Children’s response to co-branded products: the facilitating role of fit
Karine Charry Nathalie T.M. Demoulin

Article information:
To cite this document:
Permanent link to this document:
http://dx.doi.org/10.1108/IJRDM-08-2013-0166

Access to this document was granted through an Emerald subscription provided by 525660 []

For Authors
If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com
Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.
Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.
Children’s response to co-branded products: the facilitating role of fit

Karine Charry and Nathalie T.M. Demoulin
Marketing and International Negotiations Department, IESEG School of Management, Lille, France

Abstract
Purpose – The purpose of this paper is to represent the first empirical investigation of co-branding strategies whose target is children. It analyses such strategies’ potential in the context of brand extension for non-familiar brands combined with familiar ones and provides managerial implications for both brands.

Design/methodology/approach – A leisure centre-based survey was used to collect information on children’s attitudes, evaluations of fit and consumption intentions of co-branded products.

Findings – The findings confirm that co-branding strategies may have a very positive impact on attitudes towards partner brands, intentions to consume co-branded products and the host brand. They also indicate that consumption intentions for other products from the host product category are enhanced. From a theoretical perspective, the study stresses the essential mediating role of brand fit. Indeed, this construct appears to enable preadolescents to integrate simultaneous evaluations of two brands while constructing their attitudes towards one product. The asymmetric spill-over effect is also confirmed, with the non-familiar (weaker) brand benefiting more from the co-branding than the familiar (strong) brand.

Research limitations/implications – The main limitations pertain to the small sample size and the absence of direct behavioural measures that could be added through later research. It would also be interesting to study further the concept of fit and the nature of the underlying mediating process (cognitive vs affective) among the target audience, as well as to analyse the impact of the various types of co-branding (functional vs symbolic).

Practical implications – The derived guidelines suggest how non-familiar brands to the pre-adolescent target (including retailers’ brand) may expand their businesses through successful alliances with a more familiar brand that is viewed favourably.

Social implications – In this study, concerns were high to select a co-branded product that does not harm children’s health, to the contrary (vegetable soup with cheese). The results demonstrate that the tactic may increase the target’s intentions to eat products that it would not necessarily fancy (as often the case for healthy products) while contributing to the positive development of economic actors. In this, the paper shows that economic interests should not always be opposed to social welfare.

Originality/value – This study investigates the very popular strategy of brand alliance among an original target (eight-to 12-year-olds) and identifies the original process through which preadolescents appraise two brands that endorse one product, a unique marketing context. This represents an important starting point to further studies on brand alliances.

Keywords Children, Fit, Market expansion, Co-branding, Brand alliance

1. Introduction
In 2006, the children’s market was already valued at $40 billion in terms of direct spending power and $340 billion in indirect influence (The Economist, 2006). Nearly half of American children influenced household spending (The Economist, 2006). In the

The authors acknowledge Iris Decamps for her assistance in the data collection.
UK, a recent report estimated that the total amount of children’s pocket money averages £2.5 billion per annum in the country (Mintel-Oxygen, 2011) and that numbers around Europe do not differ significantly. This influence most likely explains why children have become a thrilling target for marketers (Goldberg et al., 2003), and consequently, marketing scholars have become increasing interested in understanding children’s processes of consumer socialization and children’s responses to marketing practices. Among the strategies used by practitioners, one seems to have been left out of academic research: co-branding. To the best of our knowledge, this increasingly popular strategy in the adult and children’s markets (Bachmann Achenreiner and Roedder John, 2003) has not been studied for products targeting young people. Indeed, research seems to have only considered the setting in which a product bears a single brand. In the context of brand alliances, however, two brands rather than one endorse a single product. This implies that the target is confronted with two stimuli that may provoke at the same point in time potentially different responses that need to be addressed in order for one attitude towards the co-branded product to be constructed. So far, we have little insight on this. The variety of possible options are nevertheless numerous, from ignoring one of the two brands to integrating both of them through a complex process. There is also the possibility that each type of reaction may influence subsequent brand evaluation. Furthermore, how children actually deal with potentially incoherent evaluations, if attitudes towards each brand are inconsistent and produce reactions of mixed valences, is also a relevant question given that it may lead to very important implications for the various brands involved. We believe that all of these questions justify scholarly investigation. Our objective is to fill some of the gap in the literature and contribute to the theoretical knowledge on how children build their attitudes towards products. We will show how they actually rely on a unique construct, brand fit, to respond to the simultaneous presence of two independent brands endorsing one product. We will also look at the subsequent impact of the attitude towards the co-branded product, namely, children’s intentions to consume the co-branded product and their evaluation of the parent brands post exposure to the co-branded product.

Among the different stages of children’s consumer socialization, our study will focus on the seven-to 12-year old age group (also called preadolescents or tweens; Goldberg et al., 2003). Although it appears relevant to seek knowledge at every stage of children’s development, we decided to focus on tweens for various reasons. First, their consumer decision-making process is comprehensive as it integrates every step up to autonomous behavioural decisions. At this point, they are considered fully fledged consumers (Goldberg et al., 2003). McNeal (1992) expressed this by stating that children represent a triple market, as their role is not limited to that of influencers but extends to that of deciders of consumption both today and tomorrow. Tweens’ strong influence on many household consumption decisions increases, as does their pocket money, namely, used for food products (Boland et al., 2012). In this sense, preadolescence also corresponds to a transitional period that deserves attention because children increasingly seek autonomy, namely, in prototypically personal issues such as food choices (Daddis, 2011). Second, this stage in the development of children’s consumer socialization is also a cornerstone period, as preadolescents’ relationship to brands evolves significantly. Brands are henceforth not mere functional attributes. Brand images and the symbolism they convey is now well understood and subsequently used in preadolescents’ decision-making processes (Bachmann Achenreiner and Roedder John, 2003; Belk et al., 1984; Nairn et al., 2008). Last, preadolescents have developed cognitive abilities to retrieve
previously stored information about brands when retrieval is effectively prompted (Roedder John, 1999, 2008). “The ability to conserve and engage in transitive inference emerges during the concrete operations stage (ages 7 to 12)” (Phelps and Hoy, 1996, p. 83). Brand logos now convey meaning and associations that can potentially be used for the construction of attitudes in new and original settings. The study of brand alliances therefore gains from focusing on an age group that demonstrates the abstraction abilities to make connections between two brands (Roedder John, 1999, 2008).

