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**SWP 6/92 BRAND PRICE RECALL AND THE IMPLICATIONS
FOR RESEARCH**



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BIOGRAPHIES



Dr. Leslie de Chernatony

Leslie is a Senior Lecturer in Marketing at City University Business School and has a doctorate in branding. He held Marketing Management positions in industry and used to lecture at the Cranfield School of Management. He has had papers published in many journals including Journal of Marketing Management, Journal of the Market Research Society, European Journal of Marketing, Journal of International Consumer Marketing, and International Journal of Advertising. A frequent presenter at International Conferences, he delivered the invited keynote paper on branding to the Market Research Society of Australia 1990 Conference. His research and consultancy focus upon branding. Recently his book, *Creating Powerful Brands*, which he co-authored with M. McDonald, was published by Butterworth Heinemann.

Dr. Simon Knox

Simon is a Senior Lecturer in Marketing at the Cranfield School of Management. After graduation he joined Unilever plc as a management trainee in 1975. After an initial spell in detergents marketing at Lever Bros., Simon moved to Batchelor Foods to work on their international brands, initially as the New Product Development Manager. Acting as the lead country manager, Simon launched Cup-A-Soup Special in the UK. This strategy was later adopted by other European country managers and a successful pan-European brand has subsequently developed.

Since joining Cranfield in 1983, Simon has regularly contributed papers at international marketing conferences and publishes in the areas of consumer behaviour and organisational buyer-seller relationships. He has recently been appointed to the Graduate Research Committee within the School.

Abstract

Effective pricing research techniques need to fully reflect consumer behaviour. An historical review indicates the limited capabilities of consumers to correctly recall grocery prices. Adoption-level theory implies that consumers evaluate brand prices relative to a reference price rather than in isolation. A consumer survey up-dating our knowledge of consumers' ability to correct recall prices provides evidence that price accuracy increases when a reference price is given. Implications for pricing research are considered.

Introduction

Price is an important aspect of marketing. From the firm's perspective, it is the one variable that links directly with profitability. It helps differentiate the firm's brands and, for the sales team, it is the basis for opening negotiations with buyers. From the consumer's perspective, it enables them to assess value through trading off potential benefits against financial sacrifice. It is also a useful cue when evaluating brands (Jacoby et al, 1971).

Setting brand prices can be a very emotive subject, generating many competing views from different members of the brand team (Kraushar, 1982). Often, it is approached in a mechanistic manner with more attention being paid to accountancy issues, such as costs and cash flow, rather than consumer perceptions. (Thomas, 1990).

Not surprisingly, market researchers are frequently called upon to bring a more objective perspective to the issue and many price research techniques have been

documented, eg Morgan, (1987). In essence these can be categorised as monadic (uni-dimensional), where a single brand is tested alone or competitive (bi-dimensional) where several brands are tested against each other (Frappa and Marbeau, 1982). A common characteristic of both methods is that consumers are asked to make a selection decision when *they have full knowledge of prices*. While it is reassuring to note that, under certain situations, competitive methods can provide valid results (Morgan and Godfrey, 1985), one needs to question how well either of the two categories of pricing research replicate consumer buying behaviour. For example, do consumers judge prices in absolute terms or relative to competing brands? How aware are they of prices in the first place? With a better understanding of these aspects of consumer behaviour, market researchers can design more appropriate pricing procedures.

This paper reviews the literature on price recall and shows that consumers have a poor awareness of absolute prices. We provide evidence to show that consumers judge prices on a comparative basis. Our survey to evaluate consumers' awareness of price levels is presented and the managerial implications for pricing research are considered.

Consumers' correct recall of prices

The earliest documented findings about consumers' recall of product prices was by Gabor and Granger (1961). They interviewed 428 Nottingham housewives during 1958. Across seven grocery products, 53% of the housewives were able to correctly state prices, 30% gave prices that differed from in-store prices and 17% were unsure. At a time when resale price maintenance curbed inter-retailer price discounting, it is

interesting to note that just over half of respondents were able to correctly state grocery prices. However this ability varied by product field. For example, 79% could correctly recall tea prices but only 35% could recall breakfast cereal prices. Behavioural reasons were thought to explain these differences, for example, only one brand of tea was bought per household, compared with several brands of cereals.

An American study around the same time (Progressive Grocer, 1964) similarly reported consumer uncertainty about product prices. Although a less rigorous procedure was employed, ["several thousand" (p104) shoppers in store were asked to look at products on a table and state the price of each item], over 80% of consumers were unable to correctly state prices across 60 popular grocery brands.

