

# Does Higher Price Signal Better Quality?

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## Executive Summary

With differentiated products, consumers may not be aware of the quality and features of the products they buy. They are often unable to make a quality comparison among various brands. Moreover, they often gather little information even when the financial commitment involved is substantial. A popular belief is: 'You get what you pay for.' Therefore, consumers tend to believe that high price is an indicator of better quality. Although many studies conducted on price-quality relationship have supported this belief, there are other studies that have found the relationship to be product-specific and weak in general.

This study seeks to examine the relationship between the price of the product and the buyers' perception of quality in respect of durable, semi-durable, and non-durable products in the Indian context. Three products were selected for the purpose of the study: colour television as a durable product; T-shirt as a semi-durable product; and toothpaste as a non-durable product. Data were collected from the primary sources with the help of a non-disguised, pre-structured questionnaire.

In particular, the authors sought to explore answer to two questions: (1) Does high price have a positive influence on the buyers' perception of product quality? (2) Is there a significant difference in the buyers' perception of the quality of products falling in different price ranges?

The major findings of the study are as follows:

- For a durable product, like colour television, setting the price too low will negatively affect the quality image of the product and the consumer would be reluctant to buy a low-priced brand as it might lower his image in the society. Pricing it reasonably high will give the product a high-quality image. However, the marketer should take care of the competitors' pricing policies and the buyers' purchasing power.
- The target market for T-shirt in India consists mainly of the young, especially the college students, having limited purchasing power. They prefer local, or little known, but trendy brands of T-shirts rather than expensive ones. Also, they would opt for a T-shirt of a reputed brand if it is within their purchasing power. However, reducing the price of the T-shirt may dilute its brand image. Hence, the marketer of the T-shirt should think of market segmentation strategies and select the appropriate target segment(s) and price the product accordingly.
- For toothpaste, brand reputation is a critical factor and the marketer should price the product according to the reputation enjoyed by the brand. However, the price-quality relationship for this product has been found to be weak in comparison to colour television and T-shirt. The marketer, therefore, should be wary of charging a very low price as it would create an inferior quality image in the mind of the buyer.

The findings have important marketing implications for pricing, market segmentation, target marketing, and product positioning. ❧

## KEY WORDS

**Product Quality**

**Perceived Quality**

**Purchase Decision**

**Price-quality Relationship**

**P**ricing is an important decision area of marketing. It is the only element of the marketing mix that generates revenue; all the other elements involve cost. In spite of its importance, however, pricing has been an area of little theoretical understanding and even less operating precision (Shapiro, 1968).

Price is also one of the most important marketplace cues. The all-pervasive influence of price is due, in part, to the fact that the price cue is present in all purchase situations and, at a minimum, represents to all consumers, the amount of economic outlay that must be sacrificed in order to engage in a given purchase transaction (Lichtenstein, Ridgway and Netemeyer, 1993). Although it is believed that price serves as an indicator of quality, there exists no general price-perceived quality relationship. In fact, price becomes a less important indicator of quality in the presence of other product quality cues such as brand name or store image (Erickson and Johansson, 1985). The use of price as an indicator of quality depends on the following (Zeithaml, 1988):

- the availability of other cues to quality
- the price variation within a product class
- the product quality variation within a product category
- the level of consumer awareness about price
- the consumers' ability to distinguish quality variation in a product group.

It is in this context that this study seeks to examine the influence of price of the product on the buyers' perception of quality in respect of durable, semi-durable, and non-durable products. It also seeks to ascertain whether this cue has a different effect on the three types of products.

## **IS PRICE AN INDEX OF QUALITY?**

Price, the extrinsic cue, has received the most research attention out of all the intrinsic and extrinsic cues. Price is identified as an important index of quality (Scitovsky, 1945). In his view, the word 'cheap' usually means inferior quality. In the United States, the word 'expensive' is in the process of losing its original meaning and becoming a synonym for superior quality.

In one of the pioneering studies on price-perceived quality relationship, Leavitt (1954) observed that the buyers tended to have doubts when they chose the lower-priced brands than in the case of higher-priced brands. He concluded that a higher price might sometimes increase the buyers' readiness to buy. Price would be

an indicator of quality for commodities such as textile products where quality cannot be ascertained by sight and where, owing to changes in technology and fashion, past experience was of little use (Gabor and Granger, 1966).

