Impact of Vertical Line Extensions on Brand Attitudes and New Extensions:

The roles of judgment focus, comparative set and positioning

Structured Abstract

Purpose: Companies often extend brands to higher or lower quality tiers to access different market segments. However, the impact of such extensions on the brand and its subsequent offerings is not yet conclusive. While some studies found an "averaging" pattern (all models contribute equally to the overall perception of the brand: a symmetric effect), others found a "best-of-brand" pattern (the positive impact of an upstream extension is much greater than the negative impact of a downstream extension: an asymmetric effect). In this research, we reconcile these seemingly conflicting findings by assessing the conditions under which each pattern is likely to emerge.

Methodology: Three experimental studies are presented to test the conditions under which a symmetric or asymmetric pattern of brand evaluation would merge. Study 1 examined the impact of judgment focus (quality vs. expertise) on the pattern of brand evaluations. Study 2 tested the impact of having a comparative set on the assessment of specific brand dimensions. Study 3 examined the impact of the informativeness of price positioning on product quality expectations.

Findings: Brand evaluations and attitudes are determined by the presence of a comparative brand and judgment focus. When brands are evaluated without a comparison, a symmetric pattern emerges, as a low-tier extension hurts a brand as much as a high-tier extension helps it. In contrast, when brands are evaluated with a comparison, focusing the assessment on quality leads to a symmetric pattern, while focusing it on expertise leads to an asymmetric one.

Implications and limitations: The present research specifies conditions under which a low-tier model may hurt brand perceptions. We used hypothetical brands to avoid the impact of pre-existing attitudes. While we expect our results to generalize to real brands, this may be considered a limitation of the present research.

Practical implications: The current research delineates the circumstances under which vertical line extensions have positive, neutral or negative impact on brand perceptions and future product expectations. We introduce the presence of a comparison set as a key variable and show how it interacts with assessment focus to affect brand evaluations. When thinking about the impact of extensions on brand perceptions, marketers need to consider which assessment focus is likely to be triggered by environmental cues and whether comparisons are salient.

Originality and value: Brand extension is an important area of investigation as evidenced by the vast literature dedicated to the subject. The present paper advances knowledge in this area by identifying key factors affecting the impact of vertical extensions on brand perceptions.

Samsung lists more than 40 models of smartphones under the brand Galaxy on their website. Although small changes, like different colours, are responsible for part of this variety, the brand portfolio reveals a wide array of products, ranging in price from just over $100 to close to $1,000. This extensive variety of products at different price tiers under the same brand in a given category is not an anomaly of Samsung, but in fact prevails in the marketplace. These vertical line extensions can reinforce or change consumer perceptions (e.g., perceived quality, expertise) and attitude about the brand (Riley et al., 2013, Ahluwalia and Gürhan-Canli, 2000), and these perceptions often serve as predictive performance cues for future product extensions (Janiszewski and Van Osselaer, 2000, Joshi et al., 2015, Kuksov and Lin, 2016, Palmeira and Thomas, 2011).

Of the two typical types of vertical line extensions, high-tier (upward) extensions have been shown to have a general positive effect on brand attitude and perceptions such as quality associations and perceptions of prestige and innovation (Heath et al., 2011, Janiszewski and Van Osselaer, 2000, Lei et al., 2008b). However, the impact of low-tier (downward) extensions is more ambiguous. Specifically, on the one hand, a low-tier extension may dilute quality associations (Janiszewski and Van Osselaer 2000, (Kim and Lavack, 1996, John et al., 1998), but on the other hand, it may also improve brand perceptions such as expertise as the extension adds an alternative option (variety) to consumers (Berger et al. 2007; Bertini et al. 2012; Heath et al. 2011; for a review see Childs 2017).

In the current research, we reconcile these seemingly conflicting findings by identifying the conditions under which a low-tier extension is likely to have a positive or negative impact on brand attitude and perceptions. We show that although both quality and variety (as a signal of brand expertise) considerations are inputs that consumers use for brand evaluation, consumers' focus on each input (e.g., either quality or variety) leads to different impacts of a

low-tier extension. Specifically, we argue that quality is a more central aspect of a brand than variety of product models, and the value of variety (e.g., provide alternatives to consumers) is not spontaneously recognized. Therefore, unless consumers are prompted to focus on variety considerations, brand attitude is mostly driven by quality considerations. In this case, a low-tier extension dilutes quality associations and lowers consumers' brand attitude. In contrast, when the context prompts consumers to recognize the value of product variety (e.g., brand expertise), a low-tier extension does not cause a negative impact on brand attitude, and can even improve it. In this research, we examine this prediction by spelling out contextual factors (e.g., availability of a comparative set, the informativeness of a new extension's positioning) that can affect consumers' judgment focus (on quality or variety) and their subsequent evaluations of a new extension product of the brand.

THEORETICAL DEVELOPMENT

The Impact of Vertical Line Extensions

A considerable amount of research in marketing has been dedicated to understanding the value of brands and how consumers use brands in making product judgments and decisions (Pontes et al., 2017, Dall'Olmo Riley et al., 2015, Goetz et al., 2014, Lei et al., 2008a). The value of a brand, often measured as brand equity, is a composite measure of consumers' attitudes and perceptions about the brand (Aaker, 1996, Keller, 1993). These perceptions, in addition to functioning as cues for information retrieval, can also help consumers make predictions about product performance (Erdem et al., 2006, Geyskens et al., 2010, Keller, 1993).

In the context of extending a brand to multiple products, much attention has been paid to the impact of a category extension on the brand (Heath et al., 2011, John et al., 1998) and its subsequent extension products (Aaker and Keller, 1990). For example, research has shown

that flagship products are less affected by extension failure (John et al., 1998) and that a more extensive portfolio increases perceptions of variety and brand attitudes (Berger et al., 2007). Among the studies that focused on the impact of a vertical extension (i.e., extending the brand upward or downward to different price-tiers within the same category), a common intuition is that introducing high-tier models enhances a brand's image, but introducing low-tier models has the opposite effect by associating the brand with lower quality products (Janiszewski and Van Osselaer, 2000, Ahluwalia and Gürhan-Canli, 2000). In particular, Janiszewski and Van Osselaer (2000) examined brand portfolios with different proportions of high- and low-quality (extension) products and asked participants to indicate the expected quality of a new product from the same brand. They found that consumers use the average quality of products in a brand's portfolio to infer the quality of the new product. In other words, the positive impact of high-tier models and the negative impact of low-tier models are symmetric, that means, the impact from the two types of extensions is equal in strength but in opposite directions.

However, other studies have found evidence for a different pattern of the vertical extensions' impact on brand evaluations. For example, Heath, Del Vecchio and McCarthy (2011) found that high-tier extensions improved brand evaluations, but low-tier extensions had a small and often non-existent impact. They reasoned that this asymmetry in the pattern of the impact of high- versus low-tier extensions is due to the fact that, in addition to quality considerations, other type of considerations, specifically, those variety-centered (e.g., extent of brand expertise) also contribute to consumers' brand evaluation. In particular, while low-tier extensions may dilute and high-tier ones enhance quality associations (Janiszewski and Van Osselaer, 2000), both types of extensions have a positive impact on perceptions of expertise due to the increased variety of offerings (Berger et al., 2007). Thus, while both quality and variety cues are favorable for a high-tier extension, they are in opposite directions

for a low-tier extension. As a result, the positive impact of a high-tier extension on brand attitude is larger than the negative impact of a low-tier extension.

