“Explaining Behavioural Intentions toward Co-Branded Products”

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Explaining Behavioural Intentions toward Co-Branded Products

Abstract

The authors develop a conceptual model, of factors that determine behavioural intentions to buy co-branded products. The model is an extension of the Simonon/Ruth model. Structural equation modelling serves to test the hypotheses. Product fit has the strongest effect (of the exogenous factors) on behavioural intention. Marketers should gain a detailed understanding of consumers’ perceptions of product and brand fit with partner brands and establish positive associations before leveraging a brand as a co-branded product. Buying intentions for co-branded products can be increased by marketing to brand-conscious consumers, consumers with variety-seeking tendencies, and highly involved consumers.

Keywords: Co-branded products; Behavioural intentions; Brand attitudes; Consumer motives; Brand/Product fit

Biography

Bernd Helmig obtained his Master degree in 1993 from the University of Wuerzburg (Germany) and his Ph.D. in Business Administration in 1997 from the University of Freiburg (Germany) where he became Assistant Professor in 1997. In 2001 he became full (chaired) Professor of Marketing at the University of Fribourg (Switzerland). Since 2005, he additionally serves as the Director of the Institute for Management of Nonprofit Organizations (VMI) at the same University. He has written and edited several books and published in Journal of Advertising Research, Voluntas and leading European Journals such as Zeitschrift für Betriebswirtschaft, Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung, Die Betriebswirtschaft, Marketing - Journal of Research and Management, Swiss Journal of Busi-

**Jan-Alexander Huber**

Jan-Alexander Huber is a Manager at Bain & Company, a global business consulting firm. He obtained his Master degree in Business Administration from the University of Hamburg (Germany) in 2000. While being with Bain he took a leave of absence to become a doctoral student at the University of Fribourg (Switzerland). There he wrote his doctoral thesis at Prof. Helmig’s chair of Nonprofit-Management & Marketing. In 2004 he obtained his Ph.D. in Business Administration from the University in Fribourg. While working for Bain, he published articles in books and journals on topics like branding/co-branding, customer loyalty and investor relations.

**Peter S.H. Leeflang** studied Econometrics at the Erasmus University of Rotterdam. He obtained his Ph.D. in economics in 1974. Peter Leeflang is Professor of Marketing at the Department of Marketing of the Faculty of Economics at the University of Groningen (the Netherlands). He has written several books and published in the Journal of Marketing, the Journal of Marketing Research, Management Science, Applied Economics, and the International Journal of Research in Marketing. In 1999 he became a member of the Royal Netherlands Academy of Arts and Sciences. Since 2004 he is also affiliated professor at the Johann Wolfgang Goethe University at Frankfurt am Main. In 2005 he has been appointed at the Frank M. Bass Chair of Marketing at the University of Groningen.
Competition in many markets has grown fierce as consumers become more price sensitive (Bijmolt et al. 2005) and increasingly include private-label brands in their consideration sets. Brand managers of fast-moving consumer goods (FMCG) have attempted to tackle this issue by creating stronger brands (Keller 1993; Park and Srinivasan 1994; van Osselaer and Alba 2003).

A common strategy used to strengthen a brand and its equity introduces products under the same brand name in existing product categories (i.e., line extension; Desai and Hoyer 1993; Desai and Keller 2002) and/or new product categories (i.e., brand extension; Keller 2003). These extensions aim to leverage customer value perceptions of existing brands for the new product (Aaker and Keller 1990) and affect the image of the parent brand favourably (Balachander and Ghose 2003).

In addition to extensions, marketers increasingly have begun to use brand alliance strategies. A brand alliance pertains to a marketing strategy in which two or more already established brands are presented jointly to consumers (Rao and Rueckert 1994; Simonin and Ruth 1998). Such brand alliance strategies can take a variety of forms, including

- Joint sales promotions (e.g., Campbell’s soup and Nabisco saltine crackers; Varadarajan 1986),
- Advertising alliances (e.g., Kellogg’s cereals and Tropicana fruit juice; Samu et al. 1999),
- Bundling (e.g., variety packs of branded soft drinks; Stremersch and Tellis 2002),
- Co-branding (e.g., Slim Fast/Godiva cake mix; Park et al. 1996),
- Ingredient branding (e.g., Beechut baby foods with Chiquita banana; Norris 1992), or
- Dual branding (e.g., Shell–Burger King gas stations; Levin and Levin 2000).
We define these strategies in greater detail in table 1.