Price played an important role in indicating quality of many products for four reasons (Shapiro, 1968):

- The ease of measurement since price is a concrete, measurable variable.
- The effort and satisfaction, i.e., consumer satisfaction with a product depends on the amount of effort spent by the consumer in acquiring the product and an expenditure of money may be viewed by the consumer as similar to an expenditure of effort.
- The snob appeal.
- The reduction of the perceived risk of buying a product of poorer quality.

However, Shapiro warned marketers that the concept of price as an indicator of quality should not be applied indiscriminately in making pricing decisions.

McConnell (1968) examined the relationship between price and the quality of beer which is a frequently-purchased consumer product. He found that the buyers used price as an indicator of product quality. With a homogeneous product and various unknown brand names, buyers perceived the highest-priced brand to be of better quality than the other two brands. He concluded that price, without any other cue, was an effective measure for brand evaluation.

In an experimental study, Gardener (1971) explored the degree of price-quality relationship for three products: toothpaste, a man's shirt, and a suit. He concluded that while price did not affect the perception of product quality in case of all the three products, whether branded or not, it did affect the willingness to buy a shirt. Consumer choices regarding price might be influenced by the following product-specific factors (Lambert, 1970):

- buyer's confidence in the predictive value of price
- perceived consequences of making a poor brand choice
- amount of brand-to-brand variation in product quality
- social importance of the product
- difficulty encountered in making quality judgments
- ability to assess product quality.

In another study, Lambert (1972) found that in all the sample product categories, the buyers of the high-

priced product had significantly more low-priced alternatives.

Shapiro (1973) sought to determine whether price would act as a communicator of quality and ascertain the reasons for consumers judging the product quality by price by determining the correlates of price reliance. It was found that, for most of the dimensions such as quality, durability, looks or fragrance, the number of buyers ranking the high-priced product better than the low-priced product was greater than the number of buyers ranking the low-priced product better than the high-priced product. But, a substantial number of buyers rated the products as equal. The study revealed that price was a communicator of quality and the associated attributes in the marketplace when the product was actually present and the setting relatively realistic. On the other hand, the data showed that price was not a strong communicator of quality.

Furthermore, price reliance appears to be a generalized mental construct — an attitude or trait, i.e., some people seem to be price-reliant regardless of the product under consideration. Interestingly, the study of the relationship between demographics and generalized price reliance shows price reliance to be correlated with older age and lower education but not with income. Price reliance depends upon the consumer's trust in the competence and honesty of the price-maker, perceived risk in a purchase situation, self-confidence of the customers, snobbery among them, importance of shopping speed, and the perceived quality difference among the brands. Price and quality were linked together in the mind of the consumer (Shivdasani, 1972).

Price plays different roles in the purchase-decision process. In traditional economic theory, since higher price has a negative impact on the consumer's budget, price has a negative influence on his buying decision. However, from a behavioural perspective, price may be perceived as a product quality cue (Monroe and Krishnan, 1988). Therefore, price may be viewed either as an indicator of sacrifice, or as a quality cue, or both. Rao and Monroe (1988) found that price increase might play a positive or a negative role in the purchase-decision process.

People are more likely to use price as an indicator of quality for expensive products. As price increases, the risk of an incorrect decision increases and the buyer is often less familiar with the product because of the infrequency of purchase. In such situations, simple learned

heuristics, based on folk wisdom, such as 'you get what you pay for,' are likely to be used (Rao and Monroe, 1989). Gerstner (1985) found that the relationship between quality and price was product-specific and weak in general.

In the Indian scene, Mehta, Parasuraman and AmbarishKumar (1972) conducted an experimental study to find out the relationship between quality and price and to examine the consumers' brand choice with respect to ready-made shirts. The study indicated that a majority of the buyers perceived some quality difference between the two shirts which were identical in all respects except for the brand names. The study revealed that the name of a well-known brand induced the consumers to be favourably disposed towards that brand in terms of quality and price perception and they were willing to pay a higher price for the well-known brand.

Tellis and Gaeth (1990) identified three choice strategies that the consumer might use under uncertainty when the price of the product was better known than its quality: 'best-value,' 'price-seeking,' and 'price-aversion.' While the best value strategy involves choosing the brand with the least cost in terms of price and the expected quality, price-seeking is selecting the highest-priced brand to maximize the expected quality, and price-aversion refers to buying the lowest-priced brand to minimize the immediate cost. The strategy that a consumer would use depends upon the information on quality, importance of quality, and the price-quality correlation.

