Brand Extension in a Borderless World: Lessons from India

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This paper reports a study of how consumers form attitudes to brand extensions in an emerging market that is increasingly interconnected with other economies. A two-stage study is employed with multi-item scales for multivariate analyses and structural equation modeling. An attempt is made to verify prior extant theory and extend brand extension theory to situations where the parental brand varies across several dimensions. Country of 1origin effects on attitudes to extensions as well as the impact of culture on extension acceptance is examined. Findings are relevant for marketers entering new geographies as well as scholars identifying new research areas.

Introduction

Brand extension research has been the focus of attention for many since the University of Minnesota Consumer Behavior Seminar (1987) provided empirical data to support the contention that greater perceived similarity between current and new products leads to a greater transfer of affect (positive or negative) to the new product. Tauber (1988) studied 276 actual extensions and found that consumer perception of the 'consistency' of the parent brand and the new product is a key element in predicting brand extension success. Extensive research on brand extensions was triggered by Aaker & Keller's 1990 paper that reported how consumers form attitudes to brand extensions. They found that attitudes to brand extensions was more positive when there was a perception of fit between the original brand and its extension along one of three dimensions and a perception of high quality for the original brand or when the extension was not considered trivial. Their findings are intuitively acceptable and have found its way into standard textbooks.

The wide acceptance and diffusion of Aaker and Keller's (1990) findings notwithstanding, most replications yielded varying results questioning the empirical generalizability of the original findings. Their exploratory study utilized qualitative, co relational and experimental research methods using data from consumer evaluations of brand extensions. The co relational aspect of the study has been replicated by Sunde and Brodie (1993) in New Zealand, Nijssen and Hartman (1994) in Netherlands, and Bottomley and Doyle (1996) in UK. The initial replication by Sunde and Brodie yielded different results to the original Aaker and Keller study. Further replications by Nijssen and Hartman and Bottomley and Doyle have also yielded different results. Emerging market replications in China (Guoqun & Saunders, 2002) and India (Patro & Jaiswal, 2003) have also shown mixed results.

Other researchers have carried the study of brand extensions beyond replication of the original Aaker & Keller study. Boush and Loken (1991) reported on the processes related to the evaluation of brand extensions. Keller & Aaker (1992) studied the effects of sequential introduction of brand extensions. Bridges, Keller & Sood (2000) examined the relationship between the perceived fit of an extension and the explanatory links that connect it to the parent brand. Kim, Lavack & Smith (2001) examined consumer evaluations of vertical brand extensions and core brands using categorization theory Dwivedi, Sweeney & Merrilees (2007) conducted a study on feedback effects in brand extensions in India and found that attitudes toward the brand extension did not positively affect parent brand attitude change.

The effect of extensions on brand name dilution and enhancement was reported by Gurhan-Canli and Maheshwaran (1998). Ahluwalia & Gurhan-Canli (2000) studied the effects of extensions on the family brand name. They identified "accessibility of extension information" as a factor moderating the effects of the valence of extension information and category on brand evaluations. Finally, Hem & Iverson (2003) studied the relationship between brand loyalty and extension evaluation when brand equity was sought to be transferred to brand extensions.

There are other studies that examine specific aspects of brand extensions or variations in specific cultures; summary studies of the state of knowledge are few and far between. Bottomley & Holden (2001) investigated the empirical generalizability of Aaker and Keller's model of how consumers evaluate brand extensions. Using a data set from the original study and seven replications conducted around the world, the authors undertook a secondary analysis to understand what generalizations emerge. Bottomley & Holden found support for the full model despite published results, including Aaker and Keller's own that support only some of the hypotheses. The authors however found evidence that the level of contribution of each of these components varies by brand and culture.

Understanding how brand extensions work is important because the financial risks of entering new markets have become quite high for many businesses. Brown (1985) estimated new brand introduction to cost between $50 – 100 million while Tauber (1988) estimated it to be $ 150 million. Brand extension is a critical tool for most marketers in Western markets characterized by brand proliferation and the challenge of obtaining shelf space in traditional retail. In several categories more than 80% of new product introductions are through brand extensions (Sheinin, 1998, Keller, 2003). There are several reasons for the popularity of brand extension apart from the escalating costs of establishing new brands. In an interconnected world, with emerging markets globally, marketers desiring to introduce Western brands are likely to face these challenges all over again with the added dimensions of established local brands and different cultures.

