

215

WP: 215

# Working Paper

WP215  
WP  
1978/215

IIIM  
wp-215



**INDIAN INSTITUTE OF MANAGEMENT  
AHMEDABAD**

PREDICTING NEW PRODUCT SUCCESS:  
ROLE OF PRODUCT-CATEGORY  
RELATED VARIABLES

by

Subhash C Mehta  
Anil Pandya

W P No. 215  
June 1978

WP215



WP  
1978  
(215)

The main objective of the working paper series  
of the IIMA is to help faculty members  
to test out their research findings  
at the pre-publication stage.

INDIAN INSTITUTE OF MANAGEMENT  
AHMEDABAD

PREDICTING NEW PRODUCT SUCCESS: ROLE OF  
PRODUCT-CATEGORY RELATED VARIABLES

Introduction

Despite the fact that consumer goods companies generally take considerable care in planning and introducing new products in the market and usually provide them with adequate promotional and distribution support, it is a common experience that new products often fail to take off. It is also observed that while certain product categories are easier to enter with new products, establishing new products in other categories poses serious difficulties. Can one identify the major characteristics of the product class that facilitate or hinder the initial success of new products? Answer to this question should be of considerable interest to marketing managements in India who would be in a better position to assess the chances of success or failure of a new product, given some knowledge of the relevant characteristics of the product category they intend entering with a new product or brand. The research reported here is an attempt in this direction. Five different product categories, namely, Tooth Pastes (TP), Washing Powders (WP), Headache Pills (HP), Light Bulbs (LB) and Pressure Cookers (PC) were

---

The contribution of Messers. Sampath Kumar and Prakash Sathaye in the conduct of this study is gratefully acknowledged.

chosen for investigation. The major criteria in the choice of the above product categories were :

- (a) Wide spread familiarity of the households with the product class;
- (b) Frequent use of the product in the households;
- (c) A variety of brands in the product class should be available in the market; and
- (d) The chosen categories should be quite distinct in terms of form and usage.

#### Simulated Buying Situation

Since research interest was limited to identifying the characteristics of the product categories, any differences in brand attributes, prices, packaging, as well as in promotional and distribution support behind the new brands, had to be controlled for. The following simulated buying situation was created to control for the above mentioned differences and to get a measure of potential success of the new brands in the chosen categories from the respondents :

Assume yourself in a situation where you need the following products and have gone to your favourite store to purchase these items :

(a) Tooth Paste (b) Washing Powder (c) Headache Pills (Aspirin) (d) Light Bulb (e) Pressure Cooker.

Assume again that on your visit to the store, the shop keeper shows you a new brand in each of the above products. From their appearance, all these new products look as good as the brands you normally purchase. Also all these new products are priced quite similar to the brand you generally purchase.

On seeing these new brands, you are reminded of having seen or heard over the radio advertisements about all these five new brands. The shop-keeper recommends you to try these new brands and assures you that they will work as well as the brands you normally buy. Please think about the situation carefully and give an estimate of your intention to purchase and try the new brand in each of the five product categories.

A ten-point probability scale having "Definitely will not Buy" on one extreme and "Will Definitely Buy" on the other extreme (with in-between points appropriately labelled) was used to get an estimate of the consumer intention to buy and try the new brand. Buying intentions for new brand of each of the five product categories were separately obtained from the respondents on the above indicated scale.

Adequate care was taken to make sure that respondents had fully grasped the situation before providing their estimates. Oral "play-back" of the situation was relied upon for ensuring clearer understanding and all necessary clarifications were provided till the situation was accurately "played back".

Thus, some of the important features of the Buying Situation used, were :

- (a) The new brand was projected to be similar to the present preferred brand of the consumer in appearance, price, etc.
- (b) The company had obtained adequate distribution support for the new brand and the favourite store of the consumer was willing to provide assurance about the performance of the new brand.

- (c) The new brand was well advertised.
- (d) Since actual purchase behaviour in such simulated situation is not possible, buying intentions (BI) were used as a "proxy" measure for actual purchases. A number of previous studies have shown high correlations between buying intentions and actual purchases later.

