Brand Extension: Fit Analyses for Horticultural Products of Fruits and Vegetables

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1. Introduction, Knowledge, Objectives

Brand extension (brand stretching/ category extension) is a convenient way of creating new brand products by transferring a strong, already established brand name on a new product or service (Baumüller, 2008; Keller and Aaker, 1992). Advantages are the faster achievement of a higher market share (quantity effect), a price premium (price effect) and the reduction of marketing costs (cost effect) (Baumüller, 2008). Factors for a successful brand extension are numerous: Sattler et al. (2002) identified 16 potential influences, including company -, parent brand -, and transfer product – related factors, as well as the relationship between parent brand and transfer product. The two most important success factors are the quality assessment of the parent brand and "fit" evaluation of parent brand and extension product (category) by consumers (Berens et al., 2003). Fit describes the extent to which consumers perceive similarities between the brand and the extension product and whether they think it is matching (Zatloukal, 2002). The easiest way of measuring a fit is to ask consumers for their acceptance of possible brand extensions (Mahnik and Mayerhofer, 2006). Shared associations between the parent brand and extension product (category) are crucial for a perceived fit and thus for a successful brand extension (Baumüller, 2008; Czellar, 2003). Broniarczyk and Alba (1994, p. 228) find that "*A brand's specific associations strongly influence how consumers evaluate brand extension and may dominate product class effects.*" Aaker (1991) calls brand-associations as the basis for purchase decisions and brand loyalty. The Federal Ministry of Food and Agriculture in Germany decided on a valorization strategy in 2013, with the goal to increase the value of horticultural products (BMEL 2013). On the fruit and vegetable market, only few brand product exist. Thus, a promising approach to increase revenues in the fruit and vegetable sector may be brand extension. Valensina Oranges show that a successful brand extension with fruits is possible.

However, to the best knowledge of the authors no empirical study on the potential of brand extension in this sector has been conducted yet. Thus, the goal was to identify fitting parent brands and extension products of fruits and vegetables. This was done by conducting fit analyses, following Broniarczyk and Alba (1994) and Reinstrom (2008).

2. Methods and Data

We conducted two surveys. The goal of the first qualitative survey was the identification of possible pairs of brands and products. For this, we handed participants a list of 30 types of fruits and vegetables. The list was created by using Data of GfK (2016) and Statista (BMEL, 2015); selecting often consumed fruits and vegetables, as well as a mixture of domestic (in Germany) and exotic types. Participants were asked for their associations for each of the fruits and vegetables (free association task), whether they consume this type of fruit or vegetable and which primary needs they satisfy with the consumption. In addition, we asked them for brands they could imagine offering those types of fruits and vegetables. A list of 127 brands served as assistance. The list consisted of strong brands which were selected by using the "top 100 best brands of 2016" by the Lebensmittel Zeitung ("Liste der 100 Siegermarken 2016") (LZ, 2017). In addition, we used identified categories of previously conducted qualitative interviews (not published yet), which describe in which setting the consumption of fruits and vegetables are performed. For each of those categories (e.g. snack, breakfast, naturalness, sweets) strong and prominent brands were searched for and added to the list. The final list of brands included 17 different branches. Finally, participants had to mark on the brand-list which brands they do not know and which brands they cannot imagine to serve as a brand for fresh fruits and vegetables. We identified pairs as follows: only those brands, which every participant knew, and only those types of fruits and vegetables that were addressed with distinct and clear associations were taken into closer consideration as a parent brand or extension product. Furthermore, two fruits and vegetables each, as well as a mixture of domestic and exotic types were selected (see table 1 for species names). For building pairs of brands and products, the frequency of the assignment of a brand to a fruit or vegetable was decisive. For each selected type of fruit and vegetable, two possible parent brands were selected.

The goal of the second survey was to select the best fitting brand and the level of acceptance for each possible brand extension identified in survey one. We assessed attitude towards parent brand and fit perceptions (Berens et al., 2003). The following list displays the integrated success indices for brand extensions and their indicators (Reinstrom (2008): (1) Parent brand: quality, uniqueness, positive association, strength of association. (2) Fit (parent brand – extension product): consistency of brand concept, production competence, relevance of associations, suitable image, substitutive use. The potential indicators were measured using statements, which participants could rate with a 5-point Likert scale from 1 "do not agree at all" to 5 "agree completely". For index construction, the respective indicators were summed up and divided by the number of included indicators to keep the same value range. We used Cronbach's Alpha and the Coefficient of discrimination to control for the reliability of the indices. Descriptive statistics, comparisons of the means (T-test) and correlations (Chi-test; Pearson) were calculated. Furthermore, we enquired free associations for the extension products, as well as for each of the parent brands. For analyses, the associations were categorized (summarized) and it was compared qualitatively whether the parent brands evoked the same associations as for the respective extension product.

The study was conducted using a convenience sample (a not representative sample on basis of easy availability, e.g. students) of 7 for the first qualitative survey and 54

participants for the second survey. The first sample consisted of 2 men and 5 women, ranging in the age from 28-65. The sample for the second survey consisted of 43 % of men and 57 % of women. Many young people participated with 44 % in the age of 18-24 years and 38 % in the age of 25-39 years. The older generation of 40-59 and 60-79 years were represented with each 9 %. Most of the participants stated to not consume a lot of fruits and vegetables (73 %). Only around 7 % indicated to consume a great deal or a lot of fruits and vegetables. The rest was in between.