### TABLE 1: Brand alliance strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint sales promotion</td>
<td>Sales promotion characterized by the participation and/or pooling of promotional resources by two or more distinct entities with the goal of capitalizing on joint opportunities for sales growth, profits, or other objectives to the mutual benefit of the participants in the cooperative sales promotion program (Varadarajan 1986).</td>
</tr>
<tr>
<td>Advertising alliance</td>
<td>Two brands from different product categories featured together in an advertisement (Samu et al. 1999).</td>
</tr>
<tr>
<td>Bundling</td>
<td>Marketing two or more products/services in a single package for a special price (Guiltinan 1987). Selling two or more products/services at a single price (Yadav and Monroe 1993). Selling two or more separate products in one package, with separate products defined as products for which separate markets exist (Stremersch and Tellis 2002).</td>
</tr>
<tr>
<td>Co-branding</td>
<td>Combining two existing brand names to create a composite brand name for a new product (Park et al. 1996).</td>
</tr>
<tr>
<td>Ingredient branding</td>
<td>Key attributes of one brand are incorporated into another brand as ingredients (Desai and Keller 2002).</td>
</tr>
<tr>
<td>Dual branding</td>
<td>Two brands (often restaurants) share the same facilities to provide consumers the opportunity to use either or both brands (Levin and Levin 2000).</td>
</tr>
</tbody>
</table>

The main reasons behind the increased use of brand alliance strategies in practice are the potential interdependent image improvements that may result from collaboration with a complementary partner and signalling aspects (Erdem 1998; Wernerfelt 1988). According to the signalling perspective, the combination of two brands should provide greater assurance about product quality than a single-branded product and, therefore, higher product evaluations and premium prices (Rao et al. 1999).

Nevertheless, negative effects can arise, such as when one partner faces quality or image problems. For example, the Nutrasweet–Diet Coke brand alliance suffered when Nutrasweet was associated with brain cancer. Other negative effects occur when customers are confronted with inconsistent images from the collaborating partner brands. To exploit the posi-
tive effects and avoid the potential negative effects of a brand alliance, firms must gain a detailed understanding of consumer behaviour regarding products marketed through a brand alliance strategy.

In this study, we focus on co-branded products: namely, two or more existing brands that are combined in a composite brand name, such that one product is branded by two brands simultaneously. A few empirical studies exist on co-branding and have given marketers an understanding of how co-branding may work. For example, Simonin and Ruth's study (1998) has been cited and validated many times (e.g., Baumgarth 2004; Desai and Keller 2002; Hadjicharalambous 2001; Lafferty et al. 2004). Although the model they propose (hereafter, Simonin/Ruth model) provides a solid and proven framework of attitude formation for co-branded products, a comprehensive model to explain consumers' behavioural intentions to buy co-branded products remains lacking.

This study attempts to determine the factors that influence behavioural intentions for buying co-branded products. To this end, we develop a structural equation model (SEM) that extends the Simonin/Ruth model. We analyze FMCG instead of durable goods and/or services and introduce additional constructs to explain consumers’ intentions to buy co-branded products.

Our article is organized as follows: First, we review the literature and specify a model to explain the evaluation of co-branded products. Second, we develop hypotheses based on multiple theories and concepts to explain intentions to buy co-branded products. Third, we describe the experimental methodology and procedure before discussing the key results and managerial implications. Fourth, we discuss some limitations of our study as well as directions for further research.
Literature Review

Quantitative empirical research on co-branded products started in the mid-1990s (e.g., Park et al. 1996; Shocker 1995). Park et al. (1996) argue that the philosophy behind co-branding stems from marketers’ expectation that a positive perceived attribute of one constituent brands will transfer to the co-branded product, such that the second product will be perceived to perform well on that attribute too. They also demonstrate that a co-branded product that consists of two complementary brands has a better attribute profile in consumers’ minds than does a direct brand extension of the dominant brand or a co-branded product that consists of two highly favourable but not complementary brands.

Simonin and Ruth (1998) focus on the spillover effects of co-branded products and identify several determinants of a positive evaluation of the co-branded product. Through SEM construction, they show that consumers’ attitudes toward the co-branded product can influence their attitudes toward each partner’s brands. They also prove that prior attitude toward each partner brand, as well as the brand and product fit of the constituent brands, influence consumers’ attitudes toward the co-branded product. Product fit refers to the extent to which consumers perceive the two product categories are compatible, so in this context, product fit pertains to two involved product categories. For example, yogurt and fruit have good product fit for a new product fruit quark/pudding. In contrast, brand fit refers to the fit of brand perceptions (images and associations) of the partners and therefore may be defined as how two brands (e.g., Danone and Punica) are perceived to be suited for a new product branded by two brands simultaneously (e.g., fruit quark/pudding from Danone & Punica). The findings of Simonin and Ruth’s study have been validated in multiple replications (e.g., Baumgarth 2004; Lafferty et al. 2004) Hadjicharalambous (2001) proves that the overall fit, or the fit of
the two brands for the new product, has a positive impact on the evaluation of co-branded products. Specifically, overall fit is influenced by the transfer fit, or the fit of the partner brands with the new product category of the co-branded product, and the brand fit.

