' need to rely on memory. If people are using a diversity principle to evaluate brand extensions, then making the positioning of the products in the competing portfolios available at the time of the evaluation should strengthen the advantage of the broad brand. In contrast, if the advantage of the broad brand is a function of the differential accessibility of the benefit and category associations, making the positioning information available at the time of the evaluation should favor the narrow brand. Each brand should have equally accessible benefit associations, so participants should now prefer the extension of the similar brand.

EXPERIMENT 2

The objective of the second experiment was to test whether memory processes or similarity judgments were responsible for the preference for the broad brand extension.

³All tests of proportion are one-tailed and test the hypothesis that the population proportion equals .50.

To achieve this objective, experiment 2 used a stimulus-based instead of a memory-based decision context. If the effects observed in experiment 1 were due to the weakening of the similarity manipulation in the portfolio condition, or to participants' use of the diversity principle, the effects should replicate in experiment 2. However, if the preference for the broad brand was caused by changes in accessibility of brand associations, then the preference should disappear when the benefit information is made available at the time of choice. Both brands should have equally accessible and diagnostic benefit associations, thus, as predicted by the similarity hypothesis, participants should prefer the extension from the similar brand, regardless of the number of products in the brands' portfolios.

Method

Participants were 106 undergraduate students who participated in the experiment in exchange for course credit. The design, stimuli, and procedure were similar to those in experiment 1. The only difference was that the experiment was administered in questionnaire format and that the page on which participants had to select one of two brand extensions contained all the product descriptions for both brands, making reliance on memory unnecessary. Furthermore, given that the brand information was provided at the time of the choice task, participants were not asked to write down brand associations.

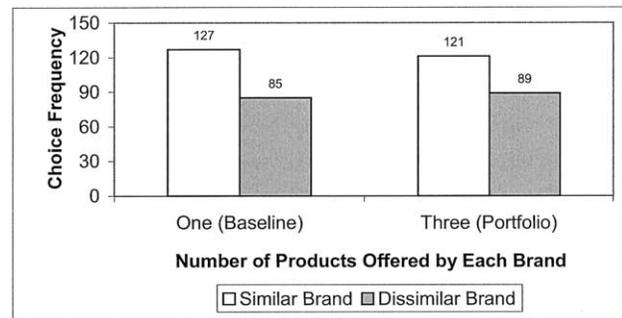
Results and Discussion

The choice frequencies for the similar and dissimilar brand extensions are shown in figure 2. Participants' relative preference for the similar and dissimilar brand extensions did not depend on the number of products in the brands' portfolio ($\chi^2 = 0.2$, $df = 1$, $p > .20$). This null effect did not depend on the nature of the product replicates ($\chi^2 = 2.52$, $df = 7$, $p > .20$). Participants preferred the extension from the similar product(s) to the extension from the dissimilar product(s) on 59% of the choices ($z = 3.60$, $p < .01$). Participants preferred the similar extension when they were presented with single products ($\hat{\pi} = .60$; $z = 2.89$, $p < .01$) and when they were presented with the complete portfolios ($\hat{\pi} = .58$; $z = 2.20$, $p < .05$).

The results are inconsistent with both alternative explanations of the effects observed in experiment 1. If the similarity manipulation became weaker in the portfolio condition, participants should not have preferred the narrow brand's extension. Similarly, if participants relied on the diversity principle to assess whether the brand's benefits would transfer to the new product category, they should have preferred the extension of the broad brand in the portfolio condition. Instead, when the benefit associations of both brands were fully accessible, there was no longer a benefit to broadening the portfolio. These results indicate that the effects observed in the first experiment must have been due to changes in the relative accessibility of the brands' associations, consistent with the accessibility-dia-

FIGURE 2

EXPERIMENT 2: CHOICE OF EXTENSIONS FROM SIMILAR AND DISSIMILAR PRODUCT CATEGORIES



nosticity explanation. However, since experiment 2 simultaneously increased the accessibility of all brand associations, these findings do not allow us to isolate the associations responsible for the effect. This will be addressed in experiment 3.