Research Design

This research design closely follows the approach adopted in the Aaker & Keller (A&K) 1990 research with modifications to go beyond mere replication. As in the A&K research, two studies were conducted. In the extension reaction study (Study 1) I obtained reactions to 33 brand extensions of 11 well-known brands (A&K studied six brands with 20 extensions). A set of open-ended associations for the brand name and each of the 33 hypothetical extensions were captured in addition to scaled measures of attitude to the original brand as well as the proposed extensions. Also captured were responses to three measures of fit between the original brand and the extension and the perceived difficulty of making the extension. In Study 2, the extension positioning study, cues and elaborations were provided to the respondents and their reactions assessed. Study 2 was conducted before Study 1 data was analyzed.

The purpose of the research was to explore whether the findings of the A&K study were replicable and to test the impact of certain other parameters on the model. Specifically, my goal was to test if consumer reactions to brand extensions are mediated by differences in culture, educational background, gender, country of origin and language of communication.

Research Questions

The purpose of my research was to test how well the A&K study replicates in a context far removed from the original in time, space, culture and economic environment. Therefore the original research questions had necessarily to be addressed:

1. Can useful qualitative insights into consumer evaluations of brand extensions be gained by exploring reactions to the 11 brands and 33 extensions (originally 6 and 20, respectively)? What kinds of beliefs about the original brand will consumers associate with the brand extension and in what ways will those beliefs affect the extension attitude?
2. How will consumers' perceptions of the overall quality of the original brand affect their evaluations of an extension? Under

what circumstances will quality perceptions have the largest effects?
3. What is the role of the consumers perceptions of the "fit" between the original and the new product class? Will they affect the transfer of the quality perception of the brand to the extension? How should fit be conceptualised and measured?
4. Will other aspects of the extension context such as how difficult the extension is to make, affect consumer evaluations?
5. How are consumer evaluations affected when different types of information are provided in the extension context?

However the present study treated the above 5 research questions as background to a more contemporary set:

6. How valid are the responses/findings to the above set of research questions today, twenty two years after the original study?
7. How are the responses/findings to the above set of research questions mediated by gender differences among consumers?
8. How are the responses/findings to the above set of research questions mediated by the educational background of consumers?
9. How are the responses/findings to the above set of research questions mediated by the cultural background of consumers?
10. How are the responses/findings to the above set of research questions mediated by the relatedness of the extension?
11. How are the responses/findings to the above set of research questions mediated by the country of origin of the brand?

As in the original A&K study, the original first four questions were explored in Study 1 and the fifth question was explored in Study 2. The set of six questions were addressed by running separate analyses against the appropriate demographic variables. This paper reports the results of Study 1

Study 1 Extension Reaction Study - Research Issues

Study 1 of the original A&K research explored how an attitude toward a brand extension is formed. I retain the same study design but with suitable modifications to address the further set of research questions raised in this study. I therefore retain the same set of hypotheses that the A&K study formulated:

H1: Higher quality perceptions toward the original brand (i.e., higher QUALITY) are associated with more favourable attitudes toward the extension.

H2: The transfer of a brand's perceived quality is enhanced when the two product classes in some way fit together. When the fit is weak, the transfer is inhibited.

H3: The fit between the two involved product classes has a direct positive association with the attitude toward the extension.

H4: The relationship between the difficulty of making the product class of the extension, DIFFICULT, and the attitude toward the extension is positive

To recall the A&K approach (that is replicated completely but extendedly here):

Attitude is conceptualized here in terms of the consumer's perception of the overall quality of the brand, termed QUALITY. Product pairs can be perceived to fit in many ways, however, and A&K developed three such measures. Two measures took a demand-side perspective to consider the economic notions of substitutes and complements in product use. The third measure took a supply-side view to consider aspects of the firm's manufacturing abilities.

The first fit measure, COMPLEMENT, indicates the extent to which consumers view two product classes as complements. Products are considered complements if both are consumed jointly to satisfy some particular need (Henderson and Quandt 1980).