Erickson and Johansson (1985) investigated the multi-faceted role of price in product evaluation with an empirical analysis of beliefs, attitudes, and intention of buyers regarding various automobile brands. Three interesting conclusions were drawn from the empirical results:

- The price-quality relationship operates in a reciprocal manner. A high-priced car is perceived to possess (unwarranted) high quality. A high-quality car is, likewise, perceived to be high-priced than it actually is.
- As a consequence of the price-quality relationship, perceived price is a good proxy variable for perceived quality. However, price was found to have a positive but indirect effect on intention, i.e., price affects intention positively through its positive effect on quality perception, through the positive effect of quality perception on attitude, and through the

positive effect of attitude on intention.

- Price perception has an independent and negative effect on the probability of purchasing a car — a budget constraint.

Lichtenstein and Burton (1989) found that consumers perceived objective price-quality relationship with only a modest degree of accuracy and that the price-quality perception was more accurate for non-durable products than for durable products. Consumers use price as a surrogate indicator of quality if they lack product information or confidence in their own ability to make the choice on other grounds (Schiffman and Kanuk, 1996). Moreover, when the consumer is familiar with a brand or has experience with a product, price has less influence on product selection.

Rao and Monroe (1989) integrated the previous research on the influence of price, brand name, and/or store name on buyers' evaluation of product quality. They found that, for consumer products, the relationship between price and perceived quality and between brand name and perceived quality was positive and statistically significant, and the effect of store name on perceived quality was small and not statistically significant. Moreover, though statistically significant, multi-cue studies generated slightly larger effect than single-cue studies.

Monroe and Krishnan's (1988) meta-analysis revealed a more positive effect for price when brand information was present than when it was not and that brand name enhanced the influence of price on quality perception. Andrews and Valenzi (1991) examined the individual and the combined effect of price, brand name, and store name on the quality perception for two products: sweaters and shoes. Render and O'Conner (1976) conducted a similar study on shirts, desk radio, and after-shave lotion. Both the studies revealed that price produced a stronger effect on the quality perception than either brand or store information. Another study conducted by Gardener (1971) on men's socks, electric toothbrush, tape recorder, and men's suit, revealed a moderate price-quality relationship when price was the only available information cue. However, when other information cues (product, brand, and limited product information) were introduced, this relationship was replaced by a brand-quality relationship.

Dawar and Parker (1994) found that brand name was universally used more than price and physical appearance, which were, in turn, used more than the

retailer's reputation as signals of product quality. The study also revealed that the more one uses the brand name as a signal, the more one uses price, physical appearance, and retailer reputation as signals of product quality. Dodds, Monroe and Grewal (1991) studied the relationship between the individual and the combined effects of price, brand, and store information on the buyers' perception of product quality and value as well as on their willingness to buy. They found that when price was the only extrinsic cue available, consumers perceived quality to be positively related to price.

## PRICING AND INDIAN BUYERS' PERCEPTION OF QUALITY

In this paper, we use Indian data to answer the following two questions:

- Does high price have a positive influence on the buyers' perception of product quality?
- Is there a significant difference in the buyers' perception of the quality of products that fall in different price ranges?

We analysed three products—colour television, representing the durable category; T-shirt, the semi-durable category; and toothpaste, the non-durable category (see Box for Research Design and Methodology). We elicited information from consumers on these three products through a questionnaire.

The questionnaire contained statements relating to the factors that the respondents might have considered while buying the product and their general opinion regarding the quality of that product. The statements were classified into factors on the basis of opinions of

### Box: Research Design and Methodology

For the purpose of the study, three products were selected to represent the three product categories — durable, semi-durable, and non-durable. Colour television represented the durable product category; T-shirt the semi-durable category; and toothpaste the non-durable product category. A 'household' was considered as a sampling unit and the non-probability, convenience sampling method was adopted to select the sample items.

The sample chosen consisted of 525 respondents for the three products taken together (179 respondents for colour television, 175 for T-shirt, and 171 for toothpaste). The respondents represented different age-groups, educational levels, and income-groups. They were selected from the metropolitan city of Delhi and its satellite towns — Faridabad, Ghaziabad, Noida, and Gurgaon. The data were collected through field survey with the help of three non-disguised, pre-structured questionnaires during December 2000 to May 2001.

The data were analysed with the help of the SPSS package. The statistical tools used for data analysis included tabulation and frequency distribution, mean, standard deviation, correlation, paired t-test, and the multiple regression analysis.

five judges who were appointed for this purpose. The seven factors identified were — brand reputation, price, features, promotion, brand loyalty, store reputation, and store loyalty. The second set of factors consisted of the buyers’ perception of the quality-revealing ability of five out of the seven factors, i.e., brand reputation, price, features, promotion, and store reputation.