EXPERIMENT 3

Experiment 1 showed that participants preferred a broad brand extension to a narrow brand extension when the brands had a common positioning that was desirable in the extension category, even though the extension category was clearly more similar to the products carried by the narrow brand. The second experiment indicated that this result was due to changes in the relative accessibility of both brands' associations but did not provide any evidence of the nature of the responsible associations. The goal of the third experiment is to demonstrate that the accessibility of the brands' benefit associations was responsible for participants' preference for the broad brand extension. In particular, participants in the first experiment preferred the broad brand extension because the brands' benefit association (1) was diagnostic in the extension category and (2) was more accessible for the broad brand than for the narrow brand. The narrow brand's focused category associations caused more interference than did the broad brand's diffuse category associations and, as a result, the narrow brand's benefit association was less accessible than the broad brand's benefit association. If this account holds, then disproportionately reducing the accessibility of the benefit association in the broad brand portfolio or reducing the diagnosticity of the benefit association in the extension category should reduce preference for the broad brand.

Method

Participants and Design. Participants were 252 undergraduate students who participated in the experiment in exchange for extra credit. The design was a two (portfolio: narrow or broad) by three (benefit accessibility/diagnosticity: accessibility + diagnosticity, reduced accessibility, re-

duced diagnosticity) by two (order and brand name counterbalancing factor) by three (extension category replicates) mixed design. Benefit accessibility/ diagnosticity was manipulated between participants.

The accessibility + diagnosticity condition represented the baseline condition and had a procedure similar to the portfolio condition of experiment 1. Participants received single exposures to category and positioning information for a given brand. After a delay, participants were informed of the desirable attribute in the extension category and asked to choose between narrow and broad brand extensions. The procedure did differ from experiment 1 in two aspects. The portfolios were increased to six products in order to increase the strength of the breadth manipulation and people were not asked to provide associations to the brand names.

The reduced accessibility condition was an attempt to reduce the accessibility of the broad brand's benefit association relative to the narrow brand's benefit association. In experiment 1, we argued that the broad brand did not have easily accessible category associations that could interfere with the benefit association. As a consequence, the benefit association of the broad brand was more accessible. In the reduced accessibility condition, we attempted to reduce the relative accessibility of the broad brand's benefit association by increasing participants' exposure to the brands' category information (i.e., by repeating the product category information but not the benefit information). We expected that repeated exposure to the dissimilar products in the broad brand portfolio should strengthen the brand's existing diffuse category associations and create multiple, strong category associations instead. Thus, increasing exposure to the dissimilar products should severely increase interference with the broad brand's benefit association. In contrast, the narrow brand already possesses easily accessible category associations. Therefore, increasing exposure to the similar products in the narrow brand portfolio should only marginally strengthen the brand's category associations, thus only producing a limited increase in the amount of interference from these associations. In sum, we expected that increased familiarity with the broad brand's diffuse category information should increase interference more than increased familiarity with the narrow brand's focused category information and that preference should shift toward the narrow brand extension.

The reduced diagnosticity condition was an attempt to reduce the diagnosticity of the benefit information for the extension evaluation. Participants in this condition were not told that they were looking for a particular benefit in the extension category. If participants in experiment 1 preferred the extension of the broad brand because its benefit was accessible and desirable in the extension category, then reducing the diagnosticity of this benefit should reduce participants' preference for the broad brand extension. Moreover, according to the similarity hypothesis, participants should rely on the similarity of the host brands' category associations to the extension category associations when they do not desire a specific benefit (i.e., when benefits are

equally nondiagnostic). Given that the products currently offered by the narrow brand are more similar to the extension category than the products currently offered by the broad brand, the narrow brand should be perceived as more likely to deliver a high quality product in the extension category and preference should shift toward the narrow brand extension.

Stimuli. The stimuli selection procedure for the third experiment was similar to the procedure used in the first experiment, with the exception that each brand portfolio contained six products. Thus, aside from an original product that was common to both portfolios and similar to the extension category, we had to select five additional products that were similar to the extension category and to each other for the narrow portfolio, as well as five additional products that were dissimilar to the extension category and to each other for the broad portfolio.