The second fit measure, SUBSTITUTE, is the extent to which consumers view two product classes as substitutes. The other fit measure, TRANSFER, pertains not to how consumers view relationships in product usage, but how consumers view relationships in product manufacturing.

Various perceptions of the new product class also may affect consumer evaluations of a brand extension. A&K considered one such factor, the perceived difficulty in designing or making the extension product, termed DIFFICULT.

Method

Perceptions and evaluations of a set of 11 original brands and 33 hypothetical extensions were gathered from 225 graduate business students who were at the end of their first year during the beginning and ending of a classroom session. Participants were in class in 10 classrooms and the responses were collected in the presence of the concerned instructor.

The original brands were selected keeping in mind the A&K criteria of being relevant to subjects, generally perceived as high quality, able to elicit relatively specific associations, and not broadly extended previously. Additional conditions were that the original brand-set had to include both late entrant and very early entrant MNC brands, Indian brands, product brands, service brands as well as at least one business to business brand that students could be expected to be familiar with. Similarly the 33 extensions selected had to be reasonable and not illogical, but had to provide heterogeneity on the three fit measures. Table 1 below shows the final selection of original brands and hypothetical extensions. Open-ended associations were obtained first for the original brand and then for the set of extensions using the same methodology as in the original A&K study. Respondents were asked to take roughly 3 minutes to write down the associations or thoughts that came to mind.

TABLE 1 - Original Brands and their Extensions

*Original Brand**	*Hypothetical Extensions*
Ashok Leyland trucks	mid size cars, autorickshaws, inverters
Amul ice-cream	potato chips, fruit juices, packaged tea-leaf
Kingfisher beer	wine, popcorn, ice-cream,
Pepsi	kulfi, TV channels, lassi
Cafe Coffee Day	Xerox shops, beer, bread
Dove shampoo	after shave lotion, hair dyes, lipstick
Bata shoes	lingerie, watches, jeans
Cadbury chocolates	T-shirts, wine, biscuits
Reebok sneakers	pizza, mobile phones, pens
Axe deodorant	neck-ties, lingerie, nail polish

*Ashok Leyland is perceived as an Indian brand though it originally was a subsidiary of the erstwhile British Leyland Corporation. Amul, Kingfisher and Cafe Coffee Day are Indian brands. Cafe Coffee Day's business model is the Indian version of Starbucks. Pepsi, Reebok and Apple are newer entrants to the Indian market. Bata and Cadbury are perceived as Indian brands, being in the Indian market prior to Independence in 1947. Axe and Dove are brands of Hindustan Unilever Ltd (HUL), the Indian subsidiary of the Unilever group. HUL has also been in the Indian market prior to 1947.

When they considered the idea of purchasing each brand name product and 15 minutes when they were considering the 33 extensions. The set of 33 open-ended association tasks was split into three parts separated by sets of scaling tasks. In a second group, the scaling tasks alone were administered to a group of 338 students who were just completing their undergraduate courses in various disciplines unconnected with business.

The measures used were identical to that of the original A&K study. Three fit measures (SUBSTITUTE, COMPLEMENT & TRANSFER) were used, with 7-point Likert scales (1 = strongly disagree, 7 = strongly agree). A 7-point scale measured the difficulty in designing and making the product, DIFFICULT (1 = not at all difficult, 7 = very difficult). A 7-point scale assessed the overall quality of each original brand, QUALITY (1= inferior, 7 = superior). Finally, the attitude toward the extension (ATTITUDE) was operationalized by two different measures: the perceived overall quality of the extension (1 = inferior, 7 = superior) and the likelihood of trying the extension assuming a purchase were planned in the product class (1 = not at all likely, 7= very likely). A slight departure from the original study was the use of two measures each for QUALITY, TRANSFER & SUBSTITUTE.

The objective of the qualitative phase of the A&K study was to see what types of associations would emerge from a thought-listing about the original brands and the extensions and thus gain insights about why evaluations were more favorable toward some of the extensions than toward others. In the case of the present study that is oriented to replication and extension, the qualitative phase results were used to confirm that the selection of brands and hypothetical extensions made sense to the respondents. Qualitative analysis of these associations is not reported here and will form part of another paper.

Results

Respondent Profile

Table 2 shows the demographics of the respondent set.