Nevertheless, it should be stressed that preadolescents are not merely “mini adults,” as their consumer socialization and cognitive development have not yet reached that of adults (Roedder John, 1999, 2008; Taylor, 1981; Valkenburg and Cantor, 2001). The process through which they build their attitudes towards brands indeed remains different (Derbaix and Brée, 1997; Moore and Lutz, 2000; Pecheux and Derbaix, 1999).

It has been said that children “have a great potential to be nurtured to become loyal consumers for a wide range of brands. The key is how to make connections between brands and children’s needs” (Ji, 2002, p. 383). Offering theoretical insights on how to create those connections and identifying the constructs that enable effective associations in children’s minds are relevant, especially for brands that aim to win over new targets. In the next section, we discuss the existing literature on co-branding and stress the lack of research on the target. We then present the conceptual framework referring to the literature on children and our hypotheses, followed by the survey procedure and measures. With marketing ethics and children’s welfare in mind, we have selected products whose consumption could be advised by the World Health Organization, such as vegetable soups and dairy products (WHO/FAO, 2003). The following section is devoted to the results. Finally, we discuss the theoretical contributions, the managerial implications, this study’s limitations, and directions for further research.

2. Conceptual background

A. Effective co-branding and its antecedents among the adult target

Although considered to be in its infancy (Thompson and Strutton, 2012), research on co-branded products targeting adults has been at the centre of scholars’ attention for some time now (Cegarra and Michel, 2001; Helmig et al., 2008; Simonin and Ruth, 1998; Uggla, 2004). According to Thompson and Strutton (2012, p. 15), brand alliance “occurs when two brands are employed jointly to name a new product”. It may take various forms, including joint sales promotion, advertising alliances, dual branding and bundling (Helmig et al., 2008), and it is mostly encountered in food product categories (Thompson and Strutton, 2012). In this paper, we will focus on co-branding that rests on a host brand already playing in a specific product category that invites a brand which is new to the category. Co-branding involves a “host” brand that plays in the category in which the co-branded product will be launched and an “invited” brand. When the host brand adopts a market development strategy via a co-branded product, the host brand is rather unfamiliar to the new target. The invited brand must represent an innovation or a crucial advantage (Norris, 1992) and must bring to the co-branded product additional concrete or symbolic attributes. The invited brand is more familiar to the new market and is considered stronger than the host brand. Co-branding is often compared to brand extensions, as both strategies aim at the conquest of new markets. The former, however, is usually considered to be a more effective tactic because it potentially provides additional value to both the co-branded product and the primary
brands (Helmig et al., 2008; Simonin and Ruth, 1998). Research has identified constructs or factors that enable direct or spill-over positive effects on the host and invited brands as well as on the co-branded product (Helmig et al., 2008). First and foremost, prior consumers’ attitudes towards the brands involved in the co-branding play a significant role in the potential success of a co-branded product. Evaluations associated with brands are indeed automatically retrieved when brand alliance cues are presented and they directly influence evaluation of the brand alliance (Simonin and Ruth, 1998). Second, the “perceptual fit”, defined as “the perceived compatibility or similarity of either the product categories or brand concepts of the partner brands” (Helmig et al., 2008; Simonin and Ruth, 1998) is among the most important dimensions in co-branding (Batra et al., 2010; Helmig et al., 2008; Simonin and Ruth, 1998; Thompson and Strutton, 2012; Uggla, 2004). Higher perceptual fit between the primary brands has been associated with increasingly positive evaluation of extension products (Helmig et al., 2008; Thompson and Strutton, 2012). The most prominent strategic objective of brand alliances is indeed related to the transfer of attributes from the parent brands to the co-branded product, eventually increasing the perceived value of the latter. Consumers usually transmit the characteristics they grant a brand to all products the brand endorses (Narayana and Duncan, 1980). Depending on the type of information transferred, the co-branding will be considered either functional – when the invited brand represents an ingredient of the co-branded product and therefore provides additional attribute(s) to the co-branded product and the host brand – or symbolic if the attributes are of a symbolic nature (and no additional ingredients are required) (Cegarra and Michel, 2001). In both cases, the co-branded product benefits from the brand-specific associations of the hosted brand consumers have stored in their memory. The difference among these two types of alliances lies in the nature of those brand-specific associations, either functional and therefore related to the quality of the product, or symbolic (Cegarra and Michel, 2001).

Beyond direct effects of the partner brands on the co-branded product, a spill-over effect of the brand alliance on the partner brands has also been observed. In other words, positively evaluated brand alliances positively affect perceptions of the parent brands (Simonin and Ruth, 1998). More specifically, brands that hold less strong associations in consumers’ minds (because they are less familiar) would have a weaker impact on the co-branded product but would benefit more strongly from the positive evaluation of the brand alliance than stronger brands do (Lafferty et al., 2004; Simonin and Ruth, 1998). Weaker brand would indeed be less accessible, and would lack the extensive network of prior associations (Bettman and Sujan, 1987), as well as the affect (Lafferty et al., 2004), to produce as a strong influence as the more familiar brand.