Three pretests were used to confirm that the stimuli had the proper characteristics. Similarity was again assessed on a seven-point semantic differential scale. First, 35 participants confirmed that products in the narrow portfolio were more similar to each other ($M = 6.33$) than were those in the broad portfolio ($M = 2.41$; $F(1, 34) = 352.7$, $p < .01$). Second, 24 participants confirmed that the extension category was perceived to be more similar to the five unique products in the narrow portfolio ($M = 4.62$) than to those in the broad portfolio ($M = 2.41$, $F(1, 23) = 245.0$, $p < .01$). Third, 15 participants confirmed that the extension category was judged as more similar to the narrow brand portfolio ($M = 5.58$) than to the broad brand portfolio ($M = 2.62$; $F(1, 14) = 79.50$, $p < .01$).

Procedure. The procedure was similar to the one used in the first experiment apart from the following changes. First, participants were not asked to list their brand associations before making the extension choice. Second, the product descriptions were simplified. The descriptions consisted only of the brand name, the product category, and a statement of the product benefit (e.g., "Does not contain additives or preservatives"). Third, although each brand's products were still presented sequentially, the previously presented product/benefit information remained on the screen when the subsequent product/benefit information appeared. When all six products for a brand had been presented, the screen was cleared and the products for the next brand were presented. After viewing information for all six brands, participants in the reduced accessibility condition were shown the product information (but not the benefit information) two more times, thus increasing their familiarity with the products offered by the brands. Finally, all participants were presented with three purchase situations (one for each replicate). In the reduced diagnosticity condition, participants were simply asked to select a high quality product, while participants in the other conditions were also asked to choose a product that offered the benefit featured by both brands.

Results

The choice frequencies for narrow versus broad brand extensions are presented in figure 3. Participants' preference depended on the benefit accessibility/diagnosticity manipulation ($\chi^2 = 18.40, df = 2, p < .01$). In the baseline condition (accessibility + diagnosticity), participants preferred the broad brand extension to the narrow brand extension on 55% of the choices ($z = 1.77, p < .05$), replicating the results of the portfolio condition of experiment 1.

When participants' exposure to the product information was increased, preference shifted to the narrow brand ($\chi^2 = 12.95, df = 1, p < .01$). Participants in the reduced accessibility condition preferred the narrow brand extension to the broad brand extension on 61% of the choices ($z = 3.49, p < .01$). This is consistent with the notion that increased exposure to the product information disproportionately reduced the accessibility of the broad brand's benefit association relative to the narrow brand's benefit association. The preference shift again did not depend on the nature of the product replicate ($\chi^2 = 4.48, df = 2, p > .10$).

Similarly, when the diagnosticity of the positioning information was reduced, preference shifted to the narrow brand ($\chi^2 = 14.27, df = 1, p < .01$). Participants in the reduced diagnosticity condition preferred the narrow brand extension to the broad brand extension on 62% of the choices ($z = 3.99, p < .01$). This implies that the brands' benefit associations were responsible for the previously observed preference for the broad brand extension. This shift in preference did not depend on the nature of the product replicate ($\chi^2 = 1.79, df = 2, p > .20$).

Discussion

The results of the third experiment provide further support for the accessibility-diagnosticity account of brand extension evaluations. While participants tended to prefer the broad