TABLE 2 - Respondent profile

Parameter	Frequency	Percent	Total	Total %
Gender - Male	375	67		
- Female	172	30	547	97
Education - Business	225	40		
- Others	338	60	563	100
Prior work experience - Nil	372	66		
> 1 Year	147	26	519	92
Mother Tongue - Hindi	228	40		
- Others	335	60	563	100
*- No of Langs**			26	
Education in - English	515	92		
- Other	48	8	563	100
*- No of Langs**			10	

* Detailed break-up value

Modeling Consumer Evaluations of Brand Extensions

In the A&K study, the qualitative analysis provided support for the importance of some of the constructs thought to affect consumers' evaluations of brand extensions. In the present study I have only used the qualitative study to support the choice of brands and hypothetical extensions. To address these effects more formally and explore the role of perceived quality, A&K estimated a regression model motivated by the four hypotheses. The dependent variable was attitude toward the extension, operationalized by the average of the perceived quality of the extension and the likelihood of trying the extension measures. The independent variables follow the four hypotheses and are listed in Table 4. The first variable is the perceived quality of the original brand, QUALITY, from H1 Next are the three fit variables, TRANSFER, COMPLEMENT, and SUBSTITUTE, from H3. The following three terms reflect the interactions of the three fit variables with the perceived quality variable, from H2. The final variable is the perceived difficulty of making the extension, DIFFICULT, from H4. The regression was run over the 563 subjects and the 33 extensions, making a sample size of 18,579.

Tables 3a-f show the mean differences and significance across the various groups.

TABLE 3a – All Variables – Educational Background

	Business (n = 225)		*Non-business (n=338)*		*t-statistics*	
	Mean	SD	Mean	SD	t-value	Sig
Attitude towards extension	4.01	0.56	3.91	0.54	2.01	0.04
Quality of Mother Brand	4.47	0.55	4.45	0.65	0.37	0.71
Transfer	3.48	0.49	3.85	0.47	-0.27	0.79
Substitute	3.54	0.77	3.63	0.84	-1.31	0.19
Complement	3.75	0.71	3.86	0.78	-1.67	0.10
Difficult	3.96	0.67	4.01	0.71	-0.87	0.38

TABLE 3b – All Variables - Gender

	Male (n=375)		Female (n=172)		t-statistics	
	Mean	SD	Mean	SD	t-value	Sig
Attitude towards extension	3.96	0.57	3.92	0.51	0.78	0.44
Quality of Mother Brand	4.47	0.61	4.44	0.61	0.56	0.58
Transfer	3.84	0.47	3.86	0.47	-0.53	0.60
Substitute	3.55	0.82	3.67	0.80	-1.54	0.12
Complement	3.81	0.74	3.84	0.78	-0.53	0.59
Difficult	3.98	0.71	4.00	0.69	-0.39	0.69

TABLE 3c – Related Extensions – Educational Background

	Male (n=375)		Female (n=172)		t-statistics	
	Mean	SD	Mean	SD	t-value	Sig
Attitude towards extension_R	4.08	0.56	4.03	0.55	0.99	0.32
Quality of Mother Brand_R	4.43	0.53	4.42	0.63	0.26	0.80
Transfer_R	3.96	0.47	3.96	0.44	0.01	0.99
Substitute_R	3.66	0.68	3.73	0.73	-1.13	0.26
Complement _R	3.87	0.67	3.98	0.72	-1.92	0.06
Difficult_ R	3.89	0.67	3.92	0.68	-0.50	0.61

TABLE 3d – Related Extensions - Gender

	Male (n=375)		Female (n=172)		t-statistics	
	Mean	SD	Mean	SD	t-value	Sig
Attitude towards extension_R	4.05	0.58	4.03	0.52	0.54	0.59
Quality of Mother Brand_R	4.44	0.59	4.41	0.58	0.65	0.51
Transfer_R	3.95	0.43	3.99	0.46	-1.02	0.31
Substitute_R	3.66	0.71	3.77	0.71	-1.67	0.10
Complement_R	3.92	0.70	3.98	0.72	-1.02	0.31
Difficult_R	3.90	0.68	3.90	0.68	-0.13	0.90