Although these results are not necessarily conflicting as these studies differ in a number of aspects (e.g., product categories, dependent variables, experimental procedures), they may lead to contradictory implications. Following Janiszewski and Van Osselaer (2000), a brand manager would need to carefully weigh the potential sales generated by a low-tier extension against the reduction in brand perceptions. In contrast, a brand manager following Heath et al. (2011) would be considerably less hesitant to introduce a low-tier extension, believing that the negative impact of such extensions on the brand would be minimal. In the current research, we identify the conditions under which each pattern of brand evaluation would emerge in response to the introduction of a high- or low-tier extension.

Quality and Variety as Different Inputs for Brand Evaluation

Quality of product models in a brand portfolio is an important determinant of brand attitudes and choices, but it is not the only consideration. In particular, research shows that brands that offer more variety in a category are believed to have higher expertise, which in turn leads to more positive brand attitude (Berger et al., 2007). Variety is taken as a positive signal even among consumers who are not interested in the additional models (Berger et al., 2007, Bertini et al., 2012).

In this research, we argue that consumers' focus on quality or variety in brand judgment can lead to different patterns of the vertical extensions' impact on brand attitude. Our key argument is that quality and variety differ in their level of saliency and, consequently, in the extent to which they are spontaneously used as input for brand judgments. Specifically, we reason that, compared to variety, brand quality is a more central aspect in brand evaluations (Carpenter et al., 1994, Miyazaki et al., 2005). For example,

Aaker's (1996) brand equity model consists of ten measures, two of which refer to perceived quality and value, but none to variety of models.

If quality is a more central aspect, then taking variety into consideration may require additional effort from consumers (Boush, 1993). This is because the variety consideration requires consumers to not only consider models in different price tiers, but also determine their relevance to the measured dimension (e.g., whether a high-tier model is more indicative of brand expertise than a low-tier model). Given that consumers are known to seek cognitive efficiency (Gilbert and Hixon, 1991, Wyer and Srull, 1986), we expect that they would by default focus on the quality consideration in their brand judgment. Indeed, research shows that consumer judgments are highly influenced by the saliency of an input, especially when individuals are not engaged in extensive thinking (Menon and Raghubir, 2003). In the context of our research, as quality consideration is more salient for brand judgments, consumers may simply form brand evaluations based on quality without making further deliberations (Feldman and Lynch, 1988, Meyvis and Janiszewski, 2004). In this case, high-quality extensions (an upward move) should improve brand attitudes, while low-quality extensions (a downward move) should hinder brand attitudes (Lei et al., 2008b).

However, when consumers are prompted to consider the value of product variety in their brand judgment, while a low-tier brand dilutes quality associations, it adds to the variety of offerings and enhances the perception of brand expertise, resulting in a small overall impact on brand attitude (Heath et al. 2011). Furthermore, we argue that judgment about the value of variety is difficult and thus requires a frame of reference (e.g., the presence of a comparative brand). In particular, when there are no clear standards or guidelines for an assessment (e.g., the amount of sugar in a yogurt), it is difficult to make a judgment and the provision of a frame of reference can help facilitate the judgment ((Hsee and Leclerc, 1998, Palmeira, 2011). In the context of brand judgments, we contend that the presence of a comparative set is key for

consumers to judge the value that product variety adds to a brand. Specifically, as the number of product offerings vastly varies among different brands, there is no clear standard on how many product models a brand needs to introduce. As such, the value of variety (e.g., brand expertise) may not be salient and thus is difficult to assess without a reference point (Chernev, 2003). Once such a reference point (e.g., a comparative brand set) is available, product variety is more likely to be valued and brands with more variety would be perceived to have more expertise (Berger et al. 2007), resulting in more positive brand attitude.

In summary, we hypothesize that the impact of a high- versus low-tier extension on brand attitude depends on whether consumers' judgment focus is on the quality or variety consideration of the brand. We expect that consumers would spontaneously focus on quality considerations in comparison to variety considerations. The focus on quality would result in a symmetric pattern of the positive impact of a high-tier extension and the negative impact of a low-tier extension on brand attitude, regardless of whether a comparative set is present. However, when consumers are prompted to focus on variety, and if a comparative set is available, they would incorporate the value of product variety into their brand judgments. This would lead to an asymmetric pattern where the positive impact of a high-tier extension is greater than the negative impact of a low-tier extension. In hypothesis 1, we first focus on situations where a comparative set is available. We hypothesize that:

Hypothesis 1: When a comparative set is available, the impact of vertical line extensions on brand attitudes will be symmetric (equal impact for a high and low-tier extension) when the focus is primarily on quality, but asymmetric (positive impact of high-tier extension greater than negative impact of low-tier extension) when the focus is primarily on the value of variety (expertise).

Hypothesis 1 examines the impact of a vertical extension on overall brand attitude. In addition to overall brand attitude, it is also important to understand how consumers form

perceptions about specific brand dimensions (e.g., quality, expertise). We argue that if consumers' focus of brand judgment (on quality or variety) leads to different patterns (e.g., symmetric or asymmetric) of brand attitude, consumers' perceptions connected to these two brand dimensions (quality or variety) should follow a similar pattern. Specifically, consumers' quality perception of a brand should follow the same symmetric pattern as brand attitude when the judgment focus is on quality: A high-tier extension strengthens the quality perception and a low-tier extension dilutes it. Similarly, consumer perception of brand expertise should follow the same pattern as brand attitude when the judgment focus is on variety (since variety signals brand expertise, Heath et al. 2011): A asymmetric pattern when a comparative set is present but a symmetric one when it is absent. In hypothesis 2, we focus on how consumer perceptions of brand expertise may follow different patterns under different assessment conditions. We hypothesize that:

Hypothesis 2: Judgments of expertise will follow an asymmetric pattern in the presence of a comparative set, but a symmetric pattern in the absence of it.

Finally, in addition to the impact of vertical extensions on brand judgements, it is also critical to understand how such extensions may affect consumers' quality expectations of the brand's future offerings. We propose that one important factor that can affect consumers' expectations for new products is the informativeness of their positioning. In particular, sometimes the marketing elements (e.g., price, packaging) connected to a new product do not clearly indicate its intended positioning (e.g., whether it is intended to be a high- or low-tier model; (Janiszewski and Van Osselaer, 2000). In those cases, that is, when there are no diagnostic cues for consumers to infer the quality of a new product, we expect that consumers will rely on their brand attitudes towards the focal brand to infer quality (Kirmani and Rao, 2000)), in what would represent an spill over effect (Balachander and Ghose, 2003). In this

case, we expect consumers' evaluations of a new product to closely follow product attitudes formed about the focal brand.

Hypothesis 3: Expected quality judgements of the product will follow attitudes formed about the focal brand, when the intended positioning of a new product is not clearly specified.

On the other hand, when the price of the model is informative of the intended positioning, we expect consumers to engage in a two-step evaluation process. First, consumers will consider whether the brand has the expertise to offer the proposed quality level or not (Aaker 1997). This judgment concerning expertise relies on the best model present in the existing brand portfolio (Randall et al., 1998, Pontes et al., 2017). When the brand is considered to have the expertise, consumers' quality expectation of the new product will map onto the intended positioning (e.g., a product positioned to be high-tier is perceived to have high quality). However, when the brand is considered not to have the expertise, consumers' quality expectation of the product will be lower than the intended positioning. For example, two computer manufacturers A and B decide to enter the tablets market. Brand A's existing line of computers contains both high and low-tier models, while brand B only offers low-tier models. If both companies decide to introduce a low-tier tablet, consumers are likely to expect similar quality for both products as they deem both brands to have the necessary expertise to introduce a low-tier product. In contrast, if both companies decide to introduce a high-tier tablet, consumers are likely to believe that only brand A has the necessary expertise and perceive higher quality in brand A's product than in brand B's. Therefore, we hypothesize that:

Hypothesis 4: When the intended positioning of a product is specified, the expected quality of the product will map onto the intended positioning only when the brand is deemed to have the necessary expertise to offer the proposed quality level.