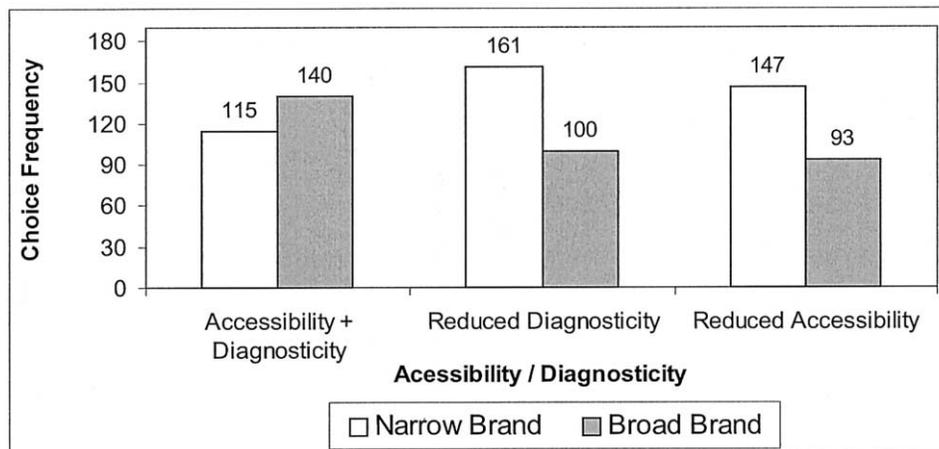
brand extension when the benefit was accessible and explicitly desirable, they shifted their preference to the narrow brand extension when the broad brand's category information was made more accessible or the positioning information was made less diagnostic. Although this study did not directly measure or manipulate the accessibility of the benefit associations, the changes in participants' brand preferences as a result of the manipulations of benefit diagnosticity and category accessibility (i.e., an indirect manipulation of benefit accessibility) provide converging support for an accessibility-diagnosticity perspective on brand extension preference. In particular, these results suggest that the preference for the broad brand observed in experiment 1 is not only due to memory effects, as suggested by experiment 2, but should more specifically be attributed to changes in the relative accessibility of the benefit associations of the two brands.

GENERAL DISCUSSION

Many brands have broadened their portfolio of products by extending to a wide variety of product categories (e.g., Yamaha, Virgin, Heinz). It has been argued that broad brands may be at a disadvantage in the most attractive extension categories (i.e., in those product categories that are similar to one of the brands' current products) because of their diffuse product associations (e.g., Boush and Loken 1991; Riess and Trout 1981). We have argued that the validity of this conclusion depends on the process consumers use to evaluate brand extensions. If consumers use a similarity-based inference process, broad brands will indeed be at a disadvantage in close extension categories (e.g., Boush and Loken 1991). Consumers are more likely to generalize the benefits associated with the similar, narrow brand than those associated with the less similar, broad brand. However, if consumers rely on the most accessible and diagnostic brand associations to infer the benefits offered by the extension

FIGURE 3

EXPERIMENT 3: CHOICE OF EXTENSIONS FROM NARROW AND BROAD BRAND PORTFOLIOS



(e.g., Broniarczyk and Alba 1994), broad brands may have an advantage over narrow brands. In contrast to narrow brands, broad brands usually do not have strong category associations that can interfere with their benefit associations. Thus, if the brands' benefits are desirable in the extension category, consumers will prefer the broad brand extension because of its more accessible benefit association.

The results of the three experiments indicate that the accessibility of beliefs about brand benefits contributes to the evaluation of brand extensions. In the first experiment, participants preferred the similar brand extensions to the dissimilar brand extensions when each brand name identified a single product. However, participants' preferences shifted in favor of the dissimilar brand extension when similar and dissimilar products were combined to form narrow and broad brand portfolios. The second experiment showed that participants always prefer the similar brand extension when they have all the brand information available at the time of choice. This indicates that the preference shift observed in experiment 1 was caused by changes in the relative accessibility of brand information. The results of the third experiment further specify this process by showing that the preference for the broad brand was caused by differences in the diagnosticity and accessibility of the benefit associations. When the desirability of the brands' positioning was unclear, participants' preference shifted toward the narrow brand extension, indicating that the brands' benefit associations were essential to the observed preference for the broad brand extension. Furthermore, when participants became more familiar with the brands' product category information, the broad brand's category associations became as strong as the narrow brand's category associations, thus eliminating the accessibility advantage of the broad brand's benefit association, and again shifting preference to the narrow brand extension. This last result not only emphasizes the importance of the relative accessibility of the brands' benefit associations but also demonstrates that this relative accessibility depends on consumers' familiarity with the brands' product categories.