TABLE 3e – Unrelated Extensions – Educational Background

	Male (n=375)		Female (n=172)		t-statistics	
	Mean	SD	Mean	SD	t-value	Sig
Attitude towards extension_UR	3.95	0.60	3.82	0.61	2.57	0.01
Quality of Mother Brand_UR	4.49	0.61	4.47	0.71	0.43	0.67
Transfer_UR	3.74	0.58	3.77	0.58	-0.41	0.68
Substitute_UR	3.43	0.90	3.54	0.99	-1.35	0.18
Complement_UR	3.66	0.84	3.76	0.92	-1.32	0.19
Difficult_UR	4.02	0.76	4.09	0.84	-1.02	0.31

TABLE 3f – Unrelated Extensions – Gender

	Male (n=375)		Female (n=172)		t-statistics	
	Mean	SD	Mean	SD	t-value	Sig
Attitude towards extension_UR	3.88	0.63	3.83	0.57	0.87	0.39
Quality of Mother Brand_UR	4.49	0.67	4.46	0.67	0.46	0.65
Transfer_UR	3.75	0.59	3.76	0.56	-0.13	0.89
Substitute_UR	3.46	0.97	3.58	0.94	-1.37	0.17
Complement_UR	3.71	0.88	3.73	0.92	-0.16	0.87
Difficult_UR	4.05	0.83	4.09	0.79	-0.53	0.59

Tables 3a-f show that there is a significant difference in the attitudes towards extensions on the part of business students as compared those with a non-business background and that these attitudes are more positive than those of non-business students. However these differences in attitude to the extension are not mediated by gender. We also see that in the case of related extensions, there is no significant difference in the attitude to extensions across both educational backgrounds as well as gender. However in the case of unrelated extensions, students with a business background show a significantly higher and positive attitude to the extension as compared to those with a non-business background. Again, gender did not make any appreciable difference in attitude to unrelated extensions.

The correlation matrix for the total sample is shown below in Table 4:

TABLE 4 – Correlation Matrix; Total Sample, n = 563

Variables	*ATE*	*QMB*	*Transfer*	*Substitute*	*Complement*
Attitude towards extension (ATE)					
Quality of Mother Brand (QMB)	0.24**				
Transfer	0.21**	-0.36**			
Substitute	0.13**	-0.45**	0.44**		
Complement	0.27**	-0.31**	0.45**	0.81**	
Difficult	0.00	-0.01	0.26**	0.49**	0.43**

** highly correlated at 0.01 level

Results of the regression analysis (enter and stepwise methods) for the total sample are shown in Tables 5a and b: The analysis shows that the adjusted R square value of 0.228 obtained by the enter method and the value of 0.229 obtained through step wise regression broadly match the value of 0.26 reported by A & K.

TABLE 5a – Regression Analysis (Method – Enter) Total Sample, n = 563

Model Summary

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
1	.484[a]	.235	.228	.47967

[a].**Predictors**: (Constant), Difficult, Quality of Mother Brand, Transfer, Complement, Substitute,

F=34.165, Sig .000

Coefficients[a]

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
	B	Std. Error	Beta		
1 (Constant)	.990	.339		2.917	.004
Quality of Mother Brand	.363	.039	.407	9.400	.000
Transfer	.174	.062	.152	2.793	.005
Substitute	-6.74E-03	.051	-0.10	-.133	.895
Complement	.284	.047	.392	5.961	.000
Difficult	-9.60E-02	.044	-.122	-2.181	.030

[a.] Dependent Variable: Attitude towards extension

Table 5b – Regression Analysis (Method – Stepwise) Total Sample, n=563

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.274[a]	.075	.073	.52547
2	.435[b]	.190	.187	.49227
3	.475[c]	.226	.222	.48156
4	.484[d]	.235	.229	.47925

[a.] Predictors: (Constant), Complement

[b.] Predictors: (Constant), Complement, Quality of Mother Brand

[c.] Predictors: (Constant), Complement, Quality of Mother Brand, Transfer

[d.] Predictors: (Constant), Complement, Quality of Mother Brand, Transfer, Difficult

Table 5c is a comparison of the regression model values reported by A & K and those obtained in the present study.