The study undertaken around Manchester in 1982 by Marks and McGoldrick (1985) indicated a fall in consumers' awareness of grocery prices. Interviewing Sainsbury and Tesco customers immediately after shopping, they found that across ten product fields, the exact price recall rate was only 29%. This varied from 39% accuracy for baked beans to 23% for digestive biscuits. While this low level of accurate recall may be due, in part, to methodological differences compared with earlier studies, [for example in sampling, interviewing procedure and the products investigated], other studies, as we show, also indicated a general decline in correct price recall.

Gabor (1988), in an up-date of his earlier research, provides evidence of increasing confusion about grocery prices, as shown in table I. Even allowing for a relaxation in the definition of "correct" price recall by allowing a margin of uncertainty,

fewer consumers were able to correctly recall prices in 1984 than in 1958.

Percentage of consumers correctly stating prices

	1958	Tolerance	1984	Tolerance
Tea	79	Nil	53	± 10p
Coffee	68	Nil	54	± 10p
Sugar	67	Nil	50	± 1p

Table I: Consumers abilities to correctly recall prices

As a result of issues such as inflation, the abolition of resale price maintenance, greater inter-store price rivalry, new brand launches and changing pack sizes, consumers appear less able to correctly recall grocery prices. Additionally, in an era where grocery superstores pride themselves on wider product ranges, changing lifestyles mean that consumers have less time for shopping. Not surprisingly, Ellert (1981) reported that over 40% of shoppers don't keep track of shop prices.

The most recently published findings (The Grocer, 1988) again indicate a poor awareness of grocery prices. Consumers were interviewed just before they went into grocery stores about prices of grocery brands. Only 17% knew the in-store prices of Andrex toilet tissue, while only 16% correctly stated the price of Heinz Baked Beans. Contrary to the assumption of classical economic theory, consumers do not appear to

have high knowledge of grocery prices.

Absolute or relative price evaluation?

Several reasons were suggested in the previous section as to why consumers' recall of grocery prices is so poor. From a consumer behaviour perspective, an important reason must be that consumers use reference prices against which they judge new prices (Winer, 1986). This reference price could be: the last price paid, the actual or perceived market price, a perception of a fair price, or an expected price (Biswas and Blair, 1991). There is growing evidence that by asking consumers about prices in isolation without any reference point, they are less able to make realistic judgements on brand prices.

The notion of consumers evaluating prices on a relative basis is underpinned by psychological models of price perception (Dickson and Sawyer, 1990). Of particular relevance to market researchers are the implications that Monroe (1990) draws from adoption-level theory:

- there is a reference price for each discernable quality level in each product category;
- either side of the reference price there is an area of indifference such that changes in price within this region have no effect on brand perception.

The fact that consumers have a poor appreciation of absolute prices does not imply that their purchase decision making is impaired. Rather, what appears to be

important is consumers appreciation of brand prices *relative* to some reference price.

Research hypotheses

Given the importance of understanding consumers' awareness of prices, together with the paucity of recent survey research on this topic, we felt it appropriate to gain a 1990's view of pricing recall. From the literature review, we decided to evaluate not just absolute price awareness but also price awareness once a reference price had been given. As the more recent work measured price awareness within a band of tolerance, typically $\pm 10p$, we thought it appropriate to measure correct price recall within this tolerance band. Furthermore, with the increasing proliferation of brands and the greater competition from own labels, we wished to focus on brands within particular product field, rather than across a broad range of grocery products.

Based on this research theme, we proposed the hypotheses:

- H1: Without a reference price, consumers show a limited price awareness of competing grocery brands within a price band ($\pm 10p$ of the actual store price).
- H2: With a reference price, consumers show a better price awareness of competing grocery brands within the same price band ($\pm 10p$ of the actual store price).

Grocery product fields investigated

When screening product fields, the following selection criteria was used:

- high household penetration;
- wide grocery distribution;
- a standard pack size across all competing brands;
- both manufacturers' brands and retailers' own labels represented.

Two product fields were selected for study, ie mineral water and pure fruit juice. In the mineral water market, sales are approximately equally split between still and sparkling waters. With the highly publicised contamination scares about Perrier we were concerned about heightened brand and price awareness in the sparkling water sector so we focused on the still sector. Evian, Buxton and Highland Spring were selected as these were the main brands in 2 litre pack sizes. In the fruit juice market, pure orange was found to be the dominant variety and the 1 litre pack the dominant size. Again, the three leading brands were selected on this basis: del Monte, Princes and Sun Pride. Interviewing took place in London suburbs where Sainsbury, Tesco and Safeway stores are common. All of the manufacturers' brands were stocked by these multiple retailers. So, in total, three brands and three own label products were used in each test.

