Feedback Effects in Brand Extensions: Evidence from India

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Abstract

This paper studies brand-extension feedback effects from India to address the paucity of extension-feedback research from the subcontinent. A model from literature was developed and tested on a sample of students in the capital city; it fitted the data well and four out of the six hypotheses were supported. Fit had the strongest effect on feedback followed by initial parent-brand attitude. Overall, the study advances the knowledge on brand-extension feedback effects.

Introduction

It is well established that brand-extensions produce ‘feedback effects’ that may either enhance or diminish the equity of the parent-brand (Swaminathan, Fox and Reddy, 2001). Most of the feedback literature reveals a Western focus, thus limiting the validity of the findings to other countries. Only two brand-extension studies (Jaiswal and Patro, 2003 and Chaudhuri, 2004) were identified that had an Eastern, or specifically, a sub-continental focus and extension feedback effect was not addressed in them. This study aims to fill this gap by studying extension feedback effects in the Indian market. India was chosen due to its emergence as an economic power in the region. This paper develops a model of brand-extension feedback from the literature and tests it using Indian brand-extensions.

Model Development

A model of brand-extension feedback-effect was developed for this study using brand-extension feedback literature. The model’s constructs and hypothesized effects are presented in Figure 1.

![Figure 1: Proposed Model of Feedback-Effect in Brand-Extensions](image)

Note: PBA=Parent-brand attitude; FIT=Perceived fit; ATBE=Attitude towards the brand-extension; PBAC=Parent-brand attitude-change.
Phase 1: Brand Extension Attitude Formation

The first phase of the model deals with formation of attitudes towards the brand-extension. The existing paradigm on brand-extension evaluation suggests that attitudes towards the brand-extension are affected mainly by existing beliefs and attitudes towards the parent-brand (Bhat and Reddy, 2001; Sheinin, 2000) and the perception of fit (or similarity) between the parent-brand and the extension (Aaker and Keller, 1990; Bottomley and Holden, 2001; Keller and Aaker, 1992). It can be defined as the consistency of the brand-extension with the parent-brand in terms of the number of shared associations between parent brand and the extension category (Aaker and Keller, 1990). The brand-extension evaluation process is rooted in categorization theory that predicts how consumers will incorporate new information about a brand-extension into their existing set of beliefs about the parent-brand (Kim, Lavack and Smith, 2001). Prior research has demonstrated that there is an attitude/knowledge transfer from the parent to the extension (Bhat and Reddy, 2001; Sheinin, 1998). Thus, as per categorization theory, existing attitudes/beliefs about a parent-brand affect both fit-perception and attitudes towards the extension. An extension is favourably received if there is a transfer of positive attitude from the parent to the extension and vice versa (Bhat and Reddy, 2001; McCarthy, Heath and Milberg, 2001). Also, it has been demonstrated empirically that extensions in similar categories tend to be judged more favourably than extensions in dissimilar categories (Aaker and Keller, 1990; Boush and Loken, 1991). On the basis of the above discussion, following hypotheses are proposed.

H1: Parent-brand attitude positively affects attitude towards the brand-extension.

H2: Parent-brand attitude positively affects perceived fit.

H3: Perceived fit positively affects attitude towards the brand-extension.

Phase 2: Parent Brand Attitude Change (Feedback phase)

Around 20 journal articles have studied both the positive (enhancement) and negative (dilution) feedback effects of extensions on parent-brands. Perceived fit has both enhancement and dilution effects (Martinez and Pina, 2003; Martinez and Chernatony, 2004; Milberg, Park and McCarthy, 1997; Zimmer and Bhat, 2004). A good fit is expected to strengthen beliefs and associations and thus add to the parent-brand’s schema, enhancing attitude and equity while, poor is expected to create negative associations with a negative affect on the parent-brand (Gurhan-Canli and Maheswaran, 1998; Keller and Aaker, 1992; Martinez and Chernatony, 2004). Attitudes towards the brand-extension also affect parent-brand evaluations (Ahluwalia and Gurhan-Canli, 2000; Gurhan-Canli and Maheswaran, 1998; Martinez and Chernatony, 2004). What hasn’t been empirically tested before is the affect of initial parent-brand attitude on the parent-brand attitude-change post extension launch. As initial parent-brand attitude is an antecedent to extension-attitudes and fit-perceptions, both of which affect feedback, it would be reasonable to posit that initial parent-brand attitudes would also impact parent-brand attitudes after extension launch. ‘Feedback-effect’ is in essence a parent-brand schema-change process (Gurhan-Canli and Maheswaran, 1998) and prior research has shown that schema-change is a function of the existing parent-brand beliefs (Sheinin, 2000). On the basis of the discussion above, the following three hypotheses are proposed:

H4: Perceived fit would positively effect on parent-brand attitude-change.

H5: Attitude towards the brand-extension would positively effect on parent-brand attitude-change.
**H6:** Parent-brand attitude would positively effect on parent-brand attitude-change.