Using the conceptual work by Rao and Rueckert (1994) and Rao (1997), Rao et al (1999) undertake a deeper analysis of co-branded products from a signalling perspective. Their findings suggest that when they evaluate a product with an important unobservable attribute, consumers experience enhanced quality perceptions when the brand is allied with a second brand that is perceived as vulnerable to consumer sanctions.

Differentiating between host brands with moderate and high quality, McCarthy and Norris (1999) prove that branded ingredients consistently and positively affect moderate-quality host brands but only occasionally positively affect higher-quality host brands.

A direct link between brand equity and a co-branded product has been established by Washburn et al. (2000), who assert that co-branded products might offer win–win potential for both brands. Although low brand equity brands may benefit the most from co-branding, high brand equity brands are not denigrated even when paired with a low equity partner. However, high brand equity brands suffer denigration if they are paired with partner brands that have either low quality or a bad image.

More specific research deals with the effects of different forms of ingredient branding, such as Janiszewski and van Osselaer (2000), Park et al. (1996), Simonin and Ruth (1998), and Desai and Keller (2002). From these studies, we conclude that high brand awareness (Desai
and Keller 2002) and positive brand associations lead to positive evaluations of co-branded products.

On the basis of these research findings, we create figure 1 to show a model of co-branding that can explain evaluations of co-branded products. We adopt and extend prior research findings to explain buying intentions for co-branded products.

FIGURE 1: Prior research findings on the evaluation of co-branded products

Conceptual Model and Hypotheses

We develop a conceptual model to explain behavioural intentions to buy co-branded products. We first derive hypotheses from prior research to explain attitude formation.
toward buying co-branded products. To this end, we use the Simonin/Ruth (1998) model and its replications (e.g., Baumgarth 2004; Lafferty et al. 2004). We also derive hypotheses regarding how attitude and additional exogenous factors explain behavioural intentions toward buying co-branded products on the basis of several behavioural studies. By explaining buying intentions for co-branded product and the explicit link between attitudes and buying intentions, we extend the Simonin/Ruth model substantially. In figure 2, we present the framework for the conceptual model, and in figure 3, we represent the estimated model itself.¹

**FIGURE 2: Theoretical framework for the conceptual model**

<table>
<thead>
<tr>
<th>Characteristics of partner brands</th>
<th>Attitude towards buying co-branded products</th>
<th>Buying intention for co-branded products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit/congruency between partner brands</td>
<td>Fit/congruency between partner brands</td>
<td>Fit/congruency between partner brands</td>
</tr>
<tr>
<td>Prior research (see figure 1)</td>
<td>Prior research (see figure 1)</td>
<td>Prior research (see figure 1)</td>
</tr>
<tr>
<td>Extensions</td>
<td>Extensions</td>
<td>Extensions</td>
</tr>
<tr>
<td>Personal, specific exogenous variables</td>
<td>Personal, specific exogenous variables</td>
<td>Personal, specific exogenous variables</td>
</tr>
</tbody>
</table>

**Attitude toward buying the co-branded product**

Many factors explain attitude formation toward co-branded products. Attitude accessibility theory (Fazio 1986) argues that a person is more likely to access attitudes related to a brand that are more salient. Transferring this finding to co-branded products suggests that evaluations of constituent brands will be retrieved automatically and transferred to the co-branded product if consumers access the brand associations through a confrontation with a sufficiently strong co-brand product stimulus (e.g., the excellent chocolate taste of Godiva will be e-…

¹ We show only the calibrated model to save space; see figure 3.
Another theory to explain attitude formation is information integration theory (Anderson 1981), which states that attitudes and beliefs form and are modified as people receive, evaluate, and then integrate stimulus information with their existing attitudes and/or beliefs. Various empirical studies have confirmed this theory (e.g., Janiszewski and van Osselaer 2000; Simonin and Ruth 1998; Washburn et al. 2000). In turn, we hypothesize

\[ H_1: \] Prior attitudes toward the constituent brands relate positively to attitudes toward buying the co-branded product.

We specify \( H_1 \) by designating the effect of attitudes toward the first partner brand as \( H_{1a} \) and those toward the second partner brand \( H_{1b} \).