B. Children and their relationship to brands

We stressed earlier that little is known about the decision-making process children follow when facing co-branded items. Do they actually consider both brands in their evaluation of the co-signed product and if so, is there a dominant brand? What are the features that lead to the dominance and what are the consequences for both brands, as partners and as individual items? Furthermore, we have no insight on how children deal with information that may be inconsistent (if brands are not perceived as equal). Brands might not be equally known and/or liked, a situation that is most likely to arise because host brands use co-branding strategies to expand their markets through the conquest of new targets. There is little insight into how children deal with those discrepancies and what the consequences are.
Fortunately, the literature has provided knowledge on how children relate to brands. Children demonstrate brand knowledge (Bachmann Achenreiner and Roedder John, 2003; Goldberg et al., 2003; Ji, 2002, 2008; Nairn et al., 2008). Not only are they aware of many brands but they are able to associate images with these brands and to identify the brands’ images (Roedder John, 1999). The number of brands that appear relevant to children also increases with age (Bachmann Achenreiner and Roedder John, 2003). Growing children indeed get more opportunities to interact with more brands (Ji, 2008) as they accordingly spend more time in retail outlets, such as toy stores, mass merchandisers, supermarkets, and convenient stores (McNeal, 1992). Those direct experiences with brands represent a first type of information source used by children to construct their attitude towards brands. Peers, parents or media come as other relevant information providers (Derbaix et al., 1999; Pecheux and Derbaix, 2002) and they influence the interpretation of brands’ meaning (Goldberg et al., 2003; Roberts and Pettigrew, 2013).

Referring to the meaning of brands, brand names may serve different objectives, and these purposes are affected by children’s age. Although it has been suggested that Piaget’s theory of children’s cognitive development should be complemented (Nairn et al., 2008), it remains the most used basis for classification as consumers (see Roedder John, 1999, 2008 for reviews) and the most relied upon theory to explain children’s consumption behaviours (Ji, 2008). According to the abovementioned theory, it is at the concrete operational stage (seven-to 11-year-olds) that children start assigning personality traits to brands. It is at this age that more abstract thinking allows them to use non-observable conceptual cues (e.g. “coolness” or “trendiness”) to classify products (Roedder John and Sujan, 1990). Brands are no longer mere functional cues used to differentiate products. They also carry symbolic meanings that are well-understood by the age group (Belk et al., 1984; Goldberg et al., 2003; Nairn et al., 2008), they influence children’s preferences (Robinson et al., 2007) and consumption decisions (Goldberg et al., 2003; Nairn et al., 2008). Preadolescents are indeed able to develop networks of associations regarding specific brands and use them in their subsequent evaluations and behaviours.

C. Formation of children’s attitude towards the co-branded product

As stressed above, perceptual and symbolic features are associated with brands. What is even more interesting is that once a brand has equity among the target, this equity can be leveraged to many other products (Bachmann Achenreiner and Roedder John, 2003). Bachmann Achenreiner and Roedder John’s findings (2003) suggest that a positive affect associated with the brand is directly transferred to congruent brand extensions. Preadolescents have the ability to hold stable attitudes (Piaget, 1981), mainly constructed on their affective responses to stimuli. It should be noted that research on the target has demonstrated the predominance of the affective dimension in preadolescents’ persuasion processes (Charry and Demoulin, 2012; Derbaix and Brée, 1997; Phelps and Hoy, 1996). This suggests that children rely mainly on affective cues to appraise brands and branded products, to build their attitudes and to infer their intentions to consume products (Charry and Demoulin, 2012; Derbaix and Brée, 1997; Nairn and Fine, 2008; Vanhamme and Chiu, 2008). It may also be expected that the mere presence of the brand logos on packaging will activate the affective responses constructed earlier on the basis of salient functional characteristics such as taste or symbolic meanings like the brands’ trendiness. This age group is named “cued-processors” due to
the fact that seven- to 12-year-olds require cues to retrieve information stored in their memory (Roedder John, 1999, 2008). Brands on packaging will be used as retrieval cues to activate stored knowledge (mainly affective responses, according to the literature), and children will rely on these meanings to construct their attitudes towards the new product. However, in co-branding, it may be expected that the process according to which the positive affect associated with one brand is automatically transferred to a congruent brand extension will not be as straightforward. The co-branding tactic supposes the co-existence of two brands on the same product, which implies confronting the attitudes towards both brands to build the attitude towards the co-branded product. At this stage, we have little insight on how children use each brand and the afferent associations to construct the attitude towards the co-branded product. To cope with this situation, children could ignore one brand (the weaker one) to the benefit of the strong brand, or conversely. However, as stated above, tweens know and master the meaning of many brands (Bachmann Achenreiner and Roedder John, 2003; Ji, 2002, 2008) and they can also transfer brands to congruent extensions (Bachmann Achenreiner and Roedder John, 2003). Although preadolescents still have limited cognitive abilities that differentiate them from adults, we argue that their evaluation process will “approach” those of adults for whom “brand fit” is an essential variable (Simonin and Ruth, 1998). The latter indeed enables adults to appraise the co-branded product through an evaluation of brand congruence in addition to the pre-attitudes towards each brand (Helmig et al., 2008; Thompson and Strutton, 2012). Nevertheless, preadolescents, relying predominantly on the affect elicited by the stimuli, tend to use affective shortcuts or heuristics to appraise situations (Pecheux and Derbaix, 2002; Taylor, 1981). We therefore expect that these two attitudes will be transferred to the co-branded product through the total mediation of a third concept, the perceived fit. The latter will fully integrate the attitudes towards both brands prior to exposure by evaluating how congruent brands are. This unique construct, which could be related to Schwartz and Clore’s heuristic (1988) “how do I feel about it”, will simplify the evaluation process and enable children to produce an appraisal of the product bearing the two brands. Contrary to adults, prior attitudes will not be considered in any other way than through the mediation of fit. Accordingly, we predict:

H1a. The perceived fit between the host and the invited brands mediates totally the relationship between children’s prior attitude towards the host brand and children’s attitude towards the co-branded product.

H1b. The perceived fit between the host and the invited brands mediates totally the relationship between children’s prior attitude towards the invited brand and children’s attitude towards the co-branded product.