Overview of studies

We conducted three online studies recruiting Mechanical Turk participants residing in the United States. The use of Mechanical Turk participants is extremely popular among consumer researchers as a source of experimental data as it is a far more representative sample of the general population than traditional college student samples (Buhrmester et al., 2011, Goodman et al., 2013, Mason and Suri, 2012). It is also considered to provide good quality data (motivated respondents) although with certain variability (Paolacci and Chandler, 2014). Furthermore, Mechanical Turk offers many practical advantages that reduce costs and make recruitment easier, while also reducing threats to internal validity (Paolacci et al., 2010). Study 1 shows that the judgment focus (on quality or expertise) can result in either a symmetric or asymmetric impact of vertical extensions on brand attitude and consumers' expected quality of a new product. Study 2 examines the impact of vertical extensions on consumer judgment about specific brand perceptions (e.g., quality, expertise). Study 3 examines extensions with an intended quality positioning and show that expected product quality only follows brand evaluations and positioning, when the brand is considered to have the necessary expertise.

STUDY 1 – JUDGMENT FOCUS IN A COMPARATIVE SET

Study 1 was designed to test our key prediction that, when a comparative set is available, consumer evaluation of a brand follows a symmetric pattern when the judgment focus is on brand quality, whereas it would follow an asymmetric pattern when the judgment focus is on brand expertise.

Method

Participants were 151 members from Mechanical Turk (M_{age} = 33, SD_{age} = 11.40, 55% men) who were randomly assigned to one of four conditions in a 2 (extension: high-tier vs. low-tier) × 2 (judgment focus: expertise vs. quality) × 2 (presence of a comparative brand: present vs. absent) mixed-subjects design, where extension and judgement focus were between-subjects factors and presence of a comparative set was a within-subjects factor. Using presence of a comparative set as a within-subjects factor allows both patterns (symmetric and asymmetric) of the impact to be demonstrated on the same focal brand.

We selected experiment stimuli (i.e., kitchen appliances) that are familiar with most consumers and created fictitious brand names (e.g.,, Circle and Triangle) to minimize the possible confounding effects of consumer associations with existing brands. All participants were asked to consider two brands of small kitchen appliances named Circle (the comparison brand) and Triangle (the focal brand with extensions). In the blender category, the Circle brand only had one model (mainstream). The Triangle brand also had one mainstream blender plus either a high-tier model or a low-tier model depending on the condition. Table 1 summarizes the conditions of all studies. To ensure that the information was processed correctly, we presented the same information through a picture. Further, in a series of multiple choice questions, participants were asked to indicate how many premium, mainstream and low-end models each brand had.

In the expertise assessment condition, participants compared the brands in terms of expertise as an exemplar measure of value of product variety. Specifically, they first indicated which brand had more expertise (Circle, Triangle or no difference). Then they compared the brands using a seven-point bipolar scale (1-Circle has much more expertise, 7-Triangle has much expertise) and rated each brand (1-Low expertise, 7-High expertise). In the quality assessment condition, instead of answering questions about expertise, they answered equivalent questions about quality.

After this, all participants indicated their attitude toward each brand using seven-point scales (1-Negative, 7-Positive; 1-Dislike very much, 7-Like very much; 1-Not interested, 7-Very interested; $\alpha_{Triangle} = .90$, $\alpha_{Circle} = .94$). Finally, they were reminded that the models they had seen were from the blender category and told that each brand was introducing a juicer, but there was no information about the quality of the juicers. Participants indicated their quality expectations for a juicer from each brand (1-Low, 7-High).

---Insert Table 1 here---

Results and Discussion

Gender and age did not have an impact in any of the measures. Recall that both brands had a mainstream model. The Triangle brand had no other models, while the Circle brand had an additional low-end or premium model. We thus refer to the Triangle brand as the control or the comparison brand and the Circle as the focal or extended brand. Attitudes toward each brand in each condition as well as quality expectations for a new model (juicer) are presented in Table 2.

---Insert Table 2 here---

In order to assess the impact of an extension on brand attitude, we subtracted attitudes toward the control brand from those of the extended brand. An ANOVA on relative attitudes yielded main effects for extension ($F(1, 147) = 23.23$, $p < .001$) and judgement focus ($F(1, 147) = 14.32$, $p < .001$) as well as an interaction ($F(1, 147) = 5.08$, $p < .05$). Further analyses revealed that a high-tier extension had a positive and similar impact on attitudes regardless of judgment focus ($M_{expertise} = .96$ vs. $M_{quality} = .68$, $F(1, 147) = 1.12$, $p > .29$). In contrast, the impact of a low-tier extension was negative for those who focused on quality, but positive for those who focused on expertise ($M_{expertise} = .48$ vs. $M_{quality} = -.68$, $F(1, 147) = 19.12$, p

< .001). In support of H1a, we find a pattern consistent with an averaging for those who focused on quality, as the impact of extensions was perfectly symmetric (quality: M_{high} = .68 vs. M_{low} = -.68). Consistent with H1b, in the expertise condition, a high-tier model increased brand attitude, while a low-tier extension had no negative impact. Interestingly, although we only hypothesized the absence of a negative impact for a low-tier model, we actually observe a positive impact for a low-tier model, although smaller than that of a high tier model (expertise: M_{high} = .96 vs. M_{low} = .48, $F(1, 147) = 3.40$, $p < .07$). These results are represented in Figure 1.

---Insert Figure 1 here---

An ANOVA on quality expectations for the extension of the focal brand revealed consistent results: main effects for judgement focus ($F(1, 147) = 8.54$, $p < .01$) and extension direction ($F(1, 147) = 37.96$, $p < .01$), qualified by a marginally significant interaction ($F(1, 147) = 2.85$, $p < .10$). A high-tier extension had the same positive impact on quality expectations regardless of the assessment type ($M_{expertise}$ = .77 vs. $M_{quality}$ = 1.00, $F(1, 147) = .73$, $p > .39$). In contrast, a low-tier extension reduced quality expectations only when participants had made a quality judgment ($M_{expertise}$ = .17 vs. $M_{quality}$ = -.68, $F(1, 147) = 11.14$, $p < .001$). These results support H3.

Finally, we examine perceptions of the brands in terms of expertise and quality. The extended brand was considered as higher in expertise regardless of extension tier. For example, the average response about expertise in the bipolar scale (1-Circle has much more expertise, 7-Triangle has much expertise), which directly compares the two brands, was 5.1 (M_{high} = 5.19 vs. M_{low} = 5.00, $F(1, 76) < 1$). In contrast, for the quality measure (1-Circle has much more quality, 7-Triangle has much quality), high tier extension increased quality, while a low-tier extension reduced it (M_{high} = 5.14 vs. M_{low} = 3.60, $F(1, 71) = 26.06$, $p < .001$). Separate results for quality and expertise of each brand followed the same pattern.

STUDY 2 – ABSOLUTE VS. RELATIVE JUDGMENTS BASED ON A COMPARATIVE SET

Study 2 was designed to test the impact of having a comparative set on consumer evaluations of brand expertise (measured by expertise, innovativeness, and prestige) and their quality expectation of the brand's future offerings.