According to the literature on product schemata (e.g., Meyers-Levy and Tybout 1989; Sujan and Bettman 1989), the concepts of the new co-branded product and those of the constituent brands can be represented as schemata. Humans associate and combine new impressions about products with their existing memory pertaining to other products or the overall environment. To evaluate co-branded products, consumers must perceive that the two schemata of the two brands involved fit well. This necessity also is evident in studies on brand extensions (e.g., Aaker and Keller 1990; Dacin and Smith 1994; Park et al. 1991), which evince positive relationships between transfer fit and brand extension evaluations. A low degree of transfer fit in consumers’ minds indicates that they question the transferability of the skills required to produce both the existing and the extension product. For co-branded products, the transferability of skills to the extension product is less important, because complementary partners
contribute interdependent skills that may be missing when the firms stand alone (Simonin and Ruth 1998). Simonin and Ruth (1998) also find that a positive product fit and a positive brand fit determine positive attitudes toward the co-branded product. The underlying assumption is that a positive fit between the two brands and products causes consumers to have a positive attitude toward the individual brands as well. A negative attitude toward the constituent brands cannot lead to a positive brand or product fit, so the fit itself is a positively related construct. In turn, we hypothesize

\[ H_2: \] Positive product fit between the product categories of the constituent brands relates positively to attitude toward buying the co-branded product.

\[ H_3: \] Positive brand fit between the brand images of the constituent brands relates positively to attitude toward buying the co-branded product.

Hierarchical memory processes and the transmission of features also represent characterizing schemata (e.g., Meyers-Levy and Tybout 1989; Sujan and Dekleva 1987). These processes imply that the product schemata (e.g., soft drinks containing caffeine) represent a subordinate level of the generic schemata (e.g., soft drinks). At a deeper layer, the brand schemata (e.g., Coca Cola) offers a subordinate level of the product schemata and hence of the generic schemata. Elementary features of the product schemata transfer to the subordinate brand schemata, such that the schemata of brands typical of a product category (e.g., Coca Cola for soft drinks containing caffeine) also contain features of the relevant product schemata. In transferring these considerations to the dimensions of product and brand fit for constituent brands of co-branded products, we propose that

\[ H_4: \] Product fit relates positively to brand fit.
Antecedents of behavioural intentions for co-branded products

According to the theory of reasoned action (Ajzen and Fishbein 1977, 1980; Fishbein and Ajzen 1975), behavioural intentions proxy real behaviour and are determined by attitude and subjective norms (e.g., Kraus 1995; Oliver and Bearden 1985; Sheppard et al. 1988; Ybarra and Trafimow 1998). We argue that because of the higher process complexity of co-branded products, buying them represents a rational, systematic, thoughtful decision. The influence of the social environment offers an especially important factor for reducing a consumer’s uncertainty about new products. This need to reduce uncertainty is a key reason that people rely heavily on opinion leaders and social reference groups during their evaluations of new products across various product categories, including FMCG (Mahajan and Muller 1998). Therefore, attitudes and social influences on a person’s behaviour (subjective norms) may be useful for predicting their behavioural intentions toward co-branded products. On the basis of these solid empirical results, we hypothesize

$H_5$: Attitude toward buying the co-branded product relates positively to behavioural intentions to buy co-branded products.

$H_6$: Subjective norms are positively related to behavioural intentions to buy co-branded products.

Among the variables that may explain behavioural intentions for buying co-branded products, we select brand consciousness, involvement, and variety-seeking tendency as potential factors. Our selection is based on an analysis of prior studies that use these variables in other contexts to explain consumer behaviour. Hence, the hypotheses that follow have been adopted from existing theories and adapted to refer to co-branded products.
Co-branded products reduce consumer risk by signalling high product quality, especially compared with products associated with a single brand (McCarthy and Norris 1999, Rao et al. 1999). Brand-conscious consumers, who identify brand names to reduce their risk, seek well-known brands and fashionable items (Shim and Gehrt 1996). Therefore, these consumers should devote greater attention to co-branded products and, according to the signalling perspective, anticipate higher quality from those products. We expect brand-conscious consumers to show a greater willingness to try prior unknown products because of their conviction about the strong quality signal offered by co-branded products. In turn, we postulate

\( H_7: \) Brand consciousness relates positively to behavioural intentions to buy co-branded products.

The involvement construct has become one of the most relevant for explaining brand and product choice (Celsi and Olson 1988; Inman 2001; Kapferer and Laurent 1985). We focus on the continuing involvement (Bloch and Richins 1983) of consumers with the product category of the co-branded product. Assuming that the assimilation of two brands into one product represents a leverage of complementary know-how to the new product, we recognize the need to analyze if consumers with a high involvement in the relevant product category demonstrate a greater desire to try the new product than do those with low involvement. Empirical results support the relationship between involvement and behaviour (Flynn and Goldsmith 1993) and between involvement and shopping enjoyment (Mittal and Lee 1989); one dimension of shopping enjoyment is the desire to gain an overview of all relevant products, especially new products. The size of a consideration set also relates positively to involvement (Divine 1995), meaning that highly involved consumers choose among a greater number of
products. Therefore, we expect that highly involved consumers have a greater desire to try new co-branded products that enlarge their consideration sets. We hypothesize:

\( H_8: \) Involvement relates positively to behavioural intentions to buy co-branded products.