3. Results and Discussion

3.1 Identification and acceptance of brand extensions

The first survey revealed that participants considered only brands of food products suitable for a brand extension on fresh fruits and vegetables. Participants excluded every other branch. We identified the following pairs of extension products and parent brands based on the procedure of the first survey: for tomatoes Barilla and Knorr, for carrots Alete and Hengstenberg, for oranges Zentis and Granini and for bananas Seitenbacher and Seeberger. With survey two, we found the level of acceptance was rather low for the tested brand extensions. That applied to the index variables, which summarize the indicators of fit perception, as well as to each single indicator (Table 1). An exception were Granini-Oranges, which received high level of acceptance. The image of Granini was felt as being suitable for oranges. Furthermore, production competence and consistency of brand concept were considered appropriate for oranges. Barilla-Tomatoes, Granini-Oranges and Alete-Carrots were the better accepted brand extensions compared to Knorr-Tomatoes, Zentis-Oranges and Hengstenberg-Carrots. Seitenbacher-Bananas and Seeberger-Bananas showed only small differences of the means, which were not significant (Table 1).

Table 1. Acceptance for identified brand extensions and comparison of means ($N = 53$).

Indicators (Mean)	Tomatoes		Oranges		Bananas		Carrots	
	Barilla	Knorr	Zentis	Granini	Seitenbacher	Seeberger	Alete	Hengstenberg
Consistency of brand concept	2.11	1.69	1.86	2.82	1.78	1.74	2.05	1.95
Production competence	2.61	2.18	2.21	3.09	2.02	2.15	2.57	2.40
Not fitting overall picture (relevance of associations)	2.86	3.56	3.07	2.52	3.25	3.46	2.56	3.05
Suitable image	3.12	2.07	2.34	3.75	2.2	2.29	2.98	2.28
Substitutive use	1.68	1.43	1.64	2.25	1.60	1.60	1.85	1.67
Index (Mean)	2.56	2.00	2.16	3.08	2.05	2.07	2.58	2.25
T-Value	-5,434***		-6,063***		-0,110		-2,907***	
*p < 0.05, **p < 0.01, ***p < 0.001								
1 = I don't agree at all; 2 = I don't agree; 3 = I agree partially; 4 = I agree; 5 = I agree completely								

A correlation between attitude towards parent brand and acceptance of respective brand extensions could not be found, with exception of Granini-Oranges. Here a weak connection was visible. It seems that someone who holds a positive attitude towards Granini will more likely accept Granini-Oranges. Correlations between single indicators between attitude and acceptance show especially for Granini-Oranges significant and highly significant correlations. Someone who has a clear overall picture of the brand Granini will more likely choose Granini-Oranges over other oranges. Thus, the strength of the associations ensure that Granini-Oranges are preferred in comparison to competitive oranges.

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Table 2. Pearson's correlation between single indicators of fit perception and attitude towards parent brand in the case of Granini-Oranges (*N* = 52).

		Consistency of brand concept	Production competence	Overall picture of Granini fits to oranges	Image of Granini suits oranges	Substitutive use
Quality of Granini		0.458[**]	0.473[**]	0.170	0.354[*]	0.561[**]
Positive valuation of Granini in comparison to competitors	Correlation (Pearson)	0.437[**]	0.447[**]	0.029	0.190	0.289
Positive overall picture of Granini		0.505[**]	0.353[*]	0.359[*]	0.377[*]	0.670[**]
Popularity of Granini		0.346[*]	0.378[*]	0.138	0.354[*]	0.562[**]
*p < 0.05, **p < 0.01, ***p < 0.001						

3.2 Associations in comparison with acceptance of brand extensions

The associations for tomatoes, carrots and their parent brands Barilla, Knorr, Hengstenberg and Alete differed from each other. Barilla and Tomatoes had "Italy" and "tomato sauce" in common. Central associations for tomatoes were "red", "fresh", "salad" and "juicy". Barilla was rather connected with "noodles and spaghetti". The only common association for Knorr and tomatoes were "salad" (for tomatoes) and "salad seasonings" (for Knorr). For carrots, Hengstenberg and Alete no corresponding associations were stated. As mentioned above, no approval was found for those brand extensions, which is in line with other literature that states matching associations are factors that can predict acceptance of brand extensions (Broniarczyk and Alba, 1994). For bananas and Seitenbacher matching associations were "cereals/muesli", "energy-rich/filling" and "snack". Nevertheless, participants did not approve Seitenbacher-Bananas. Seeberger and bananas do not have corresponding associations. Oranges and Zentis do not show any correspondence. Granini and oranges on the other hand have a matching and strong association, which is "juicy" and "juice". Both associations are dominant for each Granini and oranges. As Granini-Oranges were the only accepted brand extension, it supports the finding that corresponding central associations are good predictors for acceptance of brand extensions.

The fact that attitude towards the parent brand, age, gender and frequency of fruit and vegetable consumption do not influence the acceptance of brand extensions suggests that other factors are relevant. For segmentation of consumers concerning the likelihood to approve certain brand extensions, associations should be used as criterions.

4. Conclusions

Findings suggest that brand extension for fresh fruits and vegetables has higher chances to be accepted if the parent brand is positively viewed and if the main associations of the parent brand and of the horticultural product are similar. In this study this applied only in the case of oranges. We had a small sample, which means it is more likely that actually significant effects are not recognized (higher random error). At the same time, the rejection of a null hypothesis in a small sample as in the case of Granini-Oranges speaks for a stronger effect in the population. Nevertheless, the precision of a result also depends on

the type of sampling. Since we used convenience sampling, the majority of the sample recruited itself through self-selection, which means we could have a biased sample with participants interested in the topic. Thus, the results are by no means representative.

A more extended research considering associations in more detail and analyzing additional success factors with a larger sample may find further acceptable brand extensions for fresh fruits and vegetables, as well as clearer distinctions of acceptance between brand extensions of a product type.

5. Literature

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