#### Choice of Predictors

A number of factors can influence the buying intentions of the consumers about the new brands that are introduced in the market. For the purposes of this research, nine such variables were identified for investigation. These were brand loyalty (BL), quality variations among different brands available in the market (QV), certainty of untried brands (CUB), danger of consequences of using untried brands (DC), consumer view of price-quality relationship in a given product category (PQR), consumers' confidence in their abilities to judge quality of different brands (CJQ), complexity in the technology involved in manufacturing the product (TC), extent of alternate brand choices already available in the market (BA) and the amount of usage of the product in the household (RU). Consumers' perceptions on these nine variables were measured for the five chosen product categories and their relationships with purchase intentions about new products were examined. For effectively communicating these complex concepts in a manner easily intelligible to the average housewife in Ahmedabad, who formed the sample for this research, operationalizing these variables posed a

difficult challenge and a great deal of ingenuity had to be exercised in this task. Exhibit I presents details of the manner in which these variables were operationalized in this study. Each of these variables is now discussed to develop the bases for the relationships expected between these variables and the BI. The specific hypotheses about these relationships are then formulated.

1. Brand Loyalty (BL): Brand loyalty is a specific type of behaviour exhibited by consumers in many brand choice decisions. It implies that the consumer develops a preference or habit for a particular brand and purchases it repeatedly, giving little or no consideration to alternate competing brands. It also means that in repeat purchases of a product, the preferred brand tends to get a favoured treatment and receives a proportionately larger share of the repeat purchase behaviour. Raymond Baur<sup>2</sup> suggests that brand loyalty is a means of economizing on the decision effort (by substituting habit for repeated deliberate decisions) and serves as a method of risk reduction by the consumer. It is, thus, clear that stronger loyalty to the currently used brand(s) would inhibit the intention to use a new brand.
2. Quality Variations (QV): Consumers often feel that in some product categories, various brands available in the market are quite similar in quality (any real differences in performance of these brands are

perceived as minimal) while in certain other categories, wide differences in quality of different brands are perceived. Previous research indicates that consumer perceptions about quality variations among brands in a product class do affect their choice behaviour. Lambert<sup>3</sup>, for instance, has reported that consumers who perceived larger variations in quality of available brands generally chose higher priced brands. It, thus, appears that stronger the perceptions about quality variations among brands in a product class, more the resistance on the part of the consumers to buy new brands. Intention to buy new brands and perceived quality variations should, therefore, be negatively associated

3. Certainty of Untried Brands (CUB): Cox<sup>4</sup> has stated that in every buying decision, the consumers attempt to identify their buying goals and then try to match these goals with brand offerings. Uncertainty about the ability of the new brand to satisfy purchase goals will, thus, inhibit consumer purchase intentions towards new brands. Howard and Sheth<sup>5</sup> refer to this variable as "Confidence" and state that confidence is positively related to intention to buy.
4. Danger of Consequences (DC): Danger of consequences, should the new brand fail to meet consumer expectations, was identified by Cox<sup>4</sup> as an important dimension of perceived risk. Higher perceived risk arising out of expected consequences of using an unfamiliar new brand is, thus, an inhibitory factor in consumer's willingness to buy new brands.



5. Price-Quality Relationship (PQR): A number of studies<sup>6</sup> have examined the relationship between price level of a brand and its perceived quality. The general conclusion that emerges is that while there are situations where many information cues are available and price has little or no influence on perceived quality, a positive relationship between price and quality often exists when :

- (a) Consumer uses price as a predictor of quality, probably due to lack of other relevant information cues;
- (b) When consumer's ability to judge quality is poor; and
- (c) When there are wide quality variations between different brands available in the market.

Since the price of the new brand, in the simulated buying situation used in this study, was 'pegged' at the level of the current preferred brand, a stronger perception of higher price being an indicator of better quality would be expected to inhibit the purchase intentions of the consumers in buying the new brand.

6. Confidence to Judge Quality (CJQ): Consumer confidence in his ability to judge quality often differs from one type of product to the other. Factors like physical characteristics of the product, use experience, knowledge and background of the consumer, etc. do influence judgement abilities of the consumers. One would expect that in cases where consumer feels quite confident in judging quality of different brands in a product class, and to the extent

routinized choice making of old brands leads to monotony and boredom, novelty will be sought<sup>7</sup> by the consumer by buying a new brand if in his judgement the new brand offers comparable or better value than the brands presently used. Ogilvy's<sup>8</sup> following advise to marketing practitioners is perhaps based on this novelty seeking behaviour :

Always try to inject news into your headlines, because the consumer is always on the lookout for new products or new ways to use an old product or new improvements in an old product.