In sum, the results of the studies are not consistent with a pure similarity-based account of brand extension evaluations but, instead, indicate that consumers also evaluate brand extensions by relying on the most diagnostic and accessible brand associations. However, this does not preclude the possibility that consumers may sometimes treat brand portfolios as categories and ascribe brand characteristics to new extensions only when these extension products are similar to those in the brand portfolio. Such similarity-based transfer of attributes may be most likely when consumers are very familiar with the brand and the products it produces, thus leading them to construct a specific category for these branded products. In contrast, when consumers are less familiar with the brand, as was the case in our studies, the brand portfolio is less likely to be represented as a separate category, and the accessibility-diagnosticity framework may provide a more accurate description of consumers' extension evaluations.

Aside from providing more insight into the effects of brand breadth on extension evaluations, the results also allow for two general recommendations about the building of brand equity. First, they draw attention to the accessibility of brand associations. Many consumer decisions are memory based rather than stimulus based (see also Lynch, Marmorstein, and Weigold 1988). Therefore, not only is it important to build favorable brand associations, but these associations also need to be highly accessible in consumers' minds. Participants in the first experiment preferred the broad brand extension to the narrow brand extension even though both brands had equally favorable benefit associations and the narrow brand had more favorable category associations. We argue that participants behaved as cognitive misers who terminated their memory search for brand information when the critical benefit association was more easily retrieved for the broad brand than for the narrow brand. If consumers indeed follow such a process, brand managers should primarily be concerned about the accessibility of the brand's core benefit association.

The results also draw attention to the interdependence of the different types of brand associations. Many brands have acquired a variety of different associations through continuous extensions, promotional activity, and consumer experience. Though brand managers will usually strive for a consistent brand image (e.g., Park, Jaworski, and MacInnis 1986), it is rarely possible to construct an exclusive set of overlapping associations that mutually reinforce the brand's positioning. Those associations that are not related to the brand's core benefit not only fail to support the benefit but also have the potential of reducing the accessibility of this benefit association by interfering with its retrieval. The amount of interference will depend on, among other factors, the relatedness and strength of these additional brand associations. As experiments 1 and 3 illustrate, a diffuse set of nonbenefit associations will cause less interference than a focused set of nonbenefit associations, since the interrelatedness of the latter associations will encourage recall of additional nonbenefit associations and interfere with the retrieval of the benefit association. However, as experiment 3 also illustrates, a diffuse set of strong nonbenefit associations will cause as much interference as a focused set of nonbenefit associations and allow other extension evaluation processes (e.g., similarity-based judgments) to exert their influence. Future research could further examine conditions under which interference from additional nonbenefit associations is maximized or minimized. Such an investigation could examine interference from other types of brand associations not examined here (e.g., secondary benefits, associations with usage situations, associations to the parent company, etc.).

LIMITATIONS AND FUTURE RESEARCH

Our findings indicate that consumers tend to prefer similar to dissimilar extensions of single-category brands but, at the same time, may prefer a broad, dissimilar brand extension to a narrow, similar brand extension. We do not, however,

assert that broad brand extensions will always be preferred to narrow brand extensions. First, our results show that the similar narrow brand extensions are preferred when the decision is stimulus based (experiment 2), when the brands' benefit is not salient in the extension context (experiment 3), or when consumers are very familiar with both brands' products (experiment 3). Second, given that the broad brand portfolios in our studies always included one product that was similar to the extension category, it is not clear if the preference for the broad brand extension would also hold for brand portfolios with exclusively dissimilar products. Third, whereas participants in our studies received equally strong benefit information for both brands, a narrow brand that initially has a stronger benefit association than a broad brand could very well be preferred over a broad brand, even when consumers have to rely on memory and the benefit is highly diagnostic. Moreover, in some cases, the strong category associations of the narrow brand may even enhance the accessibility of the benefit association. More precisely, when there is a strong semantic relationship between the category and benefit associations (e.g., "fruit juices" and "healthy"), they are likely to mutually reinforce each other rather than interfere with each other (Anderson et al. 2000). In sum, consumers' preference for broad brand extensions may be limited to a specific set of circumstances. As such, this research does not establish a generalized preference for broad brand extensions but, instead, provides support for an accessibility-diagnostics account of the evaluation of brand extensions.