**Research Design**

A self-administered quantitative survey of 250 male students from a college in New Delhi was conducted. The survey was handed out in lectures and 234 usable responses were obtained. Missing data was less than three percent of the usable responses and was replaced by the mean-substitution method. The sample size exceeds Kline’s (1998) minimum requirement of 200 for SEM analysis. Brand-extension research requires that only well known brand names be examined for their potential to be extended (Martin & Stewart, 2001), as fictitious brands do not carry well-formed associations and feelings that are requisite for brand-extensions. Therefore, informal discussions were held with a small group of students to decide on a parent-brand name and a product-category suitable for extension. An Indian casual menswear brand (given the pseudonym Menz in this paper) was unanimously chosen as the parent-brand and ‘sunglasses’ as the potential extension product-category. The respondents in the survey were specifically told that the scenario of Menz launching sunglasses presented to them in the questionnaire was hypothetical.

All the scales were adapted from the literature and measured on a seven-point Likert scale anchored as *strongly disagree* (1) to *strongly agree* (7) which is consistent with previous brand-extension research. Five items from Maoz and Tybout (2002) and Simonin and Ruth (1998) were used to measure initial *parent-brand attitude* and were adapted. *Perceived fit* was assessed using four items from Martinez and Chernatony (2004) and Bridges, Keller and Sood (2000). Five items measuring *attitude towards the brand-extension* were adapted from Hem and Iversen (2003), Boush and Loken (1991) and Park, Milberg and Lawson (1991). Tukey’s test of non-additivity confirmed that the items were additive as a scale in all cases. Finally, the scales used to measure the change in attitude towards the parent-brand as a consequence of brand-extension were anchored as *more strongly negative change in attitude to Billabong as compared with before* (1) and *more strongly positive change in attitude towards Billabong as compared with before* (7), with a mid-point of *no change in attitude towards Menz as compared to before* (4). It was felt best to directly measure the change in attitude in the parent-brand to measure feedback effects, in order to avoid noise associated with *before* and *after* measures (to establish change) The items measuring the *parent-brand attitude change* were based on the same items that measured initial parent-brand attitude, but set differently to capture change.

Tests of construct reliability and validity were first performed on the data. The constructs of parent-brand attitude (PBA), perceived-fit (PF), attitude towards the brand-extension (ATBE) and parent-brand attitude change (PBAC) had acceptable construct reliabilities of 0.76, 0.82, 0.75 and 0.78, respectively. Similarly, the average variance extracted (AVE) score for each of the constructs was 0.61, 0.70, 0.61 and 0.65 for PBA, PF, ATBE and PBAC, respectively, higher than the recommended 0.50 level (Fornell and Larcker, 1981). Also the Cronbach Alphas for the constructs were 0.73, 0.81, 0.81 and 0.77, respectively, for PBA, PF, ATBE and PBAC. Consistent with the recommendations of Fornell and Larcker (1981), the *discriminant-validity* criterion is fulfilled if the variance-extracted for each pair of constructs is greater than their respective squared-correlations. Table 1 outlines the variance extracted and squared-correlations for each pair of constructs. The inter-construct variance-extracted figures are typed in italics. For each pair of constructs, the variance extracted for each pair

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was greater than the respective inter-construct squared correlations, thus fulfilling the discriminant validity condition.

Table 1: Comparing Inter-Construct Squared-Correlation and Variance Extracted

<table>
<thead>
<tr>
<th>Constructs</th>
<th>PBA</th>
<th>FIT</th>
<th>ATBE</th>
<th>PBAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent-brand attitude (PBA)</td>
<td>--</td>
<td>0.830</td>
<td>0.804</td>
<td>0.818</td>
</tr>
<tr>
<td>Perceived fit (FIT)</td>
<td>0.003</td>
<td>--</td>
<td>0.591</td>
<td>0.837</td>
</tr>
<tr>
<td>Attitude towards brand-extension (ATBE)</td>
<td>0.081</td>
<td>0.192</td>
<td>--</td>
<td>0.567</td>
</tr>
<tr>
<td>Parent-brand attitude change (PBAC)</td>
<td>0.039</td>
<td>0.156</td>
<td>0.157</td>
<td>--</td>
</tr>
</tbody>
</table>

Data Analysis and Results

The constructs in the study demonstrated no significant departures from normality and so the SEM analysis was carried out with the original data. The descriptive statistics are presented in Table 2. Multicollinearity was not a problem in the study as the independent variables demonstrated inter-correlations of less than 0.80 (Cohen, 1969; Hutcheson and Sofroniou, 1999).