7. Technological Complexity (TC): To the extent consumers perceive certain products more difficult to manufacture and require sophisticated technology, their propensity to try new brands may be inhibited by their doubts about the new brand having not been technically perfected. On the other hand, if in their perception the product is simple to make, they would have little doubt about the ability of the new brand to come upto a reasonable standard for lack of adequate technical competence on the part of the manufacturer. Intention to buy a new brand and perception about the technological complexity involved in its manufacture should, therefore, be negatively related.

8. Brand Alternatives (BA): Several studies have investigated the relationship between market structure characteristics and the consumer brand choice behaviour. For instance Farley's<sup>9</sup> study of consumer purchases in 17 diverse product categories concluded that consumers tended to be less loyal towards products where many brands were available. One would, therefore, expect that larger the perceived brand alternatives, greater the willingness to try new brands (unless, the consumers feel that brands already available are far too many<sup>10</sup>, which is not quite true about the chosen categories in the Indian market).
9. Rate of Use (RU): There are contradictory findings about the rate of use of a certain product in the household and the consumers' willingness to try new brands. These contradictions, at least in part, can be attributed to the fact that brand choice behaviour is product-specific rather than a general attribute. In any case, while some studies suggest that heavy users tend to be more brand loyal, others have found no or negative relationships between the two.<sup>12</sup> Since consumers in Ahmedabad are generally known for their "careful" shopping behaviour, heavy users, because of higher expenditures involved, would be generally looking for better values and would probably like to try the new brand, particularly when it is recommended by their favourite shopkeeper. Search for better value, desire for novelty, as also confidence in the favourite store, would more than off-set their conservative behaviour.

### Hypotheses

Based on the foregoing discussion, the following hypotheses were postulated in this research :

- H<sub>1</sub> : The mean measures of the various variables included in this study would be unequal, when compared across different product categories.
- H<sub>2</sub> : Brand loyalty would be negatively associated with buying intentions towards the new brands.
- H<sub>3</sub> : Perceptions about quality variations among different brands in a product category would be negatively associated with buying intentions towards the new brands.
- H<sub>4</sub> : Consumer perceptions about certainty of untried brands would be positively associated with buying intentions towards the new brands.
- H<sub>5</sub> : Perceived danger of consequences arising out of using an unfamiliar new brand would be negatively associated with buying intentions towards the new brands.
- H<sub>6</sub> : Stronger the perceived relationship of high price with better quality in a product category, negative would be the association between price-quality relationship measures and the buying intentions towards the new brands (given that new brands are not higher priced).
- H<sub>7</sub> : Perceived confidence to judge quality of brands in a product category would be positively associated with buying intentions towards new brands.
- H<sub>8</sub> : Perceived technological complexity involved in manufacturing a product would be negatively associated with buying intentions towards new brands.
- H<sub>9</sub> : Consumer perceptions about brand alternatives available in the market would be positively associated with buying intentions towards the new brands.

- H<sub>10</sub> : Rate of use of a product would be positively associated with buying intentions towards the new brands.
- H<sub>11</sub> : Based on the above mentioned bivariate hypotheses, the following multi-variate hypothesis can be stated :

$$BI = \alpha_0 - B_1 (BL) - B_2 (QV) + B_3 (CUB) - \\ B_4 (DC) - B_5 (PQR) + B_6 (CJQ) - \\ B_7 (TC) + B_8 (BA) + B_9 (RU)$$

where  $\alpha_0$  is a constant term, and  $B_i$  represent the respective values of the co-efficients of the independent variables.

#### SAMPLE

The data for the study was collected from a convenience sample of 100 housewives primarily drawn from lower-middle and middle income households in Ahmedabad. The sample was restricted to educated housewives, since measurement instrument was administered only in English language and nature of the variables included required a certain level of intelligence to first comprehend complex (though somewhat simplified) concepts and then provide measures on multiple-point scales. Another consideration in the choice of the sample was that the selected households must be regular users of all the five products included in the study.

Since the primary interest was in determining the strength and direction of relationships between various product category related variables and buying intentions towards new brands, and no generalizations

about the sample households were envisaged, a convenience sample was considered adequate for purposes of this study. The questionnaire was personally administered to each respondent individually by a trained investigator who was present throughout the administration task and ensured that the simulated situation, measurement scales, and the meanings of the variables measured were all clearly understood by the housewife before she provided the various measures.

### FINDINGS

Table I provides means and standard deviations of all the ten variables included in the study for each of the five product categories.