### Factors Considered while Buying the Product

In order to determine the importance of the seven factors for the respondents while buying the three products — colour television, T-shirt, and toothpaste — the mean, percentage mean, and standard deviation were computed. On the basis of their mean values, the factors were ranked. The results are presented in Table 1.

Consumers considered price as an important factor for purchasing the product. This was particularly true in the case of consumer durables like colour television as well as for semi-durable products like a T-shirt. While, for colour television, price bagged the first rank, in the case of T-shirt, it was ranked second. The buyers paid less attention to price while purchasing toothpaste and, hence, it managed to secure the fifth rank among the seven factors. The possible reason for this phenomenon is that people habitually buy a particular brand of toothpaste and do not pay much attention to the price.

### Quality Perception of the Influencing Factors

In an attempt to compare the quality perception of the factors with regard to the three products, the mean scores and the corresponding ranks were computed. The results are presented in Table 2.

It is noticed from Table 2 that buyers, to a considerable extent, judged the quality of the product on the basis of brand reputation. This was true for all the three products. Therefore, this factor secured the second rank in the case of both colour television and T-shirt. However, in the case of toothpaste, this factor bagged the first

**Table 1: Factors Considered while Buying the Product**

Factors	Colour Television N=179		T-shirt N=175		Toothpaste N=171	
	Mean	Rank	Mean	Rank	Mean	Rank
Brand reputation	3.28	III	3.04	IV	3.07	VI
Price	3.75	I	3.32	II	3.15	V
Product features	3.74	II	3.73	I	3.52	II
Promotion	2.77	VII	2.54	VII	3.19	IV
Brand loyalty	3.27	IV	3.06	III	3.55	I
Store reputation	3.10	V	2.84	VI	2.79	VII
Store loyalty	3.00	VI	2.88	V	3.51	III

**Table 2: Ranking Factors in Terms of Quality Perception**

Factors	Colour Television N=179		T-shirt N=175		Toothpaste N=171	
	Mean	Rank	Mean	Rank	Mean	Rank
Brand reputation	3.50	II	3.37	II	3.36	I
Price	3.32	III	3.32	III	3.08	III
Product features	3.74	I	3.82	I	3.14	II
Promotion	2.74	V	2.80	V	2.68	IV
Store reputation	3.16	IV	3.31	IV	2.66	V

rank. Buyers gave maximum weight to product features but price was ranked third among the five factors, for all the three products. This suggests that buyers generally believe that the higher the price of the product, the superior will be its quality.

### Price-Quality Relationship: Durable Product

The findings reported in Tables 1 and 2 reveal that price is considered to be an important factor by the respondents in product evaluation. As reported in Table 1, price is considered to be the most important factor while buying a colour television and people go for high-priced brands with the belief that it would ensure value for their money. It is also clear from Table 2 that people perceive that higher the price of colour television, the superior would be its quality and, hence, price managed to secure the third rank in terms of its association with quality.

### Perceived Quality of Colour Television Falling in Different Price Ranges

In order to ascertain whether the buyers’ perception of quality was affected by price of the colour television, the respondents were asked to judge the quality of a regular 21-inch colour television on the basis of five price ranges. Their responses are summarized in Table 3. Only 7 out of 179 respondents (3.9%) believed that a low-priced colour television set would be of high quality, i.e., if it is priced ‘up to Rs 10,000.’

On the other hand, for the television falling in the highest price range of ‘Rs 25,001 and above,’ 142 respondents (79.3%) opined that it would be of very high quality and 21 respondents (11.7%) believed that it would be of high quality. Thus, it appears that the higher the price of colour television, the higher will be the consumers’ perception of its quality.

The mean, percentage mean, and standard deviation for each of the price ranges are presented in Table 4. It indicates that the higher the price range, higher is the perception of quality of the colour television. The first rank was secured by the colour televisions falling

**Table 3: Price Range and Quality Ratings of Colour Television**

Price Range	Quality		Number(%) of Respondents			
	Very Low	Low	Average	High	Very High	Total
Up to Rs 10,000	57(31.8)	54(30.2)	61(34.1)	07(03.9)	00(00.0)	179(100)
Rs 10,001-Rs 15,000	04(02.2)	41(22.9)	93(52.0)	40(22.3)	01(00.6)	179(100)
Rs 15,001-Rs 20,000	02(01.1)	03(01.7)	73(40.8)	88(49.2)	13(07.3)	179(100)
Rs 20,001-Rs 25,000	00(00.0)	02(01.1)	15(08.4)	88(49.2)	74(41.3)	179(100)
Rs 25,001 and above	01(00.6)	00(00.0)	15(08.4)	21(11.7)	142(79.3)	179(100)