We also expect to observe an asymmetric direct effect from the parent brands to the co-branded product where the most familiar and stronger brand for children will have more influence over forming an evaluation of the co-branded product than the weaker brand will, which is in line with findings among adult populations (Lafferty et al., 2004; Simonin and Ruth, 1998). Several studies have investigated the moderating effect of brand familiarity on the formation of attitudes towards brand alliance. However, in past research, the moderation bears on the fit-and the attitude towards the brand-attitude towards the cobranded product links. In this research, we postulate that the full-mediation predicated above will be moderated by brand familiarity. However, instead of considering two co-branding conditions (one in which both brands
are highly familiar and the other in which one brand is familiar and the other is not) (Baumgarth, 2004; Simonin and Ruth, 1998), it might be more relevant to compare the influence of the most familiar brand with the impact of the less familiar one on the formation of attitudes towards a co-branded product. The moderating role of familiarity can indeed be considered by comparing the influence of a less familiar brand vs a more familiar one. The purpose is to demonstrate that the invited brand has a stronger influence on the co-branded product evaluation than the host brand. This may indeed contribute to interesting findings for marketers who consider the co-branding strategy as a market and target extension strategy.

Then, on the one hand, it has been proposed that fluency of brand processing, resulting from familiarity with this brand (Mantonakis et al., 2008), will be generalized to any subsequent extension of the brand, facilitating the processing of the brand extension. On the other hand, accessibility of information depends on the individual’s capacity to retrieve the information or how vivid the latter is in the individual’s memory (Fiske, 1980). It can therefore be assumed that the more familiar a brand is, the more accessible it will be. Furthermore, Sanbonmatsu and Fazio (1990) argue that the more accessible a construct is, the more it will be relied upon. Fiske (1980) confirms previous findings and predicts that the information presenting the highest accessibility will be the predominant cue in the process of decision making. Accessibility has been shown to be a central motor in children’s perception that information is important (Van Evra, 1995) and the more it is used in later attitude construction (Charry and Demoulin, 2012). Therefore, we expect that:

\[ H1c \] The influence of the strongest (invited) brand is higher than that of the weakest (host) brand in children’s attitude towards the co-branded product.

**D. Impacts of exposure to the co-branded product on brands evaluation: spill-over effects**

Greater fluency of processing is known to positively influence judgments in children as well (Ellis et al., 2010; Mizerski, 1995). This is related to the “mere exposure effect” (Zajonc, 1968) that predicts that familiar goods are preferred. Consequently, we can expect that the previous exposure to the host brand through the co-branded product will increase children’s processing fluency and will facilitate the appraisal of the less familiar host brand. Children’s attitude towards the host brand should therefore improve. This looping direct effect of positive attitudes towards the co-branded product on the host brand would therefore be similar to what has been observed in brand alliances with older targets (Simonin and Ruth, 1998). Co-branded products can be beneficial for both partner brands (Washburn et al., 2000, 2004). More precisely, Simonin and Ruth (1998) demonstrate spill-over effects according to which consumers’ attitudes towards co-branded product enhance the post-attitude towards both partner brands. Then, we expect that the positive affect triggered by the co-branded product will also be transferred to the invited brand, as also demonstrated among adult populations (Simonin and Ruth, 1998). We hypothesize that:

\[ H2a \] Children’s attitude towards the co-branded product positively influences children’s subsequent attitude towards the host brand.

\[ H2b \] Children’s attitude towards the co-branded product positively influences children’ subsequent attitude towards the invited brand.
Nevertheless, it appears reasonable to expect that the effect of improved fluency due to increased familiarity will primarily benefit the less familiar brand (Mizerski, 1995; Zajonc, 1968). Past research among adults found an asymmetrical spill-over effect. Weaker brands benefit more from the spill-over effect than stronger brands do (Musante, 2000). In other words, less familiar brands compared to their partners will experience stronger spill-over effects (Simonin and Ruth, 1998) as weaker brands lack a vast network of associations that may hinder new associations (Bettman and Sujan, 1987). In line with results found in adults, we therefore expect that:

\[ H2c. \] Weaker brands (host) experience a stronger spill-over effect from children’s attitude towards the co-branded product than do stronger (invited) brands.

E. Influences of attitude towards a co-branded product on consumption intentions
Previous research has demonstrated a positive relationship between attitude towards a brand and subsequent intentions to consume the branded product (Charry and Demoulin, 2012; Pecheux and Derbaix, 2002; Phelps and Hoy, 1996). This expectation is based upon the abilities preadolescents have developed to form and hold stable attitudes (Piaget, 1981) and to retrieve these attitudes in order to make consumption intention decisions (Phelps and Hoy, 1996). In line with these findings, we hypothesize that:

\[ H3a. \] Children’s attitude towards a co-branded product positively influence their consumption intentions of the co-branded product.

\[ H3b. \] Children’s subsequent attitude towards the host brand positively influence their consumption intentions of the host brand.

Furthermore, considering the importance of affect in children (Derbaix and Brée, 1997; Vanhamme and Chiu, 2008) and the automatic transfer demonstrated earlier in line extensions (Bachmann Achenreiner and Roedder John, 2003), we expect that the positive affect elicited by the new co-branded product will “spill-over”. The positive attitude associated with the new brand and reliance on this positive affect should expand to the type of product, eventually positively influencing the perceptions and attitudes of other products in the product category of the co-branded product:

\[ H3c. \] Children’s attitude towards a co-branded product positively influence their consumption intentions of products in the same product category (Figure 1).