Method

Participants were members of 324 Mechanical Turk (M_{age} = 33.00, SD_{age} = 11.40, 60% men), who were randomly assigned to a condition in a 2 (presence of a comparative brand: present vs. absent) × 4 (target brand portfolio: control vs. low vs. high vs. range) between-subjects design. In the comparison conditions, as in study 1, we follow Heath et al.'s (2011) methodology, presenting participants with a target and a comparison brand and asking for relative judgments. The comparison brand only carries one mainstream model. In the no comparison conditions, no comparison brand is presented and we ask for absolute judgments. Target brand portfolio was manipulated by describing different models in the four portfolio conditions. The target brand was named Frontier, and in all portfolio conditions carried a model of the same name that was rated as 6 stars (on a 9 star scale) on all three attributes (durability, ergonomics and design) and priced at $67. In the low portfolio condition, it also carried an extension (Frontier Light, $49) rated as 4 on all attributes. In the high portfolio condition, it carried an extension (Frontier Ultra, $91) rated as 8 on all attributes. In the range condition, the target brand carried all three models, while in the control condition it carried only the mid-tier model. In the comparison conditions, participants were presented with a second brand called Reinland that carried only a mid-tier product with the same ratings and price as Frontier (6-6-6, $67).

We divide our study in two parts. In the first part, we examine consumers' brand evaluations in different conditions. Participants were asked to assume that they were in the UK and looking to buy a bag. They were not familiar with the available brands, but had information on durability, ergonomics and design of several brands from an independent organization. Participants were asked to evaluate the brand on three dimensions that are closely linked to brand expertise as in Heath et al. (2011), which are expertise itself, innovativeness, and prestige. Scales differ between conditions, such that participants in the comparison condition rated the target brand relative to the comparison brand, while participants in the no-comparison condition rated the target brand in absolute terms. This allows us to directly compare the impact of a comparison brand on evaluations controlling for context and brand dimensions. Specifically, in the no comparison conditions, participants evaluated the brand using seven-point scales in terms of prestige (prestige, sophistication, elegance, $\alpha = .91$), innovativeness (innovation, creativity, imagination, $\alpha = .94$) and expertise (expertise, ability, competence, $\alpha = .92$). In the comparison condition, they made the same evaluations, but using comparative scales (e.g. 1-Reinland is much more prestigious, 7-Frontier is much more prestigious; $\alpha_{prestige} = .96$, $\alpha_{innovation} = .94$, $\alpha_{expertise} = .93$).

Following these evaluations, in the second part of the study, participants were presented with three scenarios in order to examine their quality expectations for a new model launched by the target brand (cf. Janiszewski and Van Osselaer 2000). In the first two scenarios participants were asked to indicate the expected quality of a new model in a related category without being provided with price information. Specifically, scenario 1 read "Consider that Frontier is introducing a briefcase in the market. You have no information about its ratings or price, but you know that in this market there are briefcases for as little as £ 30 and as high as £ 70. What would you expect of this product?" Scenario 2 was a replication in a different category: "Consider that Frontier is introducing a backpack in the market and named its

product Frontier First. You have no information about its ratings or price, but you know that prices in this market for a backpack vary from £ 10 to £ 40. What would you expect of this product?" For each of these scenarios, participants indicated their quality expectations for the new product (quality, durability, ergonomics, design). The third scenario was a choice between the target brand and a competing brand. In this scenario, price information about the models was provided but, without contextual information, it was not informative of the intended quality levels. The model of the target brand was not rated, while that of the competing brand was rated as a mid-tier product. Specifically, scenario 3 read as "Consider you want to purchase a surfboard case. You found one model from Santa Monica for $80 and one from Frontier, also for $80. Santa Monica's bag has received 6 stars (out of 9) on quality. Frontier's model has not been rated yet as it is new. Which option would you rather buy?"

Results

We begin by presenting the results for brand dimensions in the with- and without-comparisons conditions. This is to test our hypothesis that when a brand is evaluated in isolation, high-tier and low-tier models are equally influential (symmetric pattern), while when a brand is evaluated against a comparison brand, a high-tier model is more influential than a low-tier one (asymmetric pattern).

Gender had no impact on any measure. Age had only a marginal main effect on quality expectation of the backpack ($F(1, 309) = 3.44$, $p = .06$).

Brand dimensions measures in the no comparison conditions. Three participants did not answer the brand evaluations questions, providing data only for the scenarios of new models. An ANOVA on prestige revealed the predicted averaging effect for brand portfolio ($F(3, 164) = 10.35$, $p < .001$). There were no differences in prestige when a brand offered only a mid-tier model (the control condition) and when it also offered low- and high-tier models (the range condition) ($M_{control} = 4.53$ vs. $M_{range} = 4.40$, $F(1, 164) = .36$, $p > .50$). Prestige in the high-tier

condition was higher than in both control and range conditions (M_{high} = 5.13 vs. $M_{control}$ = 4.53, F(1, 164) = 9.21, p < .05; vs. M_{range} = 4.40, F(1, 164) = , p < .0). Conversely, prestige in the low-tier condition was rated as lower than both control and range conditions (M_{low} = 4.01 vs. $M_{control}$ = 4.53, F(1, 164) = 9.21, p < .05; vs. M_{range} = 4.40, F(1, 164) = 6.11, p < .07). In order to test for a linear pattern for the effect of average model quality on prestige, we combined range and control conditions (recall that these two portfolios have the same average quality) and ran an ANOVA with linear contrast. The result was supportive of a linear relationship (F_{linear}(2, 165) = 28.89, p < .001), which is consistent with our predictions of equal influence for high and low-tier models (H2). Results for the other measures followed the same pattern (Innovativeness: F_{linear}(2, 165) = 19.30, p < .001; Expertise: F_{linear}(2, 165) = 38.25, p < .001). These results support out H2 that judgment of brand expertise follow a symmetric pattern when a comparative set is not available. All results are included in Table 3.

Brand dimensions measures in the comparison conditions. An ANOVA on prestige revealed an effect for portfolio (F(3, 149) = 10.31, p < .001). The prestige of the target brand was unaffected by the introduction of the low-tier extension ($M_{control}$ = 3.89 vs. M_{low} = 4.03, F (1, 149) = .37, p > .50), but increased with the introduction of the high-tier extension ($M_{control}$ = 3.89 vs. M_{high} = 4.90, F(1, 149) = 21.58, p < .001). It also increased when the brand carried both extensions ($M_{control}$ = 3.89 vs. M_{range} = 4.69, F(1, 149) = 13.26, p < .001). Further, there was no difference in prestige between the high-tier condition and the range condition (F(1, 149) = .92, p > .30). These results support H2 and contrast with those in the no comparison conditions, indicating an asymmetric pattern: a high-tier model improves evaluations, while a low-tier model does not damage evaluations. Results for expertise followed the same pattern: no negative impact for a low-tier extension ($M_{control}$ = 4.09 vs. M_{low} = 4.19, F (1, 149) = .24, p > .50) and positive impact for carrying a high-tier extension ($M_{control}$ = 4.09 vs. M_{high} = 4.82, F(1, 149) = 12.95, p < .001) or both extensions ($M_{control}$ = 4.09 vs. M_{range} = 4.61, F(1,

149) = 6.60, $p < .05$). Results for innovation also indicated that a low-tier model had no negative impact ($M_{control} = 4.14$ vs. $M_{low} = 4.33$, $F(1, 149) = .63$, $p > .50$), while a high-tier model had a positive one ($M_{control} = 4.14$ vs. $M_{high} = 4.61$, $F(1, 149) = 4.05$, $p < .05$; $M_{control} = 4.14$ vs. $M_{range} = 4.61$, $F(1, 149) = 3.90$, $p = .05$). The omnibus F-test however was not significant for this measure ($F(3, 149) = 1.90$, $p = .13$). All results are in Table 3 and provide strong support for H2.