**Table 4: Ranking Price Ranges in Terms of Perceived Quality of Colour Television**

Price Range	Mean	Percentage Mean	Standard Deviation	Rank
Rs 25,001 and above	4.69	93.8	0.67	I
Rs 20,001-Rs 25,000	4.31	86.2	0.67	II
Rs 15,001-Rs 20,000	3.60	72.0	0.70	III
Rs 10,001-Rs 15,000	2.96	59.2	0.75	IV
up to Rs 10,000	2.10	42.0	0.90	V

in the price range of 'Rs 25,001 and above' while the lowest price range of 'up to Rs 10,000' secured the fifth and the last rank.

The information contained in Table 4 was further statistically analysed to ascertain if there was any significant difference in the perceived quality of colour televisions falling in different price ranges. In order to test this, all the price ranges were classified into three groups on the basis of their mean scores:

- Price-group A: 'Rs 25,001 and above.'
- Price-group B: 'Rs 20,001 to Rs 25,000' and 'Rs 15,001 to Rs 20,000.'
- Price-group C: 'Rs 10,001 to Rs 15,000' and 'up to Rs 10,000.'

The three price-groups were put to paired t-test, the results of which are presented in Table 5. The t-values were found to be significant at 0.01 level of significance in all the three cases. Hence, we may conclude that the perceived quality of the colour televisions falling in different price ranges differs significantly.

A multiple regression was conducted to determine why the respondents considered price while purchasing

**Table 5: Comparison of Price Groups of Colour Television**

Price Group	Mean	Standard Deviation	t-value
A	2.53	0.75	25.71**
B	3.95	0.62	
A	2.53	0.75	28.31**
C	4.69	0.67	
B	3.95	0.62	16.62**
C	4.69	0.67	

\*\*Significant at 0.01 level.

a colour television. The results of this test are presented in Table 6. It reveals that while the quality perception attached with price and store prompted the buyer to consider the price while buying a television, his income also played a significant role.

The correlations between three factors and price were also found to be statistically significant. The effect of the respondents' perception about the price — 'the higher the price of the television, the superior will be its quality' — played the most important role in the consideration of the factor 'price' while buying television contributing up to 29 per cent of its total possible impact.

Thus, the consumers considered price as an important criteria in judging the quality of colour television. They perceived higher-priced televisions to be of high quality. Significant differences relating to the perception of the quality of colour televisions falling in different price ranges were also found. Thus, we may accept the fact that high price has a positive influence on buyers' perception of product quality.

**Price-Quality Relationship: Semi-durable Product**

The T-shirt market is flooded with a host of brands — local, national, and multinational, besides the unbranded ones. Even among the branded T-shirts, the buyer is faced with the problem of making a distinction between a genuine and a fake brand. Most of the reputed brands are sold through the company outlets or exclusive showrooms. Hence, it becomes difficult to distinguish bet-

**Table 6: Variables Determining Price of Colour Television (Multiple Regression)**

Independent Variable	Dependent Variable: Price		
	Beta	Simple r	t-value
Quality perception of price	0.29**	0.37**	3.93
Quality perception of store	0.23**	0.34**	3.05
Income	0.19**	0.16*	2.76

Multiple R = 0.47; R<sup>2</sup> = 0.22.

\* Significant at 0.05 level.

\*\* Significant at 0.01 level.

ween brand reputation and store reputation. Moreover, T-shirts are found in a very wide price range of, say, Rs 50 to Rs 2,500, and predicting the quality of a particular T-shirt available at a particular price becomes all the more difficult for the buyer.

From the data given in Tables 1 and 2, we can examine the influence of price on the buyers' perception of quality of a T-shirt. It is evident from the tables that price was an important factor for the respondents while purchasing a T-shirt and in judging its quality. Price got the second rank among the factors considered by the respondents while purchasing a T-shirt and the third rank in terms of its quality-revealing ability.

### Perceived Quality of T-shirt Falling in Different Price Ranges

In order to ascertain whether the buyers' perception of product quality is affected by the price of the T-shirt, nine price-classes were selected, starting from 'below Rs 50' to 'Rs 1,201 and above,' and the respondents were asked to rate the quality of a T-shirt falling in these nine price ranges. The responses are presented in Table 7.