Data collection

A series of in-home interviews were completed in July and August 1990 using a fully-structured questionnaire. Respondents were recruited only if they had bought and drunk one of the six competing brands (either orange juice or mineral water) within the past four weeks and were primarily responsible for buying household groceries. Subsequently, they were only questioned about one of the product fields. In total, 80

interviews were conducted amongst mineral water consumers and 86 amongst fruit juice consumers. For each product field, the samples were split approximately equally between male and female and across age profiles which broadly matched the market (Mintel, 1990 a, b).

Initially, respondents were shown packs of each of the six competing brands in the product field and were asked how much they thought each would cost (without revealing any price cues). Subsequently, respondents were then told the actual store price of the brand leader in the product field (65p for Evian and 89p for Del Monte) and asked again how much each of the remaining brands and own labels cost. By giving the price of the brand leaders, we had introduced a reference price. While from the earlier literature review it is evident that there are several possible ways of introducing reference prices, we had to be pragmatic and use just one approach.

Results

Table II highlights the percentage of consumers with accurate price recall under the test conditions. In general, consumers showed very limited ability to recall absolute prices across either product categories which confirms the results of earlier studies. For example, only 15% correctly recalled the price of the leading mineral water brand (Evian) and 6% in the fruit juice sector (Del Monte). Not unexpectedly, a higher proportion of consumers were able to estimate prices within $\pm 10p$ of the actual price. However, still only 59% of consumers were able to do this for Evian (66% for Del Monte). Interestingly, the results also indicate that price awareness varied considerably between competing brands and own labels, irrespective of market share. Hypothesis 1

is not refuted, ie consumers show a poor awareness of grocery brands.

TABLE II AROUND HERE

On giving consumers the reference price of the brand leader, there was still a lot of uncertainty about the exact price of brands. As table II indicates there were, at best, only marginal improvements in exact price recall. For example, correct price recall of Sun Pride edged from 6% to 8% of consumers giving the exact price. Of more interest, though, were the results when price recall accuracy was relaxed to within $\pm 10p$ of the actual price. For all of the manufacturers' brands and own labels, there was a very noticeable shift in correct price recall within this band. For example, 84% of consumers had a far better feel for the price of Buxton mineral water once a reference price was given compared to 36% without a reference price. From these results, hypothesis 2 is accepted; consumers showed a more accurate recall of prices ($\pm 10p$), once given a reference price.

Conclusions

This study has shown that consumers have restricted abilities to recall brand prices. However, once a reference price is available they appear to have a much better feel for brand prices.

There are several implications for pricing research that can be drawn from these findings. It casts doubt on the value of monadic testing. Consumer behaviour is based on relative rather than absolute price assessments. So pricing research that just focuses

on a brand in isolation does not reflect the reality of buyer behaviour. Bi-dimensional tests, where prices from several competing brands are used, would better replicate this market behaviour.

Research based on adoption-level theory shows that there is a region of indifference either side of the reference price. Changes in brand prices within this region have no effect on perceived brand characteristics. As a consequence, when market researchers are evaluating consumers' perceptions of brands at specific price levels, if they find a price region where little change in perception occurs, they should broaden the research to identify the lower and upper bands of price indifference. Armed with this knowledge, there is greater scope for marketers to implement profitable pricing with confidence.

By appreciating the way in which consumers behave towards pricing issues, market researchers can develop more effective techniques. This paper has provided an insight into the way in which consumers recall brand prices thereby attempting to focus the debate upon pricing research design issues.

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TABLE II

PRICE PERCEPTIONS

<u>Mineral Water</u>	Evian %	Buxton %	H.Spring %	Sainsbury %	Tesco %	Safeway %
1. Correct price recall (no reference price) ± 10 p	15 59	3 36	5 56	- 39	1 57	1 37
2. Correct price recall (reference price of brand leader given) ± 10 p		1 84	5 90	- 70	4 93	1 67
<u>Fruit Juices</u>	Del Monte %	Princes %	Sun Pride %	Sainsbury %	Tesco %	Safeway %
1. Correct price recall (no reference price) ± 10 p	6 66	1 68	6 72	- 59	2 34	1 32
2. Correct price recall (with reference pricing) ± 10 p		- 91	8 87	- 74	4 41	2 39