Table 2: Descriptive Statistics

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>S.D.</th>
<th>PBA</th>
<th>FIT</th>
<th>ATBE</th>
<th>PBAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent-brand attitude (PBA)</td>
<td>4.93</td>
<td>0.921</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived fit (FIT)</td>
<td>4.53</td>
<td>1.245</td>
<td>0.055</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude towards brand-extn. (ATBE)</td>
<td>3.91</td>
<td>1.132</td>
<td>0.286**</td>
<td>0.439**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Parent-brand attitude change (PBAC)</td>
<td>0.720</td>
<td>0.723</td>
<td>0.198**</td>
<td>0.396**</td>
<td>0.397**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: **. Correlation is significant at the 0.01 level (2-tailed).

Structural Equation Modelling Results

A partial-disaggregated SEM method was adopted using the two-step approach as proposed by Andersen and Gerbing (1988). First, the analysis of the measurement-model (using confirmatory-factor-analysis) was conducted to gauge the unidimensionality of the data. This was followed by the specification and analysis of the structural model to gauge the model’s fit to the data and to test the hypotheses. Measurement model fit was deemed adequate with minimum discrepancy ($\chi^2$/df) as 0.690 with 14 degrees of freedom, GFI of 0.99, CFI of 1.0, RMSEA of 0.00 and a minimum value of the default model for the AIC. The structural model was then evaluated. The goodness-of-fit statistics for the structural model were a $\chi^2$/df of 1.89 with 142 degrees of freedom, GFI of 0.93, CFI of 0.965, RMSEA of 0.03 and minimum value of the default model for the AIC. The fit was deemed adequate. The tests for the hypotheses were conducted next by examining the significance of the latent variable path-estimates. Table 3 reports the results of the latent variable path estimates and their significance levels.
Table 3: Standardised Regression Weights & Critical Ratios

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Latent Variable Path</th>
<th>Standardised Regression Weights (β)</th>
<th>Critical Ratios</th>
<th>Sig. Level (p)</th>
<th>Hypotheses Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 PBA ➔ ATBE</td>
<td>0.288</td>
<td>3.733</td>
<td>0.000</td>
<td>Accepted</td>
<td></td>
</tr>
<tr>
<td>H2 PBA ➔ FIT</td>
<td>0.104</td>
<td>1.233</td>
<td>0.218</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>H3 FIT ➔ ATBE</td>
<td>0.608</td>
<td>6.092</td>
<td>0.000</td>
<td>Accepted</td>
<td></td>
</tr>
<tr>
<td>H4 FIT ➔ PBAC</td>
<td>0.376</td>
<td>3.291</td>
<td>0.001</td>
<td>Accepted</td>
<td></td>
</tr>
<tr>
<td>H5 ATBE ➔ PBAC</td>
<td>0.196</td>
<td>1.681</td>
<td>0.093</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>H6 PBA ➔ PBAC</td>
<td>0.163</td>
<td>1.998</td>
<td>0.044</td>
<td>Accepted</td>
<td></td>
</tr>
</tbody>
</table>

The critical ratio (CR) for the path PBA to ATBE path was 3.73 (p<0.05); thus hypothesis H1 was accepted. The effect is reasonably strong (β=0.29). The CR for the path PBA to FIT was 1.23 and not significant (p>0.05); thus H2 was rejected. The CR for the path FIT ➔ ATBE was 6.09 and significant. Thus H3 was accepted. The effect was very strong (β=0.60). The CR for the path FIT ➔ PBAC was 3.29 and significant; thus H4 was accepted. The effect was strong (β = 0.38). The CR for the path ATBE ➔ PBAC was 1.68 and not significant; thus, H5 was rejected. Finally, the CR for the path PBA ➔ PBAC was 1.99 and just significant at the 0.05 level; thus H6 was accepted. The effect was a weak one (β= 0.16).

**Discussion and Implications**

This study fills a gap in the knowledge by examining feedback effects in the context of Indian brand-extensions. What do the results mean? Fit was not only the most important influence on attitude to the brand-extension, it was also the most important influence on the feedback effect on the parent-brand. So, practitioners should seek to devote substantial resources in creating perceived linkages through their communications between the brand and the extension in order to maximise positive feedback to the parent-brand. This finding is consistent with the findings in earlier studies. A new finding was effect of existing parent-brand attitude on feedback. Although not very strong, but it signifies the importance of already existing attitudes (part of parent-brand associations) towards creating overall brand-value. Brand-extensions could be viewed as marketing-investments in the parent-brand (Keller and Lehman, 2001) and consideration of important factors would ensure a good return. This ethos is encapsulated succinctly by former Nestlé’s CEO who commented that “the choice of products that we will club under the Nestlé brand depends on the way these products enhance the Nestlé image – not on what Nestlé brings to their products” (Laverick, 1998, p. 241). A limitation of the study is that the results cannot be extrapolated to the entire Indian market. Future research should therefore look at replicating the model across different Indian cities and also across different country markets in order to establish global validity of the model. Overall, the study provides multi-national product and brand managers a handy toolkit to evaluate future brand-extension prospects holistically.
References