Table 7 reveals that the lower the price, the lower is the quality rating given by the respondents. A total of 133 respondents (76%) were of the opinion that a T-shirt falling in the price range of 'below Rs 50' would be of 'very low' quality and another 34 (19.4%) said that it would be of 'low' quality. On the other hand, for the last four price ranges, i.e., the T-shirts priced above Rs 451, not a single respondent gave a 'low' or a 'very low' quality-rating. Thus, the respondents believed that the higher the price of the T-shirt, the superior would be its quality.

Furthermore, the mean, percentage mean, and standard deviation for each of the price ranges were computed and then these price ranges were ranked on the basis of their mean scores. The results are presented in Table 8.

**Table 7: Price Ranges and Quality Ratings of T-shirt**

Price Range	Quality					
	Number and Percentage of Respondents					
	Very Low	Low	Average	High	Very High	Total
Below Rs 50	133(76.0)	34(19.4)	08(04.6)	00(00.0)	00(00.0)	175(100)
Rs 51 to Rs 100	85(48.6)	67(38.3)	23(13.1)	00(00.0)	00(00.0)	175(100)
Rs 101 to Rs 200	16(09.1)	86(49.1)	68(38.9)	05(02.9)	00(00.0)	175(100)
Rs 201 to Rs 300	04(02.3)	22(12.6)	125(71.4)	24(13.7)	00(00.0)	175(100)
Rs 301 to Rs 450	01(00.6)	03(01.7)	85(48.6)	81(46.3)	05(02.9)	175(100)
Rs 451 to Rs 600	00(00.0)	00(00.0)	31(71.7)	111(63.4)	33(18.9)	175(100)
Rs 601 to Rs 900	00(00.0)	00(00.0)	09(05.1)	88(50.3)	78(44.6)	175(100)
Rs 901 to Rs 1,200	00(00.0)	00(00.0)	08(04.6)	34(19.4)	133(76.0)	175(100)
Rs 1,201 and above	00(00.0)	00(00.0)	09(05.1)	19(10.9)	147(84.0)	175(100)

Table 8 shows that while the T-shirt falling in the highest range of 'Rs 1,201 and above' secured the first rank with the highest mean score, the lowest price range of 'below Rs 50' got the last rank with the lowest mean score.

For a further analysis, price ranges in Table 8 were classified into three groups:

*Price-group A:* 'Rs 1,201 and above,' 'Rs 901 to Rs 1,200' and 'Rs 601 to Rs 900.'

*Price-group B:* 'Rs 451 to Rs 600', 'Rs 301 to Rs 450' and 'Rs 201 to Rs 300.'

*Price-group C:* 'Rs 101 to Rs 200', 'Rs 51 to Rs 100' and 'below Rs 50.'

In order to test whether there is a significant difference in the perceived quality of a T-shirt falling in different price ranges, the three price groups were put to paired t-test. The results are presented in Table 9.

The t-values in all the three cases were found to be high and significant at 0.01 level of significance, implying that the buyers perceived a significant difference in the quality of T-shirts falling in different price ranges. Similar results were obtained from the multiple regression analysis.

High price has a positive influence on the buyers' perception of the quality of T-shirts and people see a significant difference in the quality of T-shirts available at different price ranges. However, ultimately, buyers judge the price of the product on the basis of its features such as the strength and texture of the fabric, colour, design, and shape of the T-shirt, and not merely on the basis of their perception about the price or the 'high price-superior quality' image.

### Price-Quality Relationship: Non-durable Product

The respondents paid less attention to the price of the toothpaste, as shown in Table 1, and hence 'price' was ranked fifth among the seven factors. However, in terms

**Table 8: Ranking Price Ranges: Perceived Quality of T-shirt**

Price Range	Mean	Percentage Mean	Standard Deviation	Rank
Rs 1,201 and above	4.79	95.8	0.52	I
Rs 901 to Rs 1,200	4.71	94.2	0.55	II
Rs 601 to Rs 900	4.39	87.8	0.59	III
Rs 451 to Rs 600	4.01	80.2	0.61	IV
Rs 301 to Rs 450	3.49	69.8	0.61	V
Rs 201 to Rs 300	2.97	59.4	0.60	VI
Rs 101 to Rs 200	2.35	47.0	0.69	VII
Rs 51 to Rs 100	1.65	33.0	0.70	VIII
Below Rs 50	1.29	25.8	0.55	IX

of the quality-revealing ability of this factor, it managed to get the third rank after 'brand reputation' and 'features' as can be noticed in Table 2. These results indicate that although people do not pay attention to the price of the toothpaste while making the purchase, they do associate high price with superior quality.