---Insert Table 3 here---

Quality expectations (briefcase and backpack). Five participants did not provide quality ratings for the briefcase and six did not provide them for the backpack. We hypothesize in H3 that, when the intended positioning of a new product is not provided, consumers' quality expectation of the product follows their brand attitude. An ANOVA on expected quality of the briefcase ($\alpha = .93$) revealed main effects for comparison ($F(1, 311) = 8.75$, $p < .01$) and portfolio ($F(3, 311) = 8.27$, $p < .001$), as well as an interaction ($F(3, 311) = 2.71$, $p < .05$). Further analysis of the non-comparison conditions indicates that quality expectations for Frontier briefcase were directly affected by the portfolio's average ($M_{low} = 4.43$ vs. $M_{control} = 4.99$ vs. $M_{range} = 4.65$ vs. $M_{high} = 5.34$; $F_{linear}(2, 165) = 21.16$, $p < .001$). In contrast, in the comparison condition, the pattern of quality expectations was asymmetric ($M_{low} = 4.93$ vs. $M_{control} = 4.94$ vs. $M_{range} = 5.31$ vs. $M_{high} = 5.43$), as the low-tier condition did not differ from the control condition ($F(1, 311) = .00$, $p > .99$), whereas the high-tier and range conditions were higher than the control (control vs. high: $F(1, 311) = 5.58$, $p < .05$; control vs. range: $F(1, 311) = 3.10$, $p < .08$). An ANOVA on the expected quality of the backpack ($\alpha = .94$) revealed the same pattern although the interaction was only marginal ($F(3, 310) = 2.22$, $p = .09$). In the non-comparison condition, quality expectations followed an averaging pattern ($M_{low} = 3.94$ vs. $M_{control} = 4.56$ vs. $M_{range} = 4.29$ vs. $M_{high} = 5.22$; $F_{linear}(2, 166) = 14.72$, $p < .001$). In contrast, in the comparison conditions, results were asymmetrical ($M_{low} = 4.45$ vs.

$M_{control}$ = 4.64 vs. M_{range} = 5.11 vs. M_{high} = 5.22). The low-tier and control conditions were not different from each other ($F(1, 310) = .47$, $p > .40$), while both the range and high-tier conditions were different from the control (control vs. high: $F(1, 310) = 4.66$, $p < .05$; control vs. range: $F(1, 310) = 2.94$, $p < .10$). These results support H3: when the intended positioning of the product is not specified, without comparison, expected quality followed brand attitudes in a symmetrical pattern, but with comparison, the positive impact of a high-tier extension exceeded the negative impact of a low-tier extension. All results are shown in Table 4.

---Insert Table 4 here---

Choice of surfboard case. The choice data revealed a main effect for brand portfolio ($\chi^2(3) = 21.07$, $p < .001$), a marginal effect for comparison ($\chi^2(1) = 3.25$, $p = .07$) and a marginally significant interaction ($\chi^2(3) = 6.36$, $p = .10$). The choice shares of the target brand are presented in Table 5. It is interesting to note that in the low-tier condition, choices for the target brand improved from only 20% when a brand was considered by itself to 39% when it was considered with a comparison brand. Further, when the target brand had all three models, the choice of the target model improved from 30% when it was considered by itself to 53% when it was considered with a comparison brand. In contrast, there were no substantial differences in the preference for the target brand in the control (44% vs. 43%) or high-tier conditions (69% vs. 62%). All of these results are consistent with the principle that the presence of low-tier model is more damaging when a brand is considered by itself.

---Insert Table 5 here---

Discussion

The goal of Study 2 was to test the impact of a comparison set on judgments of brand dimensions and quality expectations about a model for which the price information is either absent or uninformative. Replicating the results of Heath et al. (2011), we found an asymmetric pattern when brands were evaluated in a comparison set (H2). In contrast, when a

brand is considered by itself, we observed a symmetric pattern (H2). Consistent with our predictions, these patterns are replicated in the quality expectations about a new model of the brand (H3).

STUDY 3 – JUDGEMENT FOCUS IN NEW MODEL EVALUATIONS. THE IMPACT OF MODEL POSITIONING

In Studies 1 and 2 examined the impact of judgment focus (or attribute priming) and comparison set (present vs. absent) on brand evaluations and quality expectations of a new model. In our final study, we complete our investigation by examining quality expectations for products in which the price indicates the intended quality positioning. Specifically, in Study 3, we test our H4 that when there is diagnostic information about the brand's intended positioning (i.e., price information is informative), consumers engage in a two-step process. First, they assess the brand's ability to produce the product at the implied quality level. If the brand fulfils this assessment, quality expectations will follow from brand evaluations and the implied quality of the model price. When the brand is not considered capable, consumers' quality expectation of the product will be lower than the intended positioning.

In order to test our hypotheses, we consider three brand portfolios: low average (quality ratings of models: 4 and 6), full range (quality ratings: 4, 6 and 8) and high average (quality ratings: 6 and 8). The average quality of these portfolios increases linearly from 5 to 6 to 7. The best model of the portfolio has a quality of 6 in the low average portfolio, but the same highest rating in the full range and high average portfolios (8). We consider model introductions at low-, medium- and high-price levels. All portfolios should be considered capable of introducing models at the low- and medium-price levels. In this case, model expectations will increase with the portfolio average and the model price. For a high-price model introduction, only the high average and full range portfolios would be seen to have the required expertise. As such, we will observe the same pattern of quality expectations of the

new model for these portfolios, but a different one for the low average portfolio. For the latter, the impact of price will be reduced, as the brand is not considered capable of introducing a model at the high quality level implied by the price. To more directly test this hypothesis, we ask participants to indicate their expected quality for the product and as well as indicate whether they believe the quality of the model justifies its price.

Method

Two-hundred and thirty-nine members of Mechanical Turk (M_{age} = 31.38, SD_{age} = 10.44, 63% men) completed this study for a payment. The design was 3 (brand portfolio: low average vs. full range vs. high average) x 3 (new model price: low-tier vs. mid-tier vs. high-tier) full factorial between-subjects. The initial scenario and brand portfolios were the same as in Study 2.

Study 3 also employed a two-stage procedure. Participants first evaluated the brand on three dimensions and then evaluated a new model with a given price. Specifically, after being exposed to one of the three brand portfolios (low average, full range, high average) and evaluating brand prestige (α = .91), innovation (α = .93) and expertise (α = .94), participants were presented with products from a different category (duffle bag) described simply by (fictitious) names and prices. Prices were as follows: $59, $58, $45, $44, $31 and $30. The new model manipulation consisted on varying the position of the target brand's model in this market ($30 vs. $44 vs. $58). In order to ensure that participants processed the price information, they were asked to explain what they thought was the goal of Frontier (the target brand) in this category. After that, they indicated the appropriateness of the price through their agreement with the following statement "In this market, the quality of Frontier's model probably justifies its price." (1 – Strongly disagree, 7-Strongly agree). This measure captures people's perception of whether the brand has the necessary expertise. Then, they indicated

the expected quality of the model using the same scales of Study 2 (quality, durability, design, ergonomics, $\alpha = .94$).