TABLE 5c – Regression Model Values Comparison with A & K Study

Independant Variable	SRC*	RC*	ARS1
QUALITY (perceived quality of original brand)	-0.01	-0.01	0.055
TRANSFER (of skills/assets from original to extension product class)	0.16	0.12	0.042
COMPLEMENT (degree to which the two product classes are complements	-0.02	-0.02	0.073
SUBSTITUTE (degree to which the two product classes are substitutes)	-0.08	-0.06	0.015
QUALITY x TRANSFER	0.12	0.02	0.153
QUALITY x COMPLEMENT	0.25	0.03	0.187
QUALITY x SUBSTITUTE	0.18	0.02	0.124
DIFFICULT (difficulty of making extension)	0.12	0.12	-0.002
Sample size – 2140 (A & K) ; 18,579 in present study			
Adjusted r2 = 0.26			

* reported in the original A&K study, 1obtained in this study. SRC= standardized regression coefficient; RC= regression coefficient; ARS adjusted R square

Related versus unrelated extensions

This study examines whether attitudes to extensions are affected by the relatedness of the hypothetical extension to the original brand product class (research question 10). Table 6 shows the mean values for the dependant and independent variables for the two groups and the corresponding values for the paired sample t-test.

The data shows that there is a statistically significant difference in the attitudes towards extensions when they are seen to be more related compared to the unrelated ones and the related extensions are viewed more positively. Transferability of skills and assets is seen as higher when extensions are seen as related than not.

TABLE 6 – Paired Sample t-test (related versus unrelated extensions) n=563

	Related Extensions		Unrelated Extensions			
Variables	Mean	SD	Mean	SD	t-statistics	Sig
Attitude towards extension_R	4.05	0.56	3.87	0.61	10.14	0.00
Quality of Mother Brand_R	4.43	0.59	4.48	0.67	-3.64	0.00
Transfer_R	3.96	0.45	3.76	0.58	10.61	0.00
Substitute_R	3.70	0.71	3.50	0.96	9.39	0.00
Complement _R	3.94	0.70	3.72	0.89	8.73	0.00
Difficult_ R	3.91	0.68	4.06	0.81	-6.25	0.00

Substitutability and complementarities are also higher when the extension is related. Finally, a related extension is considered less difficult to make than an unrelated one. One interesting finding is that an unrelated extension seems to have a negative impact on the perceived quality of the original brand when compared to a related extension, though this inference needs to be tested more rigorously. The adjusted R square values for both the enter and stepwise regression methods for related and unrelated extensions are reported in Table 7 below:

TABLE 7 – Adjusted r^2 Values Related vs. Unrelated, n = 563

Analysis	*Adj r^2*	*F*	*Sig*
Regression (Related Extension) Method - Enter	0.276	43.801	0.000
Regression (Related Extension) Method - Stepwise	0.275	72.183	0.000
Regression (Unrelated Extension) Method - Enter	0.207	30.298	0.000
Regression (Unrelated Extension) Method - Stepwise	0.208	37.837	0.000

Business versus non-business educational background

This study also examines whether the educational background of the respondents affects attitudes to extensions; that is; whether a business graduate is likely to view brand extensions differently from those with non-business education (research question 8). Tables 8a and b report the correlation matrix for business and non-business students:

TABLE 8a – Correlation Matrix, Business students, n = 225

	ATE	*QMB*	*Transfer*	*Substitute*	*Complement*
Attitude towards extension					
Quality of Mother Brand	0.11				
Transfer	0.28**	-0.36**			
Substitute	0.05	-0.55**	0.45**		
Complement	0.20**	-0.46**	0.46**	0.83**	
Difficult	-0.10	-0.12	-0.45**	0.29**	0.26**

TABLE 8b – Correlation Matrix, non-business students, n = 338

	ATE	*QMB*	*Transfer*	*Substitute*	*Complement*
Attitude towards extension					
Quality of Mother Brand	0.31**				
Transfer	0.16**	-0.36**			
Substitute	0.19**	-0.69**	0.44**		
Complement	0.34**	-0.23**	0.44**	0.79**	
Difficult	0.07	0.05	-0.13	0.61**	0.53**

**Correlations significant at the 0.01 level

Gender-mediated differences

Another aspect that this study examines is whether attitudes to extensions are affected by the gender of the respondent; that is; whether a male consumer is likely to view brand extensions differently from females (research question 7). Tables 9a and b report the correlation matrix for male and female students:

