The Role of Price as a Determining Factor in Grocery Retail Store Patronage

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Key words

Pricing, pricing strategies, grocery retailing, consumer behaviour

Abstract

The purpose of this study is to examine the role price as a determining factor in consumer patronage of grocery retail stores in the United Kingdom. A cross-section of grocery consumers (n = 250) constitutes the sample for the study. Grocery stores were grouped and stores were selected for the study on the basis of the variety of grocery stores offers the consumers. A mail survey was used to investigate price perceptions and store choice across three different retail formats. Respondents were grouped into high and low groups for each of the price cue factors. The groups were compared using analysis of variance (ANOVA) for each price construct at each level of the dependent variable for store choice. Findings suggest that price cues affect consumer store choice. Price awareness positively impact patronage of retail stores that implement low cost strategies, while status sensitivity and price/quality plan tend to positively impact patronage of retail stores that implement higher price strategies. As the UK grocery market becomes saturated consumers tend to take advantage of price competition. This is particularly important when communicating store pricing policy to the target consumers.

Introduction

The UK retail environment creates considerable challenges for grocery retailing; and over the past three decades, changes in the grocery competitive retailing have led consumers to developing cross-shopping behaviour. Cross shopping behaviour could be defined as the act of a single consumer patronising multiple types of outlets which carry the same broad merchandise lines as for example supermarket chains. This phenomenon adds yet another element of complexity to grocery retailer's ability to formulate and implement retail marketing strategy (Omar, 1999). Since there are many choices of grocery retail stores, diverse merchandise assortments available to consumers, competition for patronage and loyalty continues to intensify.

For many years marketing researchers have considered issues related to consumers' store choice across various purchasing situations (see for example, Olson, 1977; Brucks et al., 2000; and Biswas, et al., 2002). From early studies that examine

traditional retail format choice (Bucklin, 1966; Williams and Dardis, 1972) to recent inquiry into the non-traditional internet format choice (Sharma and Krishnan, 2002; Keen, et al., 2004) this literature considers numerous consumer-related and situational factors that impact store choice. Price-related behaviours represent an important area of focus within the stream of research on patronage behaviour (Dawar and Parker, 1994; Richardson, et al., 1994; Seiders and Costley, 1994). Considering the rapid evolution of retail formats (emergence of electronic retailers, and growth of discount stores, and specialty food stores), it appears that grocery retailers are focusing on elements of price and quality to induce consumers into their stores.

The purpose of this study is to update and extend the research on the relationship between consumer price perceptions and grocery retail store choice in an era of extremely demanding consumers and abundant retail choices. Since price is a very important variable in the choice to patronise a given retailer, and/or to buy products and services, identifying the linkages between consumer perceptions of price and their ultimate choice of retail store provides timely information to retailers and marketers related to this important element of the marketing mix. Further, drawing upon the literature on consumer price perceptions, a number of dimensions of price are considered for their impact across the UK grocery stores.

Literature Review

Research into consumer behaviour with regard to pricing is numerous in the retail marketing literature including inquiry into consumer use of reference prices (Urbany et al., 1988; Biswas et al., 2002), response to price reductions (Price et al., 1988; Seiders and Costley, 1994; Grewal et al., 1998) price as a signal for quality or value (Tellis and Gaeth, 1990; Grewal et al., 1998), as well as other areas. Lichtenenstein, et al., (1993) point out that price is central to consumer behaviour due to its presence in all purchasing situations. The literature suggests that consumers perceive price in both positive and negative roles that ultimately influence purchasing behaviour. When price is perceived as a positive cue, it signals quality or status to the consumer (Lichtenstein et al., 1990; Monroe and Krishnan, 1985). In its negative role, price is perceived purely as an economic sacrifice. In both positive and negative respects, perceptions of price operate as marketplace cues that aid the consumer in their decision making process within increasingly complex market situations (Dodds, 1995).

The literature identifies two primary constructs that represent price in its positive role including the price/quality schema and status sensitivity. The price quality schema is defined as a consumer's general belief that levels of price are positively related to levels of quality (Lichtenstein et al., 1993). The idea that consumers use price as an indicator of quality for products, brands and retailers, has also been examined in depth in the literature (Brucks et al., 2000; Zeithaml, 1988). Although researchers tend to agree that consumers perceive price as a surrogate for quality, the price/quality relationship has been shown to differ across purchasing situations and among individual consumers (Monroe and Krishnan, 1985). The literature also identifies a number of constructs that represent price in its negative role including: price consciousness, sale proneness, value

consciousness and price mavenism. Lichtenstein et al., (1993) define price consciousness as the degree to which consumers focus exclusively on paying low prices. Sale proneness is described as an increased propensity to respond to a purchase offer when the price is used as sales inducement (Lichtenstein et al., 1990). Value consciousness represents a more complex construct, defined as a consumer's concern for the price paid versus the quality received (Lichtenstein et al., 1993). Price mavenism is defined as the degree to which an individual is a source of price information for many types of products and situations (Price et al., 1988)