The last variable we focus on is the variety-seeking tendency of consumers. By switching brands, variety seekers derive utility from the change itself, irrespective of the brands they are switching to or from (Givon 1984; McAlister 1982). To keep customers brand loyal but address their variety-seeking tendency, manufacturers of consumer goods should use sub-branded or co-branded products to establish new alternatives in existing and new product categories within their brand portfolios. This notion is supported by Inman (2001), who shows that variety seekers switch more easily within alternatives of a specific brand than between different brands. According to this finding, consumers seek variety while trying to remain loyal to a brand. Following this reasoning, we specify:

\( H_9: \) Variety-seeking tendency relates positively to behavioural intentions to buy co-branded products.

**Method**

**Sample and Data Collection**

To test the conceptual model formally, we needed to use real rather than fictitious brands so that the co-branded product could activate existing brand associations. Generally, multiple brand combinations are necessary to maximize the ability to generate results across product categories.
To identify the relevant product category of the co-branded product and constituent brands, we conducted pre-tests, which enabled us to narrow the selection of product categories and brand names. By means of market studies and expert interviews, we identified yogurt and fruit juice as compatible products and verified these choices with a questionnaire distributed to 30 students at a major university in Germany. The students evaluated a final co-branded product (e.g., drink yogurt, yogurt ice, butter milk, fruit quark/pudding) that should consist of a yogurt and fruit juice brand. Finally, we selected fruit quark/pudding because the subjects perceived yogurt and fruit juice as highly compatible for producing this product. The product also was highly familiar to students and perceived to be known across gender and age classes.

In addition to the co-branded product, the subjects selected the four most familiar brands in both product categories. Through an analysis of market studies and store checks in different supermarkets across Germany, we prepared a list of multiple yogurt and fruit juice brands, which students evaluated for their familiarity (familiar/unfamiliar, heard of/not heard of the brand\(^2\)) using seven-point, bipolar, semantic differential scales. Finally, we selected each of the four most familiar yogurt and fruit juice brands as constituent brands for the co-branded product, the fruit quark/pudding.

In the main study, we obtained 440 usable responses from students at two major universities in Germany, one in the northern part and one in the southern part of the country. For both samples of students, participants received a questionnaire in which a hypothetical fruit quark/pudding appeared as the co-branded product and were told that the fruit juice and yogurt brands had collaborated to produce and sell the new fruit quark/pudding. We use Muel- ler, Danone, Ehrmann, and Bauer as the yogurt brands and Hohes C, Granini, Punica, and Valensina as the fruit juice brands. Thus, we paired each yogurt brand with each fruit juice brand.

brand, resulting in a $4 \times 4$ questionnaire design with 16 different versions of the co-branded product. Had we not done so, the results would have depended on the particular selected brands (Simonin and Ruth 1998). We assigned students randomly to the 16 different versions of the questionnaire and thereby obtained approximately 25–30 responses per version. For each variable from the two samples of students, we conducted independent samples t-tests. We find no significant differences in mean values (confidence level of 99%) for any variable, so we treat both samples as a single sample. To increase participation rates, we offered subjects the opportunity to participate in a raffle if they filled out the questionnaire accurately. At the beginning of the study, respondents answered questions about their attitudes toward the constituent brands, variety-seeking tendencies, brand consciousness, and socio-demographics. Subsequently, they observed the co-branded product stimulus and answered questions regarding their attitude toward buying the product, product and brand fit, product involvement with the relevant product category, and intention to buy the co-branded product.

**Measurement Development and Assessment**

We test our constructs using multi-item scales that have proven reliability and validity from previous studies on co-branded products or other related topics. Because the study occurred in German and the scale items originally were developed in English, we account for possible translation mistakes. We detail the constructs and their specific items in the Appendix.

To assess the reliability and validity of the measures, we use confirmatory factor analysis (CFA). As a result of the first run of the CFA, we eliminate five items from the measurement constructs whose t-values do not meet the required threshold of significance at the .05 percent level for convergent validity (Bagozzi et al. 1991). After the second run of the CFA, we find
that each construct meets the threshold value of the coefficient alpha of .7 (Nunnally 1978). Composite reliability represents the shared variance among a set of observed variables measuring an underlying construct (Fornell and Larcker 1981), and each of our constructs meets the criterion of a score of at least .6 (Bagozzi and Yi 1988). Therefore, all remaining factor loadings are significant at the .05 percent level. Using the criterion proposed by Fornell and Larcker (1981), we assess the discriminant validity among the constructs by determining whether the squared correlation between two constructs is smaller than the average variance extracted from each construct. This criterion is satisfied; therefore, discriminant validity holds for all constructs.