TABLE I  
MEANS AND STANDARD DEVIATIONS\*

<u>VARIABLE**</u>	<u>PRODUCT CATEGORIES</u>				
	<u>TP</u>	<u>WP</u>	<u>HP</u>	<u>LB</u>	<u>PC</u>
Brand Loyalty	4.99 (2.02)	4.17 (1.96)	5.50 (1.91)	3.79 (1.81)	5.53 (1.93)
Quality Variations	4.39 (1.60)	4.69 (1.57)	4.23 (1.87)	3.59 (1.54)	4.55 (1.79)
Certainty of Untried Brand	3.74 (1.93)	3.94 (1.83)	3.12 (1.82)	3.57 (1.84)	3.28 (1.98)
Danger of Consequences	3.87 (2.19)	3.67 (1.82)	3.75 (1.63)	3.34 (1.91)	5.51 (1.75)
Price-Quality Relationship	3.15 (2.0)	3.54 (1.78)	2.94 (1.94)	3.68 (1.85)	4.30 (1.97)
Confidence to Judge Quality	2.32 (1.52)	2.56 (1.80)	3.57 (2.11)	4.07 (2.00)	3.35 (2.12)
Technological Complexity	3.32 (2.02)	2.63 (1.74)	4.46 (1.97)	4.12 (1.87)	4.94 (1.75)
Brand Alternatives	5.36 (1.57)	5.49 (1.50)	4.57 (1.61)	4.17 (1.64)	4.21 (1.75)
Rate of Use	4.20 (0.94)	4.85 (1.10)	2.40 (1.60)	3.81 (1.37)	3.92 (1.49)
Buying Intentions	3.97 (2.81)	4.59 (2.64)	2.00 (2.64)	4.21 (2.75)	2.49 (2.86)

\* Standard deviations are given in brackets

\*\* All variables, except BI, were measured on a seven-point scale.  
BI was measured on a ten-point scale.

To test for unequality of means across product categories, a separate one-way analysis of variance was conducted for each of the variable. Table II presents results of all the ten Anovas.

TABLE II  
ANALYSIS OF VARIANCE

Variables	Mean sum of squares		F <sub>4, 495</sub>
	Between	Within	
1. Brand Loyalty	62.00	4.78	12.90
2. Quality Variations	18.13	2.85	6.38
3. Certainty of Untried Brand	11.32	3.58	3.16
4. Danger of Consequences	124.70	3.53	35.30
5. Price-Quality Relationship	27.73	3.63	7.54
6. Confidence of Judge Quality	52.43	3.74	14.02
7. Technological Complexity	85.45	3.55	24.10
8. Brand Alternatives	39.49	2.64	15.00
9. Rate of Use	80.77	1.87	43.20
10. Buying Intentions	122.50	7.60	16.00

For all the variables, except CUB, the null hypothesis about equality of means across five product categories was rejected at  $\alpha = .01$  level. For CUB, the null hypothesis was rejected at  $\alpha = .025$ .  $H_1$ ,



which postulated that for each of the ten variables the means are not equal across product categories, was, therefore, confirmed.

To test the bi-variate hypotheses,  $H_2$  to  $H_{10}$ , all the nine independent variables were correlated with measures of buying intentions across product categories. Table III presents results of the correlation analysis.

TABLE III  
CORRELATIONS WITH BUYING INTENTIONS

	TP	WP	HP	LB	PC
1. Brand Loyalty	-0.31*	-0.26*	-0.62*	-0.48*	-0.40*
2. Quality Variations	-0.14	N***	-0.40*	-0.22*	-0.22*
3. Certainty of Untried Brand	0.35*	0.20*	0.27*	0.20*	0.25*
4. Danger of Consequences	-0.15	-0.13	-0.26*	-0.16	-0.23*
5. Price-Quality Relationship	N	0.13	-0.14	N	N
6. Confidence to Judge Quality	N	N	0.12	0.16	-0.14
7. Technological Complexity	N	-0.14	-0.14	-0.10	N
8. Brand Alternatives	0.10	0.14	N	0.26*	N
9. Rate of Use	N	0.14	0.17**	0.18**	N

\* Significant at  $\alpha = .05$  or lower.

\*\* Significant at  $\alpha = .10$ .

\*\*\* All correlations below .10 are indicated as N (negligible).

Brand Loyalty was found to be negatively correlated with BI across all product categories and all the correlations were significant at  $\alpha = .05$ .  $H_2$  was, thus, well supported.