3. Methodology
A. Stimuli
In their state-of-the-art on co-branding, Helmig et al. (2008) recommended studying co-branded products marketed by companies. For this study, we therefore selected a genuine co-branded product introduced by two real companies. Our stimulus is an existing co-branded product ("Liebig©" vegetable soup with "Kiri©" cream cheese) that was launched on the French market in autumn 2012 (a picture of the product is available at www.liebig.fr/nos-soupes/les-familiales). "Kiri©" is a brand dedicated to children from the “Bel©” dairy company. The communication and packaging of the moulded cream cheese are developed with a specific focus on children. It is a very popular product among the target population and very common in French households because it represents a good way for children to achieve the required daily dose of calcium.
As far as “Liebig©” is concerned, although children may be acquainted with the soup brand, it is less familiar to them as its communication and packaging target adults. The co-branded product appears in the product category of the host brand (soup) and targets customers of the invited brand (i.e., children). This co-branded product was selected because it fulfills the basic conditions required by this study. First, it is the result of an alliance of a weak and a strong brand as far as children are concerned (Liebig© and Kiri©, respectively), the cream cheese being a very well-known product to children that is heavily advertised. Second, it combines two types of co-branding: a functional and a symbolic one, as described by Cegarra and Michel (2001) and Uggla (2004). The former is based on the functional criteria of brands, with the cream cheese category improving the texture of the soup. The latter emerges as the exciting, adventurous and fun image of Kiri© complementing the traditional image of Liebig©. In the absence of literature on co-branding among children, it seems wise to ensure that the brands selected will enable any potential type of co-branding to occur. Last, we decided to select a co-branded product that presents a less ethically challenging characteristic because it falls into the healthy product category (both vegetable soups and dairy products appear in the base segment of the Food Pyramid; WHO/FAO, 2003). As marketers, we believe it is also important to demonstrate that all marketers’ objectives and initiatives do not need to be inconsiderate of the target’s welfare to be economically valid. Showing that marketing practices may also help social issues through the study of brands involved in healthy products is a praiseworthy side objective.

B. Survey procedure and participants
We conducted our study among preadolescents, the target of the existing co-branded product. This sample is in accordance with Helmig et al.’s (2008) recommendations to use representative samples instead of convenience ones such as students. A total of 128
children between eight- and 12-years-old (mean age: 9.1; 60 per cent boys and 40 per cent girls) were interviewed. Data were collected in six different leisure centres to ensure that the sample is representative of the French socioeconomic fabric of society. Parents were informed of the intervention and its objective, and their permission was required prior to children’s participation. Furthermore, children’s individual agreement was sought.

The survey took place in a room dedicated to the study. Following the procedures recommended (Rust and Hyatt, 1991) and applied (Auty and Lewis, 2004; Mallinckrodt and Mizerski, 2007) when working with young targets, children were surveyed in small groups of friends to contribute to a comfortable feeling. Small groups also represent a manageable size that enables researchers to check upon every child’s understanding of the questions as well as their individual answers (Mallinckrodt and Mizerski, 2007). The questions were read to the children and they were given instructions on how to fill in the scales. When questions relative to the Liebig© soup were reached, the researcher showed a real pack of soup in order to simulate children’s exposure to the product in a retail store context. The procedure was repeated for the Kiri© cheese and, finally, the co-branded soup.

C. Measures
Our questionnaire included measures of attitude towards the host brand Liebig© soup, the invited brand Kiri© cheese, prior (PrAib and PrAib, respectively) and post exposure (respectively PtAib and PtAib) to the co-branded product as well as a measure of the attitude towards the co-branded product (Aib). They are based on Pecheux and Derbaix’ scale (1999), developed and validated for the target on a four-point Likert format, as recommended for this age group (Peracchio and Mita, 1991). The consumption intentions of the co-branded product (CIcb) is inspired from Phelps and Hoy (1996) and adapted on a four-point Likert scale. The consumption intentions of the host brand (CIhb) and of other products in the same category (CIspc) are both measured with a single item: “I would feel like having more (Leibig©) soup” on a 4-point Likert scale. The perceived fit (Fit) is measured with one item on a four-point Likert scale inspired from (Garretson and Burton, 2005) and adapted to the target: “I think that Leibig© soup and Kiri© is a good mix”. The scales are presented in Table I.

4. Results
We tested our hypotheses using SmartPLS version 2.0.M3 (Ringle et al., 2005) for two stages related to the measurement model and the structural model. We use SmartPLS because our sample size was quite small. The SmartPLS structural equation modelling technique is recommended when the model is complex, the sample size is quite small, or assumptions of normality are not satisfied, (Chin and Newsted, 1999). Nevertheless, using PLS with 100 observations can already be sufficient to achieve acceptable levels of statistical power (Reinartz et al., 2009).

A. Measurement model
We tested the measurement model by performing a validity and reliability analysis for each measure in the structural model. As the scales in Table I show, all the item loadings were satisfactory, and the t-values were significant. The composite reliabilities (CR) and coefficient α’s exceeded the recommended 0.7 level for each construct (Fornell and Larcker, 1981). In support of convergent validity, the average variance extracted (AVE) was higher than 0.5 for all constructs. We assessed discriminant validity with AVE tests
and all variables achieved good discriminant validity. The measures of the model were reliable and valid overall. The descriptive statistics for each construct, as well as correlations between them, are presented in Table II. We checked for potential multicollinearity among independent variables because multicollinearity between latent variables might have a small but significant impact on the bias of path coefficients (Kristensen and Eskildsen, 2010). We performed a collinearity test. As a rule of thumb, it is most often recommended to have the variance inflation factor (VIF) lower than the cut-off threshold of 5-10. The results showed minimal collinearity with the VIF of all constructs ranging between 1.567 and 2.805. The condition index must never exceed 30. In our analysis, the largest condition index is equal to 14.57. Consequently, our results are not affected by multicollinearity.