We use SEM and AMOS 4.0 to test our conceptual model. Measurements of the overall fit evaluate how well the model can reproduce the observed variables’ covariance matrix. The goodness-of-fit index (GFI), a descriptive overall measurement, requires a minimum value of .9 (Bagozzi and Yi 1988), and the same threshold applies to the comparative fit index (CFI) and the incremental fit index (IFI). Compared with GFI, however, the latter two are less sensitive to model complexity (Hulland et al. 1996). Finally, we use the quotient of $\chi^2$ (chi-square test) and degrees of freedom (df), as well as the root mean square error of approximation (RMSEA), as important measurements of fit. For the $\chi^2$/df measure, a value up to 2.5, and for the RMSEA, a value up to .5 indicate good model fit (Baumgartner and Homburg 1996). Our structural equation model meets all these criteria (GFI = .90, CFI = .96, IFI = .96, $\chi^2$/df = 2.07, RMSEA = 0.05). In figure 3, we show the measurement models for each construct and the overall structural model, including the standardized coefficients of the different paths. This model offers the best fit; the model output of the AMOS 4.0 software does not display modification indices after calculation that indicate the model fit could be improved.

FIGURE 3: Results of structural equation analysis (N = 440)
Results

The conceptual model captures the most important antecedents of behavioural intentions for co-branded products; we can explain a large share ($R^2 = .55$) of the variance in behavioural intentions. For attitude toward buying the co-branded product, we can explain an adequate share ($R^2 = .41$) of variance. The results indicate support for nine of the ten hypothesized paths. The relationship between prior brand attitude and attitude toward buying the co-branded product is significantly positive, in support of $H_{1a/b}$. $H_2$, which posits a positive relationship between product fit and attitude toward buying the co-branded product, also is supported. In line with $H_3$, the relationship between brand fit and attitude toward buying the co-branded product is significantly positive. Moreover, the relationship between product and brand fit, as we posit in $H_4$, is significant, such that product fit positively influences brand fit. Therefore, if two product categories fit well together (e.g., chocolate and cereals), two brands that are closely associated with these product categories due to their strong brand awareness
(e.g., Hershey’s for chocolate and Kellogg’s for cereal) also are likely to be perceived as having a high fit. Not only do brand and product fit directly affect attitude toward buying the co-branded product but product fit influences brand fit significantly. The relationship between attitude toward buying the co-branded product and behavioural intention is significantly positive, in support of H5. However, the relationship between the subjective norm and behavioural intentions is not significant, which fails to support H6. This result might be due to the high correlation that exists between the attitude and subjective norm constructs (Ajzen 1988; Sheeran et al. 1999). Therefore, subjective norms might influence the consumer decision process during attitude formation. An alternative explanation would posit that the subjective norm is not relevant for this product category. The positive relationship between brand consciousness and behavioural intention is significantly positive (H7), and the positive relationship between product involvement and behavioural intention (H8) also is supported by the empirical data. Finally, the relationship between variety-seeking tendency and behavioural intention is statistically significant (H9).

Discussion and Implications

We determine the total effect (i.e., sum of direct and indirect effects) on behavioural intention: see table 2. The antecedents that positively affect behavioural intentions, separate from attitude toward buying the co-branded product, are product fit, brand fit, prior brand attitudes, product involvement, brand consciousness, and variety-seeking tendency. Attitude toward the co-branded product explains 70 percent of the total effects on behavioural intentions. Furthermore, product fit has the strongest influence among the exogenous factors on behavioural intentions, in contrast with research findings by Simonin and Ruth (1998), who indicate that brand fit has the highest impact on the evaluation of co-branded products.
TABLE 2: Total effects on behavioural intention

<table>
<thead>
<tr>
<th>Model Variable</th>
<th>Total Effect on Behavioural Intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward co-branded product</td>
<td>0.70</td>
</tr>
<tr>
<td>Product fit</td>
<td>0.36</td>
</tr>
<tr>
<td>Brand fit</td>
<td>0.18</td>
</tr>
<tr>
<td>Prior attitude brand 1</td>
<td>0.17</td>
</tr>
<tr>
<td>Prior attitude brand 2</td>
<td>0.14</td>
</tr>
<tr>
<td>Product involvement</td>
<td>0.16</td>
</tr>
<tr>
<td>Brand consciousness</td>
<td>0.12</td>
</tr>
<tr>
<td>Variety-seeking tendency</td>
<td>0.10</td>
</tr>
</tbody>
</table>

In one of the calibrated versions of our model, we introduce an interaction term between product fit and brand fit. Because product fit and brand fit have strong effects, we expect that an interaction term might have an extra effect on behavioural intention. However, we do not find a statistically significant relationship between the interaction term and behavioural intentions.