TABLE 9a – Correlation Matrix, Male respondents, n = 375

	ATE	*QMB*	*Transfer*	*Substitute*	*Complement*
Attitude towards extension					
Quality of Mother Brand	0.33**				
Transfer	0.17**	-0.33**			
Substitute	0.13**	-0.42**	0.47**		
Complement	0.29**	-0.24**	0.45**	0.78**	
Difficult	0.03	0.03	-0.38**	0.43**	0.36**

Country-of origin effects

It was thought that there is a possibility that attitudes to extensions would be influenced by considerations of whether the extensor brand is a homegrown one or perceived as an MNC or foreign brand. A paired sample t-test (home-grown versus MNC brands) (Table 10) was conducted which threw up some interesting results.

TABLE 9b – Correlation Matrix, Female respondents, n = 172

	ATE	QMB	Transfer	Substitute	Complement
Attitude towards extension					
Quality of Mother Brand	-0.01				
Transfer	0.39**	-0.35**			
Substitute	0.16**	-0.48**	0.38**		
Complement	0.30**	-0.40**	0.42**	0.87**	
Difficult	-0.09	-0.07	-0.02	0.62**	0.58**

**Correlations significant at the 0.01 level

TABLE 10 – Paired Sample t-test (home-grown versus MNC brands) n=563

	Home Grown		MNC		t-statistics	
	Mean	SD	Mean	SD	t-value	Sig
Attitude towards extension_D	3.99	0.64	3.87	0.67	5.73	0.00
Quality of Mother Brand_D	4.51	0.70	4.43	0.70	4.07	0.00
Transfer_D	3.78	0.59	3.81	0.59	-2.16	0.03
Substitute_D	3.51	0.94	3.56	0.96	-2.03	0.04
Complement_D	3.76	0.88	3.78	0.96	-0.53	0.60
Difficult_D	4.02	0.82	4.03	0.87	-0.22	0.83

The adjusted R square values for both the enter and stepwise regression methods for home grown and MNC brands are reported in Table 10a below:

TABLE 10a – Adjusted r^2 Values Home grown vs MNC brands, n = 563

Analysis	Adj r^2	F	Sig
Regression (Related Extension) Method - Enter	0.214	31.629	0.000
Regression (Related Extension) Method - Stepwise	0.215	52.380	0.000
Regression (Unrelated Extension) Method - Enter	0.217	32.169	0.000
Regression (Unrelated Extension) Method - Stepwise	0.217	52.775	0.000

Perceived brand quality

The A&K study reported essentially a zero value for the beta coefficient for the QUALITY variable indicating that in opposition to H1, there was no direct link from the perceived qualityof the brand to the attitude to the extension. However, in the present study, we do find such a direct link for the total sample of 563 respondents, a similar link when we consider business students, non-business students, for related extensions, for unrelated extensions, for male respondents, for female respondents and, finally, in the case of both home-grown and MNC brands. This result is a significant deviation from the A&K findings.

Perceived product class fit

A&K found that the beta coefficients for two of the fit variables COMPLEMENT & SUBSTITUTE were not significant and did not support H3. However they found the coefficient for TRANSFER both substantial and significant. The present study supports the A&K finding for the total sample of 563 respondents. However, when we slice and dice the respondent set, a somewhat different picture emerges. For related extensions, TRANSFER & COMPLEMENT are significant; for unrelated extensions only COMPLEMENT is significant; for business students TRANSFER, SUBSTITUTE and COMPLEMENT are significant while for non-business students only SUBSTITUTE & COMPLEMENT are significant. Both male and female respondents consider TRANSFER & COMPLEMENT as significant.

A&K found that TRANSFER had primarily a direct relationship Hence they suggested that it might detract from the attractiveness of an extension even when the original brand was perceived to be of high quality. However our study finds an indirect relationship between ATTITUDE and TRANSFER. Perhaps this reflects the changed times – when branding is not only ubiquitous across nearly all product classes, but there is also increased awareness of the fact that the products represented by most well known brands are not manufactured by the brand owners but simply out-sourced. It is interesting to note that TRANSFER was not significant in the case of non-business respondents – reflecting their inability to refect on such issues.