**Perceived Quality of Toothpaste in Different Price Ranges**

The respondents were asked to judge the quality of a 150gm toothpaste tube on the basis of six price ranges. The purpose was to ascertain whether the buyers' perception of quality was affected by the price of the toothpaste. The responses are summarized in Table 10. As shown in the table, people perceived that the higher the price of the toothpaste, the superior will be its quality. While 86 respondents (50.3%) believed that a 150gm toothpaste tube priced below Rs 10 would be of very low quality, for the highest price range, viz., 'Rs 51 and above,' 88 respondents (51.5%) gave a very high quality rating.

On the basis of the results shown in Table 10, the mean, percentage mean, standard deviation, and the ranks corresponding to the mean values for each of the six price ranges were computed. The results are presented in Table 11.

From Table 11, it is evident that the higher the price range, the higher is the mean value or the quality rating

**Table 10: Price Ranges and Quality Ratings of Toothpaste**

Price Range	Quality					Total
	Very Low	Low	Average	High	Very High	
Below Rs 10	86(50.3)	57(33.3)	26(15.2)	02(01.2)	00(00.0)	171(100)
Rs 11 to Rs 20	26(15.2)	72(42.1)	66(38.6)	07(04.1)	00(00.0)	171(100)
Rs 21 to Rs 30	02(01.2)	28(16.4)	103(60.2)	36(21.1)	02(01.2)	171(100)
Rs 31 to Rs 40	01(00.6)	03(01.8)	56(32.8)	94(55.0)	17(09.9)	171(100)
Rs 41 to Rs 50	01(00.6)	01(00.6)	24(14.0)	90(52.5)	56(32.7)	171(100)
Rs 51 and above	01(00.6)	01(00.6)	19(11.1)	62(36.3)	88(51.5)	171(100)

**Table 9: Comparison of Price Groups of T-shirt**

Price Group	Mean	Standard Deviation	t-value
A	4.63	0.49	26.73**
B	3.49	0.51	
A	4.63	0.49	47.91**
C	1.76	0.57	
B	3.49	0.51	
C	1.76	0.57	42.44**

\*\*Significant at 0.01 level.

and, therefore, higher is the corresponding rank. The highest price range of 'Rs 51 and above' scored the highest mean value of 4.39 and secured the first rank. Thus, the respondents perceived a difference in the quality of toothpaste available at different prices and gave a high quality rating to the high-priced toothpaste and vice-versa. A further grouping of the price ranges, and a paired analysis as well as the multiple regression analysis substantiated these results.

Thus, the buyers believe that the higher the price of toothpaste, the superior will be its quality. However, they would like to pay a high price for a toothpaste which has the maximum number of features as they believe that such a toothpaste will give the maximum value for their money. Moreover, most of the respondents were either brand-loyal or went for reputed brands and, therefore, paid little attention to the price of the toothpaste.

**Principal Components of Price**

The importance of price while buying any of the three products has already been discussed in the previous paragraphs. The principal components of this factor were further analysed on the basis of their mean scores and standard deviation. The results are presented in Table 12.

The analysis of the variables revealed that, for all the three products, the buyers attached much importance to the fact that they would get value for their money by buying that brand. This was especially true for colour television and T-shirt. The variable 'value for

**Table 11: Ranking Price Ranges: Perceived Quality of Toothpaste**

Price Range	Mean	Percentage Mean	Standard Deviation	Rank
Rs 51 and above	4.39	87.8	0.70	I
Rs 41 to Rs 50	4.18	83.6	0.68	II
Rs 31 to Rs 40	3.72	74.4	0.69	III
Rs 21 to Rs 30	3.05	61.0	0.68	IV
Rs 11 to Rs 20	2.32	46.4	0.78	V
Below Rs 10	1.67	33.4	0.77	VI

money’ scored a very high mean of 4.58 and 4.39, respectively, for the two products, while it was only 3.53 for the toothpaste.

For all the three products, a majority of the respondents believed that the price of the brand they had purchased was reasonable. This variable scored an average rating for the three products. The mean scores of this variable were 2.94, 2.96, and 2.77 for colour television, T-shirt, and toothpaste, respectively.

The buyers’ perception of the product quality on the basis of price was further examined. For this purpose, the mean and the standard deviation for each of the relevant statements were computed. The results are shown in Table 13.

The buyers believed that it would be risky to buy a low-priced brand and, therefore, the mean computed for this variable was reasonably high in case of all the three products: 3.59 for colour television, 3.58 for T-shirt, and 3.42 for toothpaste.