Aside from these reservations about the possible advantage of broad over narrow brands, it is also necessary to exercise caution with regard to the process inferences warranted by these results. First, we hypothesized that, when diagnostic benefit associations differ in accessibility, consumers will rely on benefit accessibility rather than on category similarity. In the first and third experiments, when accessibility and similarity were pitted against each other, participants indeed tended to prefer the dissimilar brand with the more accessible benefit association. Whereas these results indicate that the effect of benefit accessibility can surpass the effect of similarity, they do not imply that this will always hold. As mentioned in the general discussion, in some situations (e.g., when the brands are familiar), category-based evaluations may be more likely than inference-based judgments, implying an advantage of category similarity over benefit accessibility. Furthermore, any dominance of benefit accessibility over category similarity requires that the benefit is sufficiently diagnostic and the difference in accessibility is substantial. When the benefit is relatively inconsequential or when the difference in accessibility is rather small, consumers may rely more on differences in category similarity. The results suggest that this was indeed the case for a substantial number of participants (i.e., those who preferred the narrow brand extension). Moreover, although consumers tend to be cognitive misers, some consumers may still make similarity-based inferences even given large differences in accessibility of a highly de-

sired benefit. In sum, both benefit accessibility and category similarity can (simultaneously) influence consumers' brand extension preferences. These studies document one situation in which the effect of benefit accessibility, on average, overrides that of category similarity. However, the relative impact of these two factors will depend on both situational and individual differences, which is an area for future research.

Second, we have argued that the observed preference for the broad brand extension over the narrow brand extension is caused by the reduced accessibility of the narrow brand's benefit association due to interference from its strong category associations. However, although the results of experiments 2 and 3 demonstrate the importance of the accessibility of the benefit associations, our findings cannot completely rule out alternative interpretations of the role of these associations. In principle, an increased accessibility of the broad brand's benefit association due to its diverse non-benefit associations can account for the results as well as the proposed decreased accessibility of the narrow brand's benefit association due to its focused nonbenefit associations. Although the latter explanation seems more plausible in light of the existing memory literature, the two explanations can only be distinguished by comparing each brand extension to a neutral baseline (which was not included in our studies).

Finally, our studies did not directly manipulate the accessibility of the benefit associations or provide direct process measures of the proposed mechanism. The accessibility of the benefit associations was manipulated only indirectly by varying the consistency of the category associations (all experiments), the accessibility of all brand information (experiment 2), or the familiarity with the category associations (experiment 3). Although the effects of these manipulations were consistent with the accessibility-diagnostics perspective, we did not obtain any direct evidence of the mediating mechanism. We did ask participants to list their brand associations in the first study, but participants listed only a limited number of associations, mostly consisting of brand names and category labels. Given that only few participants listed the brand benefits, these free associations could not be meaningfully analyzed. Future studies on the accessibility and interdependence of brand associations could address this shortcoming by including more specific measures of the accessibility of the diverse brand associations (e.g., using reaction time measures).