**Theoretical Implications**

We identify the conceptual model of Simonin and Ruth (1998) as a solid basis for explaining attitude formation toward co-branded products through SEM. However, our study differs from the Simonin/Ruth model in several aspects. First, we analyze FMCGs instead of durable goods or service products. Second, we use a different attitude construct and measure attitude toward behaviour instead of attitude toward an object. Third, we explain behavioural intentions instead of attitudes toward brand alliances.
We find that, due to the hierarchical memory process structure of schemata and their transmitting mechanisms, the perceived product fit of the product categories of constituent brands has a significant positive influence on the perceived brand fit of the two brands. Thus, product and brand fit cannot be viewed as independent constructs but rather must be considered two dimensions of a complex construct, namely, fit.

In our model, we find strong evidence that attitude toward buying co-branded products has a strong positive influence on intention to buy co-branded products. We also identify three other determinants with positive influences on behavioural intentions: brand consciousness, product involvement, and variety seeking. Brand-conscious consumers rely heavily on the quality signal sent by the co-branded product, and a co-branding strategy might be a good tool to address the variety-seeking tendency of customers. We further find that product involvement is positively related to behavioural intentions with respect to co-branded products.

**Managerial Implications**

To develop and successfully sell a co-branded product, the constituent brands both should possess strong brand equities. Our results indicate that existing positive brand connotations (e.g., attitudes) can be leveraged for the co-branded product. In congruence with one of our main research findings, manufacturers intending to launch co-branded products should conduct a detailed analysis of the fit of the product categories of the constituent brands. Only when the product categories are perceived to fit in the eyes of the customer will the co-branded product be successful, and a lack of fit can be detrimental in a broader sense. Customers might have difficulty understanding why the two partners have collaborated and there-
fore question the competence of one or both partners to produce a high quality co-branded product.

Co-branded products must fit together on image dimensions as well (Bhat and Reddy 1998). Advertising campaigns should therefore point out why the image dimensions of the two constituent brands fit together and highlight the competence the brand partners have to produce the co-branded product. From a signalling perspective, such campaigns should enhance customers’ perceptions that the pairing of two complementary brands offers the promise of an extraordinarily high-quality product.

Co-branded products should be introduced at prices that equal those of their substitutes, which facilitates their trial purchase. Subsequent price increases supported by promotional campaigns that note the high quality of the co-branded product could help establish a product positioned at the upper end of the market and therefore justify premium pricing.

Our empirical results also indicate a positive relationship between brand consciousness and behavioural intentions for co-branded products. Therefore, a selective distribution strategy should be implemented initially. Retailers and wholesalers with a high percentage of traditionally branded products should distribute co-branded products, not discounters or retailers that offer a substantial number of store brands. In addition, we demonstrate the positive relationship between product involvement and behavioural intentions. Newly launched co-branded products should be distributed primarily in specialty stores, because consumers with higher product involvement tend to shop in such locations.
Limitations and Directions for Further Research

Our conclusions are based on data obtained from students. Therefore, our research inherently contains several limitations. First, because the respondents are students, any generalization of our results to other groups of consumers should be performed with care (Peterson 2001). Additional research should use different samples to validate our conceptual model.

Second, our model focuses only on consumer goods, which are generally low-involvement products. Other studies should use different numbers of products from not only the FMCG sector but also durable goods and services sectors (i.e., high involvement products).

Third, in line with most research on co-branded products, we use a written and hypothetical stimulus. However, the identified relationships might differ if the product stimulus were presented in actual form, so that the sample subjects could taste the product (e.g., Janiszewski and van Osselaer 2000; Washburn et al. 2000). Further research therefore should extend our conceptual model by measuring real behaviour and intentions, as well as incorporating taste tests to simulate not only trial but also repeat purchases.

Fourth, our model focuses on the direct effects of the constructs, as we show in figure 3 regarding behavioural intentions to buy co-branded products. However, interactions between these constructs and moderators (e.g., brand familiarity, product relevance, price orientation, social demographics) could affect the strength of their relationship for behavioural intention. Fifth, we do not analyze the benefits and costs of a strategy that uses co-branded products versus one with single-branded products.
Further research should reduce these limitations and thereby increase our knowledge about consumer evaluations of co-branded products.
## APPENDIX