Another interesting finding is that, despite the respondents agreeing to the common proposition ‘the lower the price of the product, the inferior will be its quality,’ they did not strongly believe that ‘the higher the price of the product, the better will be its quality.’ Therefore, while the mean scores for the former statement were 3.23, 3.27, and 3.06, respectively for colour television, T-shirt, and toothpaste, the mean scores for the latter statement were 3.14, 3.11, and 2.79, respectively.

It can be inferred from Table 13 that buyers perceived a lesser association between price and quality for toothpaste in comparison to colour television and T-shirt.

## PRICE-QUALITY RELATIONSHIP: MANAGERIAL IMPLICATIONS

An analysis of the price-quality relationship for the three products reveals the following:

**Colour television:** Among the seven factors considered by the buyers while purchasing a colour television, price is the most important factor. The buyers perceive a considerable difference among the quality of colour television falling under different price ranges. They believe that price can reveal its quality and the higher the price of the television, the superior will be its quality. Moreover, while purchasing a durable product like a colour television, buyers prefer to go for a high-or a reasonably-priced brand, rather than a low-priced one. Moreover, they want value for their money and find it risky to buy a low-priced product.

**T-shirt:** For purchasing T-shirts too, price is an important consideration while selecting a brand. However, the buyers would like to pay more for reputed brands and for features present in the T-shirt like the strength and texture of the fabric and fast colour. They believe that the lower the price of the T-shirt, the inferior will be its quality. However, they are a bit sceptical about the ‘high-price-superior quality’ relationship. Nevertheless, they perceive a considerable difference in the quality of the T-shirt falling in different price ranges. The expectation of getting value for their money has more importance to them than the high-price consideration.

**Toothpaste:** The buyers generally pay less attention to the price of the toothpaste while making the actual purchase. Brand loyalty, features of the toothpaste, and brand reputation takes precedence over price. However, they see a significant difference in the quality of the toothpaste available at different price ranges. They do believe that the lower the price of the toothpaste, the inferior will be its quality and vice-versa. But, this belief is somewhat weaker for toothpaste in comparison to the other two products. Again, in comparison to colour television and T-shirt, while buying a toothpaste, the buyers are less concerned about whether they will get

**Table 12: Factors Influencing Price Consideration**

Factor	Colour Television (N=179)		T-shirt (N=175)		Toothpaste (N=171)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
High price of the product	2.94	1.12	2.96	1.12	2.77	0.98
Value for money	4.58	0.56	4.39	0.65	3.53	0.71

**Table 13: Price and Quality Perception**

Statement	Colour Television N=179		T-shirt N=175		Toothpaste N=171	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
The higher the price of the product, the better will be its quality	3.14	1.12	3.11	1.11	2.79	1.08
The lower the price of the product, the inferior will be its quality	3.23	1.11	3.27	1.16	3.06	1.12
It is risky to buy a low-priced product	3.59	1.03	3.58	1.04	3.42	1.06

value for their money from that purchase.

The findings of the study have the following implications for the marketer for pricing of the three types of products:

**Colour television:** In the case of colour television, setting the price too low will negatively affect the quality image of the product and the consumer would be reluctant to buy a low-priced brand which may lower his or her image in the society. Pricing it reasonably high will give the product a high quality image. But, the marketer should also take care of the competitors' pricing policies and the purchasing power of the target market.

**T-shirt:** Pricing of the T-shirt is all the more difficult. The problem faced by the marketers of T-shirt in the Indian market is that their target market segment mainly consists of the young, especially the college-going ones, having limited purchasing power. They would prefer a local or not-so-reputed brands of trendy T-shirts rather

than spending on expensive branded T-shirts. But, they will definitely prefer a T-shirt of reputed brand if it is within their purchasing power. However, reducing the price of the the T-shirt may dilute its image. Hence, the marketer of the T-shirt should adopt appropriate market segmentation strategies, select the appropriate target segment, and price the T-shirt accordingly.

**Toothpaste:** For toothpaste, brand image is a decisive factor and the marketer should price the product according to the reputation enjoyed or likely to be enjoyed by the brand. However, the price-quality relationship for this product is rather weak in comparison to colour television and T-shirt. However, the marketer should keep in mind that charging a very low price would create an inferior quality image in the minds of the buyer. Moreover, the buyer, generally, judges the price of this product in terms of his/her internal reference price. Hence, an understanding of the buyers' internal reference price is necessary for the marketer. ♡

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*We tend not to choose the unknown, which might be a shock or a disappointment or simply a little difficult to cope with. And yet it is the unknown with all its disappointments and surprises that is the most enriching.*

Anne Morrow Lindbergh