Perceptions about quality variations among brands in a product class were also consistently found to be negatively correlated with BI, though only three of the five correlations were statistically significant at  $\alpha = .05$ .  $H_3$  was, thus, only partially supported. Though direction of the relationship was consistent with the hypothesized relationship, correlations in the case of two product categories, namely Washing Powders and Tooth Pastes, did not turn out to be significant.

Consumer perceptions about certainty of untried brands were found to be positively correlated with BI across all product categories and all the correlations were significant at  $\alpha = .05$ .  $H_4$  was, thus, well supported.

Perceptions about danger of consequences arising out of the use of an untried brand were consistently found to be negatively correlated with BI across all product categories, though only two of the five correlations were statistically significant at  $\alpha = .05$ .  $H_5$  was, thus, only partially supported. Though direction of the relationship was consistent with the hypothesized relationship, correlations in the case of only Headache Pills and Pressure Cookers were statistically significant. In these two product categories, uncertainty of untried brands was the highest.

None of the correlations of perceived price-quality relationship with BI turned out to be significant. Also direction of relationship was inconsistent across product categories. This variable, therefore, appears to be a poor predictor of BI towards new brands. Also behaviour of this variable as to its direction of relationship with BI appears to be product category specific, being positive in some cases and negative in others. The perception that higher price connotes better quality, given that new brand is not higher priced, seems to be favourable towards BI for Washing Powders and unfavourable towards BI for Headache Pills. It may be recalled that WP was perceived as a low technology, high certainty of untried brand and high rate-of-use product while HP was perceived as high technology, low certainty of untried brand and low rate-of-use product. These product characteristics probably explain favourability towards BI for Washing Powders and unfavourability towards BI for Headache Pills in terms of price-quality differential relationship with BI. In any case,  $H_6$  did not find support and requires further investigation.

Confidence to judge quality also turned out to be a poor predictor of BI towards new brands. The direction of this variable's relationship with BI also appears to be product-category specific. While the relationship was positive in most cases (as hypothesized), in the case of Pressure Cookers it turned out to be negative. Since consumers perceive Pressure Cookers as high technology products and also consider danger of consequences from using unknown brands as

serious, and additionally perceive wide variations in quality among various brands available, they probably resort to strong loyalty towards selected brands and also use price as a major cue to product quality. Their confidence to judge quality, given that price of the new brand is similar to their presently preferred brand and, thus, is not perceived as having better quality, raises doubts in their minds about the value of the new brand, particularly when purchase of Pressure Cookers is a long-term commitment involving considerable financial outlay. Since none of the correlations were significant,  $H_7$  was not supported. Also because of inconsistency in signs, the behaviour of this variable needs further investigation.

None of the correlations of Technological Complexity variable with BI towards new brands turned out to be statistically significant. However, all correlations had negative signs, which was consistent with  $H_8$ .  $H_8$  was, thus, not adequately supported.

Consistent with  $H_9$ , all the correlations of Brand Alternatives with BI towards new brands were found to be positive, though only one of the correlations (Light Bulbs) was significant at  $\alpha = .05$ .  $H_9$ , thus, found only partial support. It may be recalled that Light Bulbs as a product-category was perceived as having the least brand alternatives available in the market. This variable, thus, found statistical support only when perceived brand alternatives were too few.

Consistent with  $H_{10}$ , rate of use was found to be positively correlated with BI towards new brands for all the five product categories, though only two of the correlations (Headache Pills and Light Bulbs) achieved significance at  $\alpha = .10$ . Thus, this variable did not prove a good predictor of BI and  $H_{10}$  only received partial support. Both the product categories with significant correlations were perceived as having low rate of use. This variable appears to have some value as a predictor of BI in cases where rate of use of a product is perceived as low.

To test  $H_{11}$ , which was a multi-variate hypothesis, multiple regression analyses were conducted for each of the five product categories with BI as a dependent variable and all the other nine variables as predictors. The results of multiple regression analyses are presented in Table IV.