### Scale Items for Theoretical Measures

<table>
<thead>
<tr>
<th>Scale Name, Response Cue, Items</th>
<th>t-Value</th>
<th>Composite Reliability/Coefficient Alpha</th>
<th>M/SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitude towards constituent brands</strong> (reflective scale, 7-point bipolar semantic differential; from Sujan and Bettman 1989; Simonin and Ruth 1998)</td>
<td>0.88/0.89</td>
<td>4.68/1.04</td>
<td></td>
</tr>
<tr>
<td>What is attitude concerning brands (1+2)? negative/positive 1/2 unfavourable / favourable 1/2 bad/good 1/2</td>
<td>0.94/0.94</td>
<td>5.15/1.27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>19.78/29.07</td>
<td>21.16/32.88</td>
<td></td>
</tr>
<tr>
<td><strong>Product fit</strong> (reflective scale, scored on 7-point scale with anchors 1 = strongly disagree and 7 = strongly agree; adapted from Simonin and Ruth 1998)</td>
<td>0.78/0.78</td>
<td>3.93/1.53</td>
<td></td>
</tr>
<tr>
<td>Please indicate the extent to which you agree with the following statements: Products (1+2) are complementary and fit together well. Products (1+2) are endorsing each other. (Products (1+2) are very similar.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Brand fit</strong> (reflective scale, scored on 7-point scale with anchors 1 = strongly disagree and 7 = strongly agree; adapted from Simonin and Ruth 1998)</td>
<td>0.81/0.81</td>
<td>3.79/1.43</td>
<td></td>
</tr>
<tr>
<td>Please indicate the extent to which you agree with the following statements: (Brands (1+2) are complementary and fit together well.) Brand images (1+2) are endorsing each other. Combination of brand images (1+2) leads to a consistent new brand image of the co-branded product.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attitude towards buying the co-branded product</strong> (reflective scale, 7-point bipolar semantic differential; from Shimp and Sharma 1987; Netemeyer and Bearden 1992)</td>
<td>0.87/0.87</td>
<td>3.91/1.19</td>
<td></td>
</tr>
<tr>
<td>What is your attitude towards buying the co-branded product? bad/good foolish/wise harmful/beneficial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subjective norm</strong> (reflective scale, 7-point bipolar semantic differential; adapted from Shimp and Kavas 1984)</td>
<td>0.94/0.94</td>
<td>4.13/1.01</td>
<td></td>
</tr>
<tr>
<td>Most people who are important to me probably consider my intention to buy the co-branded product to be…. negative/positive bad/good valuable/worthless</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale Name, Response Cue, Items</td>
<td>t-Value</td>
<td>Composite Reliability/ Coefficient Alpha</td>
<td>M/SD</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------</td>
<td>------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>Behavioural intention</strong> (reflective scale, scored on 7-point scale with anchors 1 = strongly disagree and 7 = strongly agree; adapted from Tripp et al. 1994; Putrevu and Lord 1994) Please indicate the extent to which you agree with the following statements:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is very likely that I will buy the co-branded product.</td>
<td>19,49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If the co-branded product will be launched, I will buy the co-branded product the next time I need that kind of product type.</td>
<td>0,86/0,86</td>
<td>3,70/1,56</td>
<td></td>
</tr>
<tr>
<td>I will definitely try the co-branded product.</td>
<td>18,03</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Brand consciousness</strong> (reflective scale, scored on 7-point scale with anchors 1 = strongly disagree and 7 = strongly agree; adapted from Donthu and Gilliland 1996; Shim and Gehrt 1996) Please indicate the extent to which you agree with the following statements:</td>
<td></td>
<td></td>
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<tr>
<td>I generally buy branded products.</td>
<td>17,34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nationally and internationally known brands are best for me.</td>
<td>14,70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brands that are more expensive are much more attractive for me. (Branded products are continuously providing adequate quality levels.)</td>
<td>not significant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For most of the products I buy, only branded products are among the considered alternatives.</td>
<td>14,13</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Product involvement</strong> (reflective scale, scored on 7-point scale with anchors 1 = strongly disagree and 7 = strongly agree; adapted from Beatty and Talpade 1994; Flynn et al. 1996) Please indicate the extent to which you agree with the following statements:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m very interested in product (x).</td>
<td>28,97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product (x) is very important for me.</td>
<td>27,08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m very enthusiastic about product (x).</td>
<td>18,89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product (x) is fun. (Product (x) is exciting.)</td>
<td>not significant</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variety-seeking tendency</strong> (reflective scale, scored on 7-point scale with anchors 1 = strongly disagree and 7 = strongly agree; adapted from van Trijp 1995; Donthu and Gilliland 1996) Please indicate the extent to which you agree with the following statements:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(I generally like to try out something different.)</td>
<td>not significant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I switch brands only to be able to spontaneously try something different.</td>
<td>3,02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always buying the same brand is boring.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes: Scale items in parentheses are those we did not retain.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Literature


Fishbein, Martin and Ajzen, Icek (1975), Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research, Reading, MA: Addison-Wesley.


Keller, Kevin Lane (2003), Strategic Brand Management, Upper Saddle River, NJ: Prentice Hall.