Results

Since our independent variables are linearly spaced (portfolio average: 5, 6, 7; new product price: $30, $44, $56) we run linear regressions so this information can be used to increase the power of the analysis. We recoded the independent variables as -1, 0 and 1, so that impact of changes in the independent variables is normalized.

Price appropriateness. A regression on price appropriateness revealed effects for brand portfolio ($b = .29$, $t = 3.27$, $p < .001$), as well as new model price ($b = -.28$, $t = 3.15$, $p < .01$). Age and gender had no impact. Importantly, we also found a significant interaction between brand portfolio and new model price ($b = .24$, $t = 2.21$, $p < .05$). As can be seen in Figure 2, brand portfolio had little impact when participants evaluated the appropriateness of the price of a low- or mid-price duffle bag, but had a large impact on that a high-price model. We ran contrast analyses in order to examine the impact of portfolio at each price level. We found no significant differences for low price or mid-price duffle bags (all $p > .25$), but significant differences for a high price one. Consistent with an expertise assessment, the price of a high-tier model was considered equally appropriate in the range ($M_{range} = 4.63$) and high average portfolios ($M_{high} = 4.60$, $p > .90$). In addition, price was considered more appropriate for each of these portfolios relative to the low average portfolio ($M_{low} = 3.52$, both $p < .001$). In line with our argument, this indicates that in the low average condition, participants did not think the brand had the necessary expertise to carry an expensive model in another category.

---Insert Figure 2 here---

Expected quality. A regression on expected quality revealed main effects for portfolio average ($b = .42$, $t = 5.00$, $p < .001$) and new product price ($b = .67$, $t = 7.81$, $p < .001$) as well as an interaction ($b = .20$, $t = 1.90$, $p < .06$). There was also an effect for age ($b = .02$, $t =$

2.92, $p < .01$). Age did not interact with other variables and we do not discuss it further. Figure 3 shows two patterns. First, we see that as average quality of the portfolio increases, so do quality expectations, an effect consistent with the principle that all models count similarly (symmetric pattern). Importantly, the impact of portfolio is much larger for a high price duffle bag. Contrast analyses show that comparing range and low average portfolios, there are no difference in quality expectations for a low-price duffle bag ($M_{low} = 3.64$ vs. $M_{range} = 3.88$, $p > .25$) or a mid-price one ($M_{low} = 4.42$ vs. $M_{range} = 4.79$, $p > .25$), but a large difference when it comes to a high-price model ($M_{low} = 4.52$ vs. $M_{range} = 5.49$, $p < .001$). This is consistent with our two-steps assessment where consumers first consider whether the brand has the necessary expertise. Indeed, brands with a low average or a full range portfolio should be equally capable of producing low-tier and mid-tier bags, but not high-tier ones. Contrasts comparing high average and full range corroborate our hypotheses. Since in both conditions the best model is the same, the brand is always viewed as having a similar level of capability. As a result, there are no differences in expected quality of a low price model ($M_{full} = 3.88$ vs. $M_{high\text{-}average} = 4.20$, $p > .25$), a mid-price model ($M_{full} = 4.79$ vs. $M_{high\text{-}average} = 5.04$, $p > .25$) or a high-price one ($M_{full} = 5.89$ vs. $M_{high\text{-}average} = 5.81$, $p > .25$).

---Insert Figure 3 here---

Brand dimensions. As can be seen in Table 6, results for brand dimensions replicate those obtained in Study 2 showing no evidence of asymmetry. Linear contrasts were significant for each dimension (prestige: $F_{linear}(2, 235) = 46.37$, $p < .001$; innovativeness: $F_{linear}(2, 235) = 34.94$; expertise: $F_{linear}(2, 235) = 49.98$, $p < .001$).

---Insert Table 6 here---

Discussion

Results of Study 3 provide further support to our hypotheses. Participants were presented with a single brand and asked to consider a new product in a related category at a

specific price. They were provided with competing models of the target brand as a price benchmark so they could infer the intended quality positioning of the brand in the new category through the indicated model price. First, we asked participants to judge whether the price of the new model would justify the quality of the product, providing an indication of the extent to which participants believed the brand would be capable of manufacturing a product at the quality level implied by its price. Then, participants were asked to indicate the expected quality of the new model. As shown in Figure 3, there is a clear effect for portfolio average on expected model quality ($b = .42$, $t = 5.00$, $p < .001$), which indicates brand evaluations influence quality expectations even when quality positioning can be inferred from the context, as predicted in H4. It also shows evidence of an expertise assessment in line with the two-steps process. For range and high average portfolios, expected quality increases as price increases (each difference significant at $p < .05$). In contrast, for a low average portfolio, expected quality increases as price increases from \$30 to \$44 ($M_{\$30} = 3.64$ vs. $M_{\$44} = 4.42$, $F(2, 230) = 6.22$, $p < .05$), but does not change when it further increases to \$58 ($M_{\$58} = 4.52$, $(2, 230) = .09$, $p > .50$). This indicates that a low average brand, which does not have a high-tier model, is viewed as capable of making an inexpensive or a mid-price duffle bag, but not an expensive one. Supporting H4, we find that for this brand, increasing price only raised quality expectations up to the same level of the best model in its existing portfolio.

GENERAL DISCUSSION

Summary of findings

Brand extensions (category or vertical) are common strategies for introducing new products. However, while they allow companies to leverage existing associations, they also risk diluting the brand. This concern is especially present when brands introduce low-tier extensions to their portfolio. Indeed, previous research has shown that low-tier models reduce

perceptions of brand quality (Janiszewski and Van Osselaer, 2000). Based on these results, marketers are advised to carefully weigh the short-term benefits of increased sales from low-tier models against the potentially long-term effects of reduced quality associations. In contrast to this perspective, more recent research has found that the impact of low-tier models on brand perceptions is modest and even often inexistent (Heath et al., 2011). While these investigations differ substantially in their goals and procedures, at a practical level their conclusions send conflicting recommendations to managers: the first advises great caution when considering introducing low-tier models under the same brand name, while the latter suggests that risks are minimal. Motivated by this managerial puzzle, we set our research to investigate conditions that determine which of these two sets of findings apply to how vertical extensions affect a brand. We found that while quality and variety are both relevant inputs for brand judgments, they differ in their level of saliency, such that quality considerations emerge more spontaneously than variety ones. We further demonstrated that the presence of a comparison brand should help consumers recognize the value of variety.

Theoretical Implications, Limitations and Future Research

Our findings add to the literature on the impact of extensions on brand perceptions by highlighting the role of input saliency on brand judgments. The proposition that quality and variety are important inputs for brand judgments is not new, as quality is considered a fundamental aspect of a brand (Aaker, 1996, Raghubir and Corfman, 1999, Berger et al., 2007, Janiszewski and Van Osselaer, 2000) and consumers have been shown to not only appreciate variety (Kahn, 1995), but also view a brand more positively as a result (Berger et al., 2007, Bertini et al., 2012). However, the difference in level of saliency between these two inputs for brand evaluation has been largely overlooked. This paper adds to the literature by documenting, in the context of vertical line extensions, that brand quality considerations are more salient and often dominate brand evaluations.