APPENDIX

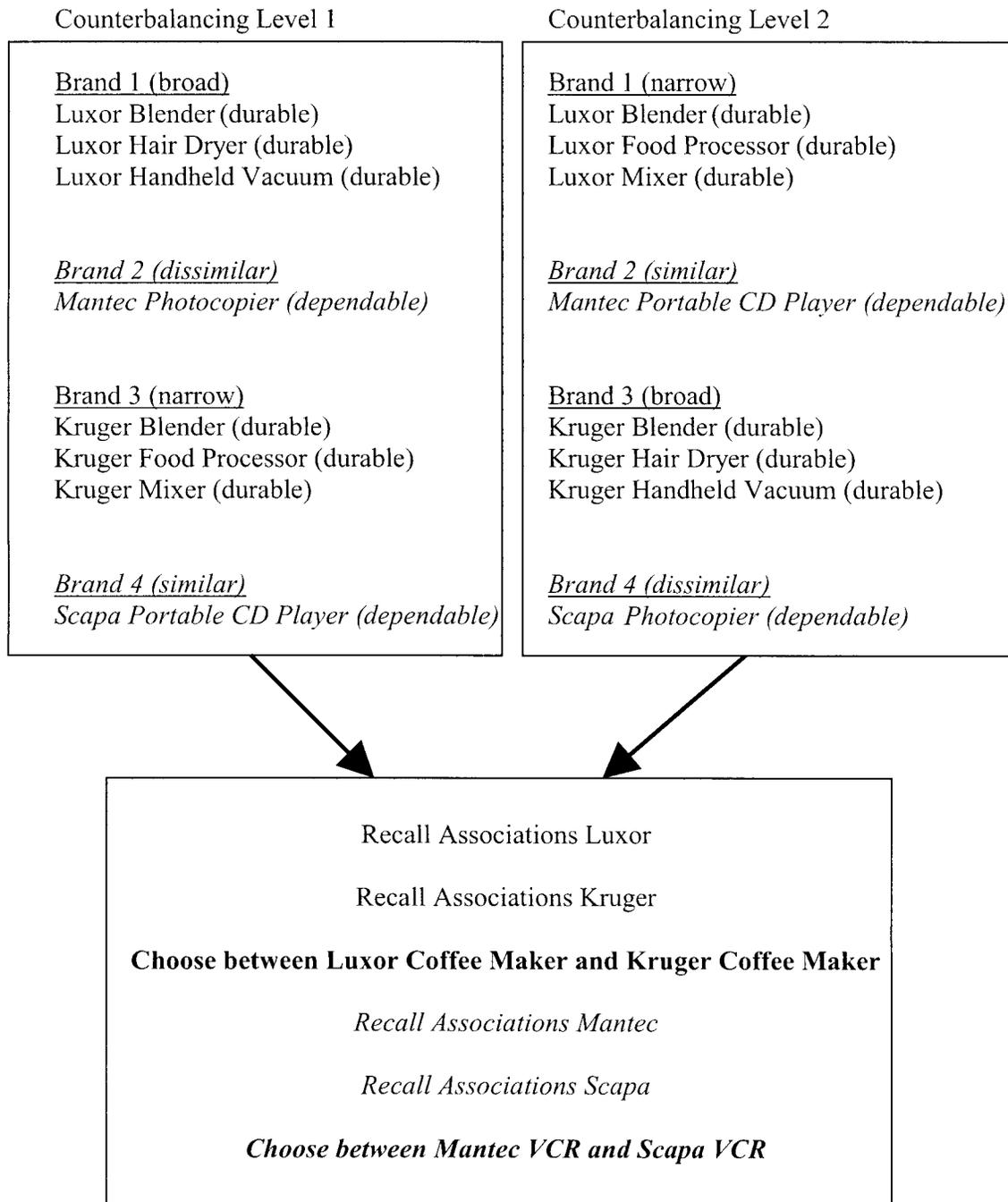
EXAMPLE OF PRODUCT DESCRIPTIONS, EXPERIMENT 1 (BROAD BRAND)

Luxor's Blenders will last you a long time, even after extensive use. They are slightly more powerful than the average blender, although they do not have that many different settings.

Luxor's Hair Dryers come with extra attachments that give your hair more volume. Like most other hair dryers,

FIGURE A1

EXAMPLE OF PROCEDURE, EXPERIMENT 1 (BLOCK OF TWO REPLICATES)



they also have a built-in safety-check that prevents your hair dryer from overheating. Furthermore, Luxor's hair dryers come with a 10-year warranty.

Luxor's Handheld Vacuums can reach into the smallest corners. Luxor's handheld vacuums are durable and reliable products. Moreover, they have a spacious dirt repository that is easy to empty.

EXAMPLE OF EXTENSION CHOICE INSTRUCTIONS

Extension Category: Coffee Maker

Desirable Benefit: Durability

Suppose you need to buy a coffee maker and you are very concerned with the reliability of that coffee maker (i.e., you're fed up with your appliances breaking down). You want a high quality coffee maker, but you also want to make sure that it will last a long time.

When you arrive at the store, you notice that your favorite brand is not available. More precisely, there are only 2 coffee maker brands available: Luxor and Kruger.

Based on what you know about these brands, and knowing that you want your coffee maker to last a long time, which coffee maker would you select? (Choose a brand by clicking on the corresponding name.)

[Dawn Iacobucci served as editor and Gita Johar served as associate editor for this article.]

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