TABLE IV  
RESULTS OF MULTIPLE REGRESSION ANALYSES<sup>†</sup>

	Constant Term	BL	QV	CUB	DC	PQR	CJQ	TC	BA	Ru	R <sup>2</sup> *	F	d.f
Sh. Paste	4.03	-.32 (2.35)		+.41 (2.88)							.17	9.9	2,97
ing Powder	5.27	-.40 (2.03)				+.28 (1.92)					.10	5.2	2,97
ache Pills	4.91	-.83 (7.97)		+.28 (2.39)									
at Bulbs	4.02	-.66 (4.96)								+.36 (2.63)	.46	27.0	3,96
asure Cooker	5.4	-.54 (3.86)		+.20 (1.48)			-.18 (1.42)		+.37 (2.56)	+.30 (1.66)	.29	13.0	3,96
											.20	8.0	3,96

† Only those variables which made significant contribution to the explanatory power of the model are reported.  
\* All R<sup>2</sup> are significant at  $\alpha = .01$

For Tooth Paste, brand loyalty and certainty of untried brand were the significant predictors of BI, and together explained 17% of the variance.  $R^2$  was significant at  $\alpha = .01$ . As expected, BL inhibited BI towards new brands while CUB proved a positive factor.

For Washing Powder, brand loyalty and perceived price-quality relationship were the only significant predictors of BI, and together explained 10% of the variance.  $R^2$  was significant at  $\alpha = .01$ . BL inhibited BI towards new brands while PQR proved a positive factor.

For Headache Pills, brand loyalty, certainty of untried brand, and rate of use were the three significant predictors of BI and together explained 46% of the variance.  $R^2$  was significant at  $\alpha = .01$ . BL was an inhibitor while CUB and RU were positive factors in consumer intentions towards purchasing new brands of Headache Pills. It is significant to note that heavy users of Headache Pills were quite interested in trying new brands of analgesics, probably to find a better solution to their problem.

In the case of Light Bulbs, brand loyalty, perceived brand alternatives, and rate of use turned out to be the three significant predictors of BI and together explained 29% of the variance.  $R^2$  was significant at  $\alpha = .01$ . BL was an inhibitor while BA and RU proved favourable factors in BI towards new brands of Light Bulbs. Here again, heavy users were quite interested in trying new brands.

Finally, for Pressure Cookers, brand loyalty, certainty of untried brand and consumers' perceived ability to judge quality were the three significant predictors of BI and together explained 20% of the variance.  $R^2$  was significant at  $\alpha = .01$ . BL and CJQ were inhibiting factors while CUB was a favourable factor in consumer willingness to try new brands.

### CONCLUSIONS AND RECOMMENDATIONS

The findings of this study clearly suggest that role and importance of various product-category related variables as predictors of new product success do differ across product categories. It is, therefore, necessary that marketing managers take into account the behaviour of these variables while planning their new product offerings. The following are the major conclusions that emerge from the results of this study :

1. Measures of behavioural intentions in this study indicated that while new brands of products like Washing Powders, Light Bulbs and even Tooth Pastes may find easy acceptance among consumers, the marketers have heavy odds against them in the case of products like Headache Pills and Pressure Cookers. The major common characteristics of these difficult-to-introduce products are a strong consumer loyalty towards existing brands, low certainty of untried brands in these product categories, high perceived danger of consequences in the event of new product failure, and

high technological complexity involved in their manufacture. Whenever a product category is characterized by these factors, marketing managements should recognize the inherent difficulties of introducing new brands in the market and take these factors into account in potential determination and marketing strategy formulation for the new product.

2. In general, stronger loyalty to existing preferred brands, perceived wide quality variations among different brands in the market, high danger of consequences arising out of new product failure and greater uncertainty of untried brands appear to be the major barriers to initial success of a new brand in any product category. Of course, danger of consequences and perceived uncertainty of untried brands are highly inter-correlated. Also, perceived risk as well as perceptions of wide quality variations among existing brands directly contribute to strengthening of loyalty to certain chosen brands. In product categories when such perceptions are strong, marketer will have to resort to multi-pronged attack aimed at projecting good quality image, risk reduction through credible information, and attempts at weakening loyalty to existing brands through appropriate steps like sampling, demonstrations, trade support, deals and other consumer promotions.
3. Perceived relationship of higher price with better quality can prove a favourable factor in cases where product, in the consumer view, involves high technology, high risk and low rate of use.



In such cases, marketer can exercise some freedom in pricing the new product somewhat higher for comparable quality. If, however, the product category is perceived as involving low technology, low risk and high usage, such pricing freedom might be limited and pricing the new product at the existing level may be a better strategy. In any case, perceptions about price-quality relationship do not appear to be very significant in predicting new product success.