We also showed that the availability of a comparative set could facilitate variety considerations in consumer judgments about a brand. This finding helps explain the seemingly conflicting patterns supported by earlier research (e.g., Heath et al. 2011 or Janiszewski and Van Osselaer, 2000). In Heath et al.'s (2011) studies, which demonstrate an asymmetric pattern of effects, participants always judged the brand with a reference point (i.e., a comparative set). In their studies 1 and 2, the reference was another brand; in their study 3, the reference was the focal brand itself before the introduction of an extension. Our findings suggest that having a reference brand can change consumers' judgment criteria in their brand evaluation, which would subsequently change the impact of an extension product on the brand.

This point may also be particularly relevant for the methodology used in studies of brand and line extensions. In a typical study, participants are presented with information about the brand and a newly introduced extension without any other brands (John et al., 1998, Loken and John, 1993, Lei et al., 2008b). As our results indicate the pattern of response may be quite different depending on whether a product is evaluated by itself or in the presence of others. This is consistent and extends prior research showing the impact of competitive context on extension evaluations (Milberg et al., 2010). In particular, Milberg et al. (2010) showed that when competitors are familiar brands, participants give less weight to extension fit.

Furthermore, we proposed a two-step process to illustrate how a brand portfolio affects consumer expectations for new models introduced by the brand. First, if the new product has a clear intended positioning, consumers would first assess if the brand has the necessary expertise to deliver the implied product quality. If the answer is yes, then consumers draw on brand evaluations to form their quality expectations. However, when a brand is not considered to capable (i.e., the brand does not have a model at the same quality

level as the new model), quality expectations are considerably reduced for the high-tier model. We also considered situations in which the implied quality of a new model is not clear. In this case, consumers follow an averaging pattern of brand evaluations to estimate the likely quality of the new model. These findings add to the existing literature on the feedback of brand extensions on the parent brand and future extensions (e.g., Balachander and Ghose 2003). Our research suggests that, in addition to the impact of the properties of the extensions (e.g., high-tier or low-tier) as shown in earlier research, the properties of a new product itself (e.g., ambiguous or clear intended positioning) can affect consumer product evaluations.

In our studies, we sought to use a diversity of categories, manipulations and measures in order to confidently test our hypothesis. In choosing the design of our studies, we had to make some choices that now open the possibility for future studies. For example, we have used Mechanical Turk samples, which may call for a field study to confirm the external validity of our results. Second, we have increased saliency of variety in different ways: prompting participants to think about expertise (study 1) and providing a comparison brand. Future research could examine other forms of directing consumers' attention to variety, like communications in advertisement or other promotional materials. It may also be worth investigating to which extent other brand dimensions (e.g., prestige) documented in the literature tend to evoke one type of judgment or the other.

Our manipulation of comparison set followed to a great extent the one used by Heath et al. (2011) using one control brand with just a single mainstream model as a comparison brand. Configurations of a brand portfolio may differ in the extent to which they facilitate comparisons. For example, would the impact of a low-tier model be the same if the two mainstream models did not have the same ratings? In this case, would it still be salient to consumers that the low-tier model is an additional model that should not lower expertise considerations? Finally, product categories may differ in the extent to which they are

naturally associated with expertise and innovation. For example, the expertise required for producing smartphones is likely to be viewed as superior to the expertise required to produce tomato sauce. Examining the impact of product category type and other contextual cues on the likelihood of a particular judgment focus may be fruitful directions for future research.

We also note that we followed prior research on vertical line extensions by manipulating price and quality together, such that a premium model was described as having a higher price, while a low-end model was described as having a lower price (Heath et al., 2011, Janiszewski and Van Osselaer, 2000, Lei et al., 2008b). For example, in study 2, the price of the premium model was almost twice the price of the low-end model. While price and quality often correlate, this correlation is far from perfect. As a result, one could consider the impact of value on brand attitudes (Dall'Olmo Riley et al., 2015, Goetz et al., 2014). Specifically, there is some evidence that a low-tier extension may improve brand attitudes through greater perceived value (Goetz et al., 2014). Conversely, could a high-tier model hurt attitudes if it is considered over-priced? Further, would value be automatically considered in brand evaluations, as quality is, or would its use depend on contextual factors, as variety does?

Another issue worth discussing it the different meanings of product quality and how it can affect the results. Quality may refer to the level at which a product performs a function. For example, a high quality speaker has better sound than a low quality speaker, but both work as speakers, amplifying sound. In contrast, products can differ in terms of features. A premium speaker may be able to connect to the internet and allow adjustments in terms of bass, treble and so on. A low-end speaker may not have these additional features. Would this difference have an impact on how vertical line extensions affect brand attitudes? It is plausible that consumers view changes in features as less relevant to brand quality than changes in quality of core functions. If this is the case, then a low-tier model based on fewer

features could improve brand attitudes through increased variety without loss in the perception of quality. This and other related questions await future research.

Managerial implications

The current research makes contributions to the literature and to practice by delineating the circumstances under which vertical line extensions have a positive, neutral or negative impact on brand perceptions. While the positive impact of a high-tier extension seems unequivocal, the impact of a low-tier one depends on contextual factors. Consumers like variety and it can be used to cancel the negative impact of low quality associations. However, under many circumstances, this process does not seem to take place spontaneously. As a result, brand managers are advised to explicitly prompt consumers to think about variety when they interact with a brand and its extensions. For example, when introducing a low-end extension, communication programs should position the new product as increasing diversity, providing more alternatives without altering the existing core products. The fact that additional extensions increase variety perceptions without affecting existing products may appear obvious, but our results suggest that consumers may not make this connection unless somehow prompted to do so.

We introduce the facilitating role of a comparison set as a key variable and show how it interacts with assessment type to affect brand evaluations. When thinking about the impact of extensions on brand perceptions, marketers need to consider which type of assessment is likely to be triggered by environmental cues and whether comparative frames are salient. For example, inside any technology flagship such as an Apple or Samsung store, environmental cues may lead consumers to focus on expertise and innovation. However, if the store only carries one brand, our framework indicates that we are still likely to observe effects consistent with averaging since brand perceptions and expectations are likely to be impacted

by all visible models regardless of judgment focus. Without a salient reference point, low-tier models may not be viewed as providing an edge on expertise and innovation and may lead to reduced brand perceptions through quality.

Finally, while our investigation focused on judgement effects on the target brand, there is also the potential for an indirect impact on other related brands. For example, research has shown that the presence of a low-tier extension can actually be beneficial to a mainstream brand, as it improves perceptions of quality of the latter (Palmeira, 2014, Palmeira and Thomas, 2011). The low-tier brand seems to serve as a reference and consumers update their perceptions of the mainstream brand to create some quality differentiation between them. Researchers have also found a negative impact of a high-tier extension, as it can make consumers reassess their perceptions connected to the brand and product features, especially if the extension is an attempt to match a competitor's features (Caldieraro et al., 2015).

REFERENCES

AAKER, D. A. 1996. Measuring brand equity across products and markets. *California management review,* 38**,** 102-120.

AAKER, D. A. & KELLER, K. L. 1990. Consumer evaluations of brand extensions. *The Journal of Marketing,* 54**,** 27-41.

AHLUWALIA, R. & GÜRHAN-CANLI, Z. 2000. The effects of extensions on the family brand name: an accessibility-diagnosticity perspective. *Journal of Consumer Research,* 27**,** 371-381.

BALACHANDER, S. & GHOSE, S. 2003. Reciprocal spillover effects: a strategic benefit of brand extensions. *Journal of Marketing,* 67**,** 4-13.

BERGER, J., DRAGANSKA, M. & SIMONSON, I. 2007. The influence of product variety on brand perception and choice. *Marketing Science,* 26**,** 460-472.