### B. Hypotheses tests

Before testing our hypotheses, we verified that the invited brand is well perceived as a stronger brand compared to the host brand. First, we tested that children were more familiar with the invited brand than with the host brand. During the survey, children answered a yes/no question about their familiarity with each brand. In total, 97 per cent...
<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>CI_{hb}</th>
<th>CI_{spc}</th>
<th>PtA_{hb}</th>
<th>Fit</th>
<th>PrA_{hb}</th>
<th>PrA_{b}</th>
<th>A_{cb}</th>
<th>CI_{cb}</th>
<th>PtA_{cb}</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI_{hb}</td>
<td>2.7500</td>
<td>1.1570</td>
<td>na</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CI_{spc}</td>
<td>2.7344</td>
<td>1.1738</td>
<td>0.9016</td>
<td>na</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PtA_{hb}</td>
<td>2.5197</td>
<td>0.9015</td>
<td>0.3804</td>
<td>0.4531</td>
<td>0.8556</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fit</td>
<td>2.3984</td>
<td>1.0066</td>
<td>0.4107</td>
<td>0.4635</td>
<td>0.5963</td>
<td>na</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PrA_{hb}</td>
<td>2.7032</td>
<td>0.7931</td>
<td>0.3505</td>
<td>0.383</td>
<td>0.5945</td>
<td>0.4417</td>
<td>0.7885</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PrA_{b}</td>
<td>1.8306</td>
<td>0.8806</td>
<td>0.2514</td>
<td>0.3758</td>
<td>0.5611</td>
<td>0.5658</td>
<td>0.3833</td>
<td>0.8705</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A_{cb}</td>
<td>2.5223</td>
<td>1.0173</td>
<td>0.4542</td>
<td>0.4887</td>
<td>0.5806</td>
<td>0.756</td>
<td>0.4162</td>
<td>0.4639</td>
<td>0.8545</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CI_{b}</td>
<td>2.6274</td>
<td>1.0883</td>
<td>0.6286</td>
<td>0.7219</td>
<td>0.6239</td>
<td>0.6424</td>
<td>0.4622</td>
<td>0.4423</td>
<td>0.6876</td>
<td>0.9288</td>
<td>0</td>
</tr>
<tr>
<td>PtA_{cb}</td>
<td>1.8675</td>
<td>1.0184</td>
<td>0.275</td>
<td>0.3728</td>
<td>0.6003</td>
<td>0.5117</td>
<td>0.3788</td>
<td>0.7042</td>
<td>0.5017</td>
<td>0.4971</td>
<td>na</td>
</tr>
</tbody>
</table>

**Notes:** $n = 128$. Italic numbers on diagonal show the square root of the average variance extracted. For concepts measured with one item, the AVE is equal to zero.
of the sample knew the invited brand whereas 48 per cent were familiar with the host brand. A McNemar’s test allowed us to state that children are significantly more familiar with the invited brand than with the host brand (S-statistic = 59.23; \( p < 0.0001 \)). We then confirmed those results by comparing the mean difference (0.8726) between PrAib (mean = 3.1694) and PrAhb (mean = 2.2968) by performing a t-test for paired samples. The results demonstrate that the difference is significant (\( t = 10.36, \ p < 0.0001 \)). This supports the idea that Kiri© is a stronger brand than Liebig© in terms of association for preadolescents.

We used SmartPLS to test our hypotheses (Ringle et al., 2005), some of which feature complete mediations. We used Baron and Kenny’s (1986) procedure, as reconsidered by Zhao et al. (2010), to test mediations. In Table III, we present the path coefficients and their statistical significance (using bootstrapping resampling techniques). Figure 2 reports the path coefficients and \( R^2 \) values, which indicate the predictability of independent variables. The \( R^2 \) for dependent variables related to attitude (i.e. \( A_{cb}, PtA_{hbb}, PtA_{ib} \)) range between 0.488 and 0.581 which can be considered as moderate according to Chin (1998). Regarding consumption intention variables, the \( R^2 \) value of \( CI_{cb} \) (0.473) is moderate whereas the \( R^2 \) value of \( CI_{hb} \) and \( CI_{spc} \) (i.e. 0.145 and 0.239) can be described as weak. To judge the overall fit of the model, we used the GoF

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Bs</th>
<th>T</th>
<th>( p )</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>( H1a ) PrA_{hb} → Fit</td>
<td>0.264</td>
<td>2.958</td>
<td>0.0031</td>
<td>Supported</td>
</tr>
<tr>
<td>Fit → ( A_{cb} )</td>
<td>0.694</td>
<td>10.236</td>
<td>&lt; 0.0001</td>
<td></td>
</tr>
<tr>
<td>( H1b ) PrA_{ib} → ( A_{cb} )</td>
<td>0.097</td>
<td>1.279</td>
<td>0.2001</td>
<td></td>
</tr>
<tr>
<td>Fit → ( A_{cb} )</td>
<td>0.694</td>
<td>10.236</td>
<td>&lt; 0.0001</td>
<td></td>
</tr>
<tr>
<td>( H2a ) ( A_{cb} ) → PtA_{hbb}</td>
<td>0.403</td>
<td>5.617</td>
<td>&lt; 0.0001</td>
<td>Supported</td>
</tr>
<tr>
<td>( H2b ) ( A_{ib} ) → PtA_{ib}</td>
<td>0.223</td>
<td>2.555</td>
<td>0.0106</td>
<td>Supported</td>
</tr>
<tr>
<td>( H3a ) ( A_{cb} ) → Cl_{cb}</td>
<td>0.688</td>
<td>13.623</td>
<td>&lt; 0.0001</td>
<td>Supported</td>
</tr>
<tr>
<td>( H3b ) PtA_{hbb} → Cl_{hb}</td>
<td>0.380</td>
<td>4.916</td>
<td>&lt; 0.0001</td>
<td>Supported</td>
</tr>
<tr>
<td>( H3c ) ( A_{cb} ) → Cl_{spc}</td>
<td>0.489</td>
<td>6.811</td>
<td>&lt; 0.0001</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Figure 2.
Diagram of the structural model with standardized parameter estimates

Note: ns, not significant relationship
(i.e. the mean of the average communality and average $R^2$) as well as the $Q^2$ (i.e. the cross-validated redundancy) obtained through a blindfolding procedure in SmartPLS. The goodness of fit of the final model is acceptable ($GoF = 0.5911$). Looking at the $Q^2$ values, the model has good predictive relevance (Fornell and Cha, 1994). According to Henseler et al. (2009), the $Q^2$ for our dependent variables are evaluated as large, i.e., above 0.35 ($A_{cb}: Q^2 = 0.4153; PtA_{ihb}: Q^2 = 0.3502; PtA_{ib}: Q^2 = 0.3952; Cl_{ib}: Q^2 = 0.4064$) except for $Cl_{spc}$ and $Ch_{hb}$ for which the $Q^2$ are medium, i.e., between 0.15 and 0.35 ($Cl_{spc}: Q^2 = 0.2266; Cl_{hb}: Q^2 = 0.1479$).