4. Interestingly, consumer confidence to judge quality appears to be the lowest in case of most frequently purchased and every-day use items like Tooth Paste and Washing Powders. A check on the data regarding characteristics of these products reveals that these are perceived as products with high quality variations among brands, easy to manufacture, and having a wide range of brands available in the market. Faced by many alternatives with wide variations in quality, consumers probably resort to routinized decision making in brand choice but continue to feel unsure of the choices actually made. Simplification of choice decisions becomes a mode of dealing with brand "noises" in the market place. In any case, this predictor is not strongly correlated with buying intentions towards new brands. Only in the case of Pressure Cookers, CJK (Table IV) turned out to be a significant predictor with negative association with BI.

Stronger confidence to judge quality is confounded with perceptions about price being the indicator of quality and if the new brand is not higher priced, buying intentions become weak in view of long-term financial commitment involved and doubts about the quality (based on price cues) exercising dominance over own ability to judge quality.

As discussed earlier, the direction of relationship between CJQ and BI is product specific and each case has to be investigated to find the nature of relationship between the two.

5. If in a certain product category, consumers generally feel that brand choices available are somewhat limited, such a feeling can become a favourable factor in the purchase intentions of the consumers towards the new brands.
6. In the case of low consumption items, like Headache Pills and Light Bulbs, heavy users appear to be more willing to try new brands than light users. The relationship appears similar in more frequently used items also but definite statements cannot be made in view of the results not being statistically significant.

To our knowledge, the relationships of these variables with buying intentions towards new brands have been investigated for the first time among Indian consumers. This research utilized limited product categories as well as a small consumer sample.

The direction of various relationships turned out to be quite consistent with the hypotheses, though strength of many relationships was weak. This pilot study has given some direction to this type of research and future studies can hopefully improve upon the results so that more definitive statements about the relationships can be made. Coverage of more and different product categories, use of larger and better selected samples, and improvements in variable operationalizations should all help in getting better results. Companies would find it advantageous to get some measures of these variables regarding the product categories of specific interest to them so that their new product choices, as also the introductory marketing strategies for them, are based on deeper insights into the behaviour of these variables which may hinder or help the chances of success of the new products.

Exhibit I

Operationalization of Independent Variables

The perceptual measures of the 9 independent variables were obtained from the consumers by firstly explaining the concept being measured through a descriptive statement and then getting a measure of the concept on a seven-point-scale. Separate ratings for each of the five product categories were obtained. The statements used to explain the concepts and rating scales used for measuring them are outlined below :

1. BRAND LOYALTY\*

(Measured on 7-point-scale from "Not at all particular in buying a specific brand" to "Extremely particular")

As you know, for some product categories, consumers are very particular about using only a certain brand and repeatedly purchase the same brand while in some other product categories, consumers are not as particular about any single brand and buy many different brands. About the following product categories, please indicate the extent to which you are particular in buying only a certain specific brand.

2. QUALITY VARIATIONS

(Measured on 7-point-scale from "Not at all different in quality" to "Extremely different in quality")

It has been found that for some product categories, consumers feel that quality differences among various brands available in the market are very small and most brands are almost similar in quality, while in

---

\* In the actual questionnaire used, titles of these variables were not included.

some other product categories, consumers do find substantial differences in the quality of the various brands available in the market. In your opinion, what is the extent of differences in the quality of various brands available in the market in the following five product categories.

### 3. CERTAINTY OF UNTRIED BRANDS

(Measured on 7-point-scale from "Not at all certain" to "Extremely certain")

It has been found that for some product categories, consumers generally feel that new brands of the product are as good or even better than the old well-established brands, while for some other product categories, consumers feel that new brands are often inferior and do not work as well as the old well-established brands. For the following product categories, indicate the extent to which you feel sure or certain that new brands that have come in the market are at least as good as the old well-established brands.

### 4. DANGER OF CONSEQUENCES

(Measured on 7-point-scale from "Not at all serious" to "Extremely serious")

In some product categories, the consumers feel that if a new brand of the product does not work as well as expected, there is a high risk because of the seriousness of the consequences involved in using a bad product. However, in certain other product categories, the risk involved in using a bad quality new brand may be very minor or none at all. In your opinion, how serious are the consequences of using a new brand which does not work as well as expected for the following product categories.

### 5. PRICE QUALITY RELATIONSHIP

(Measured on 7-point-scale from "No indication of quality at all" to "Complete indication")

For some product categories, consumers feel that buying higher priced brands means getting better quality.