Summary of Main Findings

At a very basic level, this study supports the model formulation of the A&K study but with several caveats. While A&K reported an adjusted r2 value for the model of 0.26, we

report a somewhat lower value of 0.23. However given that the sample size in the present study is not only much larger but also more systematically stratified, it must be at least suspected that the difference in adjusted r2 values indicate a lowered explanation of the total variance by the model. This suspicion is strengthened by the supplementary analyses of this study.

The original A&K study considered perceptions of 6 fast moving consumer brands of which (one - McDonald's - is partly a service brand) among a cohort of 107 undergraduate business students in the first study and 121 for the second. Most subsequent replications or further explorations have used the same respondent profile. Patro & Jaiswal's sample was 106 graduate business students in a premier B-School. Boush & Loken's (1991) study employed 144 university students who were paid either in cash or in academic credit. Bridges Keller & Sood (2000) surveyed 66 university staff members for the pilot study and 181 more for the main experiment. Kim, Lavack & Smith (2001) used 55 undergraduate students for the pretest and 125 more from undergraduate marketing classes for Study 1 & 189 for Study 2. The problem with using business students is that they are highly sensitized to branding concepts & are likely to be from upper class society and so not truly representative of the general consumer.
The findings of the present study support the suspicion that results obtained by surveying only business students could be unrepresentative of the general population. We have seen that business students' attitude to extensions is significantly more positive than those of non-business students. This is likely to be because business students may be able to evaluate an extension more 'rationally' uninfluenced by branding effects thanks to their specific education. The finding further strengthens this conjecture that business students irrespective of relatedness evince a more positive attitude to extension.

The A&K model is a far from complete explanation of the way attitudes are formed to brand extensions. One factor that seems to play a significant role in attitude formation is that this study reveals the relatedness or otherwise of the proposed extension. Attitudes to unrelated extensions seem to have a different structure in terms of relationship between the variables as compared to related extensions.

This study finds a direct link between QUALITY and ATTITUDE unlike A&K.. With the passage of time since the A&K study, brand penetration and multiplication across product categories has been immense. Concomitantly, it is also well known that products of most well known brands are not manufactured by the brand owners but simply outsourced irrespective of the level of technology involved. Consequently, QUALITY is seen as the ability to TRANSFER very specific organization skills in understanding customer wants and managing the outsourcing relationship. There could be an underlying assumption in the minds of the customer that once high QUALITY is achieved, TRANSFER is product and technology-agnostic.

The present study indicates that gender does not mediate the attitude formation process but country of origin does. With the limitations posed by looking at only correlational data, nevertheless the differences in extension attitude formation between home grown and MNC brands seem to be structural; quality of the mother brand, TRANSFER and SUBSTITUTE being the impacting variables and which work in a stronger manner in favour of home-grown brands

Future Research Directions and Implications

Across what parameters does a consumer consider an extension as related or unrelated? Are these independent of product categories and country-of origin or they somewhat Idiosyncratic? Do they depend on whether the brand is positioned or perceived as a functional, experiential or symbolic or considered as an esteem brand? The data set collected in the present study lends itself to considerably more analysis including item analysis – why for examples does Apple get such an overwhelming endorsement for unrelated products?

What are the other independent variables that affect attitudes to extensions? How universal are these variables? How relevant are the fit variables today and what is the type of mediating role they play? A mother brand such as Bata, considered of poor quality, has co-opted other brands with higher perceptions into its store display. Some of them are their own and others franchised from MNCs. What is the impact of such a strategy on the brand image of the co-opted brands and its own self?

The present study shows that attitude formation to extensions is not mediated by gender. However is that a universal truth or are there differences when we consider gender- specific brands? Arrow venturing into women's wear might have damaged its own franchise or it may be simply ineffective in women's wear with no reciprocal effect on the mother brand. Similarly, will Dove be successful with products for males?

There is a case for systematic longitudinal study of brand extension effects. A continual stream of new social segments entering the market at varying speeds and brand thinking among these new market segments needs to be understood better marks emerging economies. Are lower levels of brand knowledge more permissive of brand extension activity?

Finally there is a case for replicate studies across societies to better understand the impact of economy and culture variables as well as studies to understand brand extension attitude formation in service and business-to-business brands.

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