With $H1$, we predicted the full mediation of perceived fit in the relationship between $PrA_{hhb}$ and $A_{cb}$. Children’s prior attitude towards the host brand positively influenced the perceived fit ($\beta = 0.264, p < 0.005$), which positively affected the attitude towards the co-branded product ($\beta = 0.694, p < 0.0001$). The direct link between $PrA_{hhb}$ and fit was not significant ($\beta = 0.097, p > 0.05$). According to Zhao et al. (2010), we thus have evidence of indirect-only mediation. To test this mediating effect, we compute the Sobel’s (1982) $z$-test adapted by Preacher and Hayes (2008). The mediating effect is significant ($z = 2.9050; p < 0.005$) and the total effect is equal to 0.2798 (axb+c). $H1a$ is supported. We also predicted that perceived fit would have a full mediating role in the perceived fit – attitude towards the co-branded product link. $PrA_{ib}$ positively influences perceived fit ($\beta = 0.465, p < 0.0001$). We already confirmed the relationship between perceived fit and $A_{cb}$ to test $H1a$. As expected, $PrA_{ib}$ had no direct impact on $A_{cb}$ ($\beta = 0.034, p > 0.05$). The mediating effect is significant ($z = 4.5121; p < 0.0001$) and the total effect (axb+c) is equal to 0.3559. $H1b$ is supported.

According to $H1c$, the influence of the strongest brand (i.e. the invited brand) on children’s attitude towards the co-branded product is higher than that of the weakest brand (i.e. the host brand). We tested whether the mediation (axb) of the prior attitude towards the host brand on the $A_{cb}$ is lower than that of the prior attitude towards the invited brand on the $A_{cb}[1]$. According to the result of the unidirectional $t$-test, the difference is significant if we consider an $\alpha = 10$ per cent ($t = 1.6021; p = 0.0546$). However, knowing that the impact of perceived fit on attitude towards the co-branded product (b) is common for both mediation, we compared the direct effect of the prior attitude towards the invited brand and the host brand on the perceived fit. These two parameters (for $PrA_{ib} \rightarrow fit: \beta = 0.465; PrA_{ib} \rightarrow fit: \beta = 0.264$) differ significantly from one another ($t = 1.7043; p = 0.0442$). Therefore, $H1c$ is partially supported.

To test $H2a$ and $H2b$ according to which the attitude towards the co-branded product positively influences children’ post attitudes towards the partner brands, we checked that this effect is true even when we take into account the effect of prior attitudes on post attitudes i.e., $PrA_{hhb}$ on $PtA_{hhb}$ and $PrA_{ib}$ on $PtA_{ib}$. The results showed that children’s post attitudes towards the host and invited brands depend on their respective prior attitudes ($\beta = 0.427, p < 0.0001; \beta = 0.601, p < 0.0001$). Next, we found that attitude towards the co-branded product positively influences children’s subsequent attitudes towards host ($\beta = 0.403, p < 0.0001$) and invited brands ($\beta = 0.223, p < 0.0001$). $H2a$ and $H2b$ are supported. $H2c$ postulates that weaker brands received a stronger spillover effect than do stronger brands. We tested whether the effect of $A_{co}$ on $PtA_{ihb}$ is significantly higher than the effect of $A_{co}$ on $PtA_{ib}$. The results of the unidirectional $t$-test indicate that the difference is significant ($t = 1.6516; p = 0.0493$). Thus, $H2c$ is supported.

Children’s attitude towards the co-branded product determines both their consumption intention of the co-branded product ($\beta = 0.688, p < 0.0001$) and of products in the same product category ($\beta = 0.489, p < 0.0001$). Children’s post attitude towards the host brand
also affects their consumption intentions regarding the host brand ($\beta = 0.380$, $p < 0.0001$). $H3a$, $H3b$ and $H3c$ are supported.

5. Discussion
Co-branding is an increasingly popular practice in marketing and it has been suggested as one of the most effective ways for brands to extend their territory, offset competition (Uggla, 2004) and develop their markets (Helmig et al., 2008). Understanding how children respond to the co-branding strategy is therefore relevant, as the very specific context of two brands endorsing one product remains untouched by scholars although preadolescents are not mini adults (Roedder John, 1999, 2008). Furthermore, it is said that learning about children may certainly contribute to researchers’ knowledge about adults (Roedder John, 1997).

A. Theoretical contributions
In this study, we demonstrate the process through which children respond to and treat the information provided by the presence of multiple brands on one product. First, we show that the fit construct is key for children trying to appraise the product and construct their attitudes towards the co-branded product. It enables the children to integrate the association to the two brands that are presented simultaneously. This construct simplifies the process for preadolescents and enables both brands to be considered, although their congruence is essential because it will drive the attitude towards the co-branded product. Children’s prior attitudes towards both brands are indeed fully mediated by the perceived fit between the two brands. Direct asymmetric as well as asymmetric spill-over effects are also observed. Furthermore, we demonstrate that the attitude towards the most popular brand in the alliance influences more the co-branded product through the perceived fit than the attitude towards the less popular brand. However, the former benefits less from the alliance than the less familiar brand.

These findings are very stimulating from a theoretical perspective. First, Ellis et al. (2010) suggested that earlier acquired brands (i.e. brands children are acquainted with from an earlier age, such as Kiri©) may negatively impact the subsequent brand extensions because those brands might be so deeply entangled in their respective imagery that it renders associations with new products difficult. We do not find support for this in this study. We show that positive brand associations of familiar brands may be transferred to new offers bearing the familiar brand. It further supports co-branding strategies. Second, our research shows that children follow a path that is unique to the target. Research on children has extensively demonstrated the differences between adults and children in similar consumption situations, and this research confirms these findings. We demonstrate that children follow a process that may be assimilated to a simplification one in order to integrate two brands in the evaluation of the co-branded product. The positive evaluation of the co-branded product not only positively influences intentions to consume the product but also impacts intentions to consume other products in the same category. This represents another unique contribution, as we believe that no previous studies on adults have demonstrated this original type of spill-over effect extended to consumption intentions.