However, for certain other product categories, higher priced brands may not necessarily mean better quality. For the following product categories, indicate the extent to which you feel that the price of the brand is a good indicator of the quality of the product.

#### 6. CONFIDENCE TO JUDGE QUALITY

(Measured on 7-point-scale from "Not at all difficult to judge" to "Extremely difficult to judge")

It has been found that for some product categories, consumers consider themselves good judges of quality and can easily find out whether a certain brand of a product is good or bad. However, there are other product categories where consumers feel that it is very difficult for them to make judgement on quality differences among various brands of the product. For the following product categories, indicate the extent to which you think it is difficult for you to find out quality differences in the various brands.

#### 7. TECHNOLOGICAL COMPLEXITY

(Measured on 7-point-scale from "Not at all difficult to manufacture" to "Extremely difficult")

In some product categories, the company may require substantial technical skills in manufacturing a good quality product, while for other product categories, company may not require much technical skill in manufacturing a good quality product and it may be quite easy to manufacture. For the following product categories, indicate the extent to which you think it is difficult to manufacture these products because of technical skills required in manufacturing a good quality product.

#### 8. BRAND ALTERNATIVES

(Measured on 7-point-scale from "Very limited choice" to "Very wide choice")

In some product categories, consumers have a very wide brand choice since there are a large number of brands available in the market. However, in certain other product categories, the brands available in the market are so few that the consumers have a very limited choice of brands. For the following product categories, indicate the extent to which you feel that consumers have limited or wide choice of brands in the market.

#### 9. RATE OF USE

(Measured on 7-point-scale from "Extremely small" to "Very large")

It has been found that there are wide differences in the quantities of a product used by different households. For instance, you may be using in your household on a per head basis more sugar than your neighbour and your neighbour may be using more cooking oil than your household. For the following product categories, indicate the relative quantities you use in your household.

## REFERENCES

- 1 See Martin Fishbein (Ed.), Readings in Attitude Theory and Measurement, John Wiley & Sons, 1967, pp. 487-90. John A. Howard & Jagdish N. Sheth, The Theory of Buyer Behaviour, John Wiley & Sons, 1969, pp. 132-39. J.N. Sheth, Models of Buyer Behaviour : Conceptual, Quantitative and Empirical, Harper & Row, 1974, pp. 247-48; Fleming Hansen, Consumer Choice Behaviour : A Cognitive Theory, Free Press, 1972, pp. 299-300.
- 2 Raymond A. Baur, "Consumer Behaviour as Risk Taking," in Donald F. Cox (Ed.), Risk Taking and Information Handling in Consumer Behaviour, Harvard University Press, 1967, pp. 24-25.
- 3 Zarrel V. Lambert, "Price Choice Behavior", *Journal of Marketing Research*, Feb. 1972, p. 38.
- 4 Donald F. Cox, op. cit., p. 6
- 5 Howard & Sheth, op. cit., p. 35
- 6 See James F. Engel, David T. Kollat and Roger D. Blackwell, Consumer Behavior, Holt, Rinehart and Winston, 2nd Ed., 1973, pp. 251-52.
- 7 See M. Venkatesan, "Cognitive Consistency and Novelty Seeking," in Scott Ward and T.S. Robertson, Consumer Behavior : Theoretical Sources, Prentice Hall, 1973, pp. 354-84.
- 8 D. Ogilvy, Confessions of an Advertising Man, Atheneum Publishers, 1963, p. 13.
- 9 John U. Farley, "Why Does Brand Loyalty Vary Over Products?", *Journal of Marketing Research*, November 1964, pp. 9-14.
- 10 A laboratory experiment found that the greater the number of alternatives available, the greater the concentration on the most frequently chosen alternative. See Lee K. Anderson, James R. Taylor and Robert J. Holloway, "The Consumer and His Alternatives: An Experimental Approach," *Journal of Marketing Research*, Vol. 3, February 1966, pp. 62-67.
- 11 See R.M. Cunningham, "Brand Loyalty - What, Where, How Much?", *Harvard Business Review*, January-Feb., 1956 and W.F. Massy, R.E. Frank and T. Lodahl, Purchasing Behaviour and Personal Attributes, University of Pennsylvania Press, 1968.
- 12 See A.A. Kuehn, "Consumer Brand Choice as a Learning Process," *Journal of Advertising Research*, Dec. 1962 and G.S. Day, "A Two-Dimensional Concept of Brand Loyalty," *Journal of Advertising Research*, Sept. 1969.