BERTINI, M., WATHIEU, L. & IYENGAR, S. S. 2012. The discriminating consumer: Product proliferation and willingness to pay for quality. *Journal of Marketing Research,* 49**,** 39-49.

BOUSH, D. M. 1993. How advertising slogans can prime evaluations of brand extensions. *Psychology & Marketing,* 10**,** 67-78.

BUHRMESTER, M., KWANG, T. & GOSLING, S. D. 2011. Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on psychological science,* 6**,** 3-5.

CALDIERARO, F., KAO, L.-J. & CUNHA JR, M. 2015. Harmful Upward Line Extensions: Can the Launch of Premium Products Result in Competitive Disadvantages? *Journal of Marketing,* 79**,** 50-70.

CARPENTER, G. S., GLAZER, R. & NAKAMOTO, K. 1994. Meaningful brands from meaningless differentiation: The dependence on irrelevant attributes. *Journal of Marketing Research,* 31**,** 339-350.

CHERNEV, A. 2003. When more is less and less is more: The role of ideal point availability and assortment in consumer choice. *Journal of consumer Research,* 30**,** 170-183.

DALL'OLMO RILEY, F., PINA, J. M. & BRAVO, R. 2015. The role of perceived value in vertical brand extensions of luxury and premium brands. *Journal of Marketing Management,* 31**,** 881-913.

ERDEM, T., SWAIT, J. & VALENZUELA, A. 2006. Brands as signals: A cross-country validation study. *Journal of Marketing,* 70**,** 34-49.

FELDMAN, J. M. & LYNCH, J. G. 1988. Self-generated validity and other effects of measurement on belief, attitude, intention, and behavior. *Journal of applied Psychology,* 73**,** 421.

GEYSKENS, I., GIELENS, K. & GIJSBRECHTS, E. 2010. Proliferating private-label portfolios: How introducing economy and premium private labels influences brand choice. *Journal of Marketing Research,* 47**,** 791-807.

GILBERT, D. T. & HIXON, J. G. 1991. The trouble of thinking: Activation and application of stereotypic beliefs. *Journal of Personality and Social Psychology,* 60**,** 509-517.

GOETZ, D. M., FASSNACHT, M. & RUMPF, K. 2014. Extending downward is not always bad: Parent brand evaluations after brand extension to higher and lower price and quality levels. *Journal of Brand Management,* 21**,** 303-324.

GOODMAN, J. K., CRYDER, C. E. & CHEEMA, A. 2013. Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making,* 26**,** 213-224.

HEATH, T. B., DELVECCHIO, D. & MCCARTHY, M. S. 2011. The asymmetric effects of extending brands to lower and higher quality. *Journal of Marketing,* 75**,** 3-20.

HSEE, C. K. & LECLERC, F. 1998. Will products look more attractive when presented separately or together? *Journal of Consumer Research,* 25**,** 175-186.

JANISZEWSKI, C. & VAN OSSELAER, S. M. J. 2000. A connectionist model of brand–quality associations. *Journal of Marketing Research,* 37**,** 331-350.

JOHN, D. R., LOKEN, B. & JOINER, C. 1998. The negative impact of extensions: can flagship products be diluted? *The Journal of Marketing,* 62**,** 19-32.

JOSHI, Y. V., REIBSTEIN, D. J. & ZHANG, Z. J. 2015. Turf Wars: Product Line Strategies in Competitive Markets. *Marketing Science,* 35**,** 128-141.

KAHN, B. E. 1995. Consumer variety-seeking among goods and services: An integrative review. *Journal of Retailing and Consumer Services,* 2**,** 139-148.

KELLER, K. L. 1993. Conceptualizing, measuring, and managing customer-based brand equity. *The Journal of Marketing,* 57**,** 1-22.

KIM, C. K. & LAVACK, A. M. 1996. Vertical brand extensions: current research and managerial implications. *Journal of Product & Brand Management,* 5**,** 24-37.

KIRMANI, A. & RAO, A. R. 2000. No pain, no gain: A critical review of the literature on signaling unobservable product quality. *Journal of marketing,* 64**,** 66-79.

KUKSOV, D. & LIN, Y. 2016. Signaling Low Margin Through Assortment. *Management Science,* 63**,** 1166-1183.

LEI, J., DAWAR, N. & LEMMINK, J. 2008a. Negative spillover in brand portfolios: exploring the antecedents of asymmetric effects. *Journal of marketing,* 72**,** 111-123.

LEI, J., DE RUYTER, K. & WETZELS, M. 2008b. Consumer responses to vertical service line extensions. *Journal of Retailing,* 84**,** 268-280.

LOKEN, B. & JOHN, D. R. 1993. Diluting Brand Beliefs: When Do Brand Extensions Have a Negative Impact? *Journal of Marketing,* 57**,** 71-84.

MASON, W. & SURI, S. 2012. Conducting behavioral research on Amazon's Mechanical Turk. *Behavior research methods,* 44**,** 1-23.

MENON, G. & RAGHUBIR, P. 2003. Ease-of-retrieval as an automatic input in judgments: a mere-accessibility framework? *Journal of Consumer Research,* 30**,** 230-243.

MEYVIS, T. & JANISZEWSKI, C. 2004. When Are Broader Brands Stronger Brands? An Accessibility Perspective on the Success of Brand Extensions. *Journal of Consumer Research,* 31**,** 346-357.

MILBERG, S. J., SINN, F. & GOODSTEIN, R. C. 2010. Consumer reactions to brand extensions in a competitive context: does fit still matter? *Journal of Consumer Research,* 37**,** 543-553.

MIYAZAKI, A. D., GREWAL, D. & GOODSTEIN, R. C. 2005. The effect of multiple extrinsic cues on quality perceptions: A matter of consistency. *Journal of consumer research,* 32**,** 146-153.

PALMEIRA, M. 2011. The Zero-Comparison Effect. *Journal of Consumer Research,* 38**,** 16-26.

PALMEIRA, M. 2014. The interplay of products from the same product line: the role of brand reputation. *European Journal of Marketing,* 48**,** 1648-1663.

PALMEIRA, M. M. & THOMAS, D. 2011. Two-Tier Store Brands: The Benefic Impact of a Value Brand on Perceptions of a Premium Brand. *Journal of Retailing,* 87**,** 540-548.

PAOLACCI, G. & CHANDLER, J. 2014. Inside the Turk: Understanding Mechanical Turk as a participant pool. *Current Directions in Psychological Science,* 23**,** 184-188.

PAOLACCI, G., CHANDLER, J. & IPEIROTIS, P. G. 2010. Running experiments on amazon mechanical turk. *Judgment and Decision Making,* 5**,** 411-419.

PONTES, N., PALMEIRA, M. & JEVONS, C. 2017. Brand expertise and perceived consistency reversals on vertical line extensions: The moderating role of extension direction. *Journal of Retailing and Consumer Services,* 34**,** 209-218.

RAGHUBIR, P. & CORFMAN, K. 1999. When Do Price Promotions Affect Brand Evaluations? *Journal of Marketing Research,* 36**,** 211-222.

RANDALL, T., ULRICH, K. & REIBSTEIN, D. 1998. Brand equity and vertical product line extent. *Marketing science,* 17**,** 356-379.

RILEY, F. D. O., PINA, J. M. & BRAVO, R. 2013. Downscale extensions: Consumer evaluation and feedback effects. *Journal of Business Research,* 66**,** 196-206.

WYER, R. S. & SRULL, T. K. 1986. Human cognition in its social context. *Psychological Review,* 93**,** 322-359.