B. Managerial implications
It has been said that due to the lack of information, co-branding remains a risky undertaking, more precisely for the strongest brands (Rao and Ruekert, 1994). With this
study, we are able to provide recommendations to managers who are considering a brand extension strategy.

The first managerial implication is that marketers should select their partners wisely in a brand alliance. This study indeed stresses the importance of the perceived fit between the two brands and clearly demonstrates that a well-thought partnership may lead to improved attitudes towards both brands. For weaker brands, i.e., those that are not initially popular among children, partnering with a brand liked by children may significantly improve their image and sales, if the partner brands are perceived as congruent in the mind of children. Although the consequences are less influential, stronger brands should also take care of the quality of the partnership, as spill-over effects are also noted. This implies that the partner in the alliance should be able to identify congruence between their brands. In other words, some additional insight in terms of brand fit may be required from the target market, and companies should be ready to invest to gather appropriate information. Brand alliance nevertheless remains a relevant card to play for host brands, as they may gain new target markets and increased sales volumes for both partners.

It also seems important to stress that retailers could benefit from these findings as well. While it appears very difficult for them to compete against brands that exclusively dedicate their marketing means to children, our study shows that brand alliances with popular children’s brands could be an effective tool to use. An alternative to investing a lot of money in advertising could be an alliance with the right partners, as it may improve retailers’ brand image and sales volumes in the category. In the case of healthy products, the strategy could even alleviate “the retailing paradox”, meeting “business objectives while demonstrating commitment to sustainability issues” (Knight, 2004 in Carrero and Valor, 2012).

C. Limitations and directions for further research
In this research, we have shown how to successfully transfer meaning from one familiar and liked brand not only to a co-branded product but also to a less familiar brand. However, at this stage, we have little insight into which type of brand criteria (i.e. functional or symbolic) is the most relevant in the process for children. This pioneering study on brand alliances targeting preadolescents could not answer all questions of course, as parsimony is required in studies focusing on this young target. It may be relevant, however, for the brands playing on either the functional or the symbolic dimension for differentiation, to achieve a deeper understanding of the phenomenon which may vary according to age sub-groups among the preadolescent clutter, as Bachmann Achenreiner and Roedder John (2003) suggest.

Furthermore, as mentioned earlier, the nature of the process itself, either cognitive or affective, should be further analysed, as it has been suggested that obtaining a greater understanding of how individuals transfer meaning to and from brands is one of five research imperatives (Uggla, 2004). At this stage, we can only propose explanations based on previous literature (Charry and Demoulin, 2012; Derbaix and Bree, 1997; Phelps and Hoy, 1996; Vanhamme and Chiu, 2008). We therefore propose that it is an affective process and that the fit construct is the result of affective heuristics. The assumption according to which the nature of fit may vary according to the level of cognitive development of the target should nevertheless be confirmed. As Ellis and his co-authors state (2010), understanding the process that underlies the assimilation of brand extensions is important. Looking further into these issues seems very relevant and promising, and further studies should determine the nature of the fit construct.
As closing words, we would like to focus on ethical issues, as research on children legitimately raises concerns. The target is indeed generally perceived as a particularly vulnerable group that deserves extra care in marketing and marketing research (Nairn and Fine, 2008; Van Reijmersdal et al., 2012). However, it seems that targets themselves consider ethics from a much more pragmatic perspective (Singhapakdi et al., 1999) than do social marketers or scholars involved with marketing ethics (Charry et al., 2013). In other words, it seems that the positive returns consumers gain from marketers’ practices significantly decrease their critical views of the practices. Our concern to select a product that does not harm social welfare while potentially contributing to the success of an economic actor could advocate in favour of the tactic. A teleological perspective of ethics indeed states that the sum of positive consequences of an act may balance its potential negative outcomes (Hunt and Vitell, 1993, 2006; Singhapakdi et al., 1999). If companies succeed in their commercial intent while increasing the consumption of products that do not harm the target’s welfare, and hence contribute to it, the co-branding strategy could indeed be perceived as ethical, and marketers’ could see their images restored.

Note
1. Given that direct effects of PrAhb and PrAib on Aco were not significant, we ran the model without these links to compare both mediations.

References


Ringle, C.M., Wende, S. and Will, A. (2005), SmartPLS 2.0, University of Hamburg, Hamburg, Germany.


**About the authors**

Dr Karine Charry (PhD) is an Associate Professor of Marketing at the IÉSEG School of Management (Lille|Paris, France), Catholic University of Lille. Her research focuses on consumer behaviour, particularly children as consumers, as well as persuasion mechanisms in marketing and health prevention communication. Her ten years of B2B and B2C experience in the marketing departments of diverse companies and sectors contribute to the pragmatic approach of both her peer-reviewed publications (in *Journal of Business Ethics, International Journal of Advertising, Recherche et Applications en Marketing* […] and teaching. Dr Karine Charry is the corresponding author and can be contacted at: k.charry@ieseg.fr

Dr Nathalie T.M. Demoulin (PhD) is an Associate Professor of Marketing at the IÉSEG School of Management (Lille|Paris, France), Catholic University of Lille. Her primary research interests have focused on marketing managers’ decision-making processes and the impact of marketing decision support systems on managers. She currently conducts research linked to customer loyalty, waiting time, and sensorial marketing in the service and retailing sectors. She publishes in both international and French peer-reviewed journals, such as *Decision Support Systems, International Journal of Advertising, International Journal of Retail & Distribution Management, Journal of Retailing, Journal of Retailing and Consumer Services, Managing Service Quality*, and *Systèmes d’Information et Management*.

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com
Or visit our web site for further details: www.emeraldinsight.com/reprints