Price and store patronage

Past research into retail patronage behaviour has considered the impact of price through various conceptions. Over the years a number of researchers have focused on examining different elements of price as a determinant of store choice (Bell and Lattin, 1998; Fox et al., 2004; Stephenson, 1969; Yavas, 2003). Among this stream of literature, price is depicted as pure monetary cost (Fox et al., 2004) and as an element of broader concepts such as store image (Finn and Louviere, 1996) and consumer value (Sweeney and Soutar, 2001).

The linkage of price to patronage behaviour has been implied in the literature in both a direct sense and as a moderating variable. As a result of a variety of measurement approaches and research contexts, the findings among this stream of research tend to be mixed. Fox et al., (2004) examined the relationship of price to grocery shopping behaviour and found that price was less important in driving consumer spending than promotions and store assortment. Seiders and Costley (1994) found price to be a major determinant of store choice in the grocery shopping context. They also reported that consumers had accurate perceptions of market pricing related to the stores that they considered in their study. Yavas, (2003) reported price as an important driver in store choice among a battery of patronage motivations. Studies have also linked the pricing policies of an organization to consumer value perceptions and ultimately shopping intentions (Biswas, et al., 2002). A number of researchers have examined the effect of store related variables on perceptions of price. For example, in a 1977 study of price as a market cue, Olson (1977) suggests that store name can influence consumer perceptions of price and quality. However, Rao and Monroe (1989) found that store name has little influence over consumers' perceptions of value, quality and intention to purchase. Dodds (1995) also found that store name does not influence consumer perceptions of value, but does influence their perceptions of quality, price and the intention to buy. Dodds' study indicated a positive relationship between favourable store information and both consumers' perception of price and the willingness to purchase. Dodds (1995) concluded that both price and store name are influential in consumer evaluation of products.

Developing Research Hypotheses

The literature suggests that price perceptions influence consumer behaviour with regard to product evaluation and store evaluation. The direction and magnitude of the influence of price on patronage behaviour is not clear. Drawing on the literature that examines price as a market place cue, we hypothesize relationships based on the negative and positive dimensions of price. As consumers perceive price in a negative manner, their choice of retail formats that implement low price strategies will increase. Likewise, the consumer who perceives price in a negative manner will likely abstain from shopping in store formats that are likely to charge higher prices for goods. For consumers that perceive price as a positive cue the opposite relationships are expected. That is, as consumers view price in a positive role, the likelihood of choosing retailers that tend to charge higher prices also increases. Vice versa, consumers who tend to perceive price in its positive role will be less likely to choose store formats that stress low cost strategies.

Price awareness refers to a consumer's propensity to focus on low price as a major driver in their purchasing behaviour. Consumers who are considered to be aware of price should be more likely to frequent stores that stress low prices therefore it can be posited that there are linkages between this price indicator and store choice:

- *H*₁. *Price awareness is positively related to shoppers' choice for stores that implement low price strategies.*
- *H*₂. *Price awareness is negatively related to shoppers' choice for stores that implement high price strategies.*

The second negative price indicator that was investigated is sales susceptibility (i.e. sales proneness). Sale susceptibility refers to the consumer propensity to buy goods and services when they are offered at a sale price. If consumers are sale prone they are expected to frequent stores that stress price reductions as a focal element of their marketing strategy. As such, it could be posited that there are linkages between sale susceptibility and store choice:

- *H*₃. Sale susceptibility is positively related to shoppers' choice for stores that implement price reduction strategies.
- *H*₄. Sale susceptibility is negatively related to shoppers' choice for stores that do not implement price reduction strategies.

Status sensitivity represents a positive perception of price under which consumers act upon high prices as a stimulus for purchasing behaviour. The author posits that consumers who are sensitive to status will tend to patronise stores that reflect status in their marketing strategy. Likewise, it could be assumed that consumers who perceive high prices as a cue for status will not patronise stores that stress every day low prices (EDLP) and value in their marketing strategies. Thus, the following hypotheses are set forth to investigate the linkages between status sensitivity and store patronage behaviour:

- *H*₅. Status sensitivity is positively related to shoppers' choice of stores that implement status-oriented pricing strategies.
- *H*_{6.} Status sensitivity is negatively related to shoppers' choice of stores that stress every day low prices (EDLP) and value-oriented pricing strategies.

Another construct that is considered in terms of the positive price indicator is the price/quality planning. When consumers use the price/quality plan to make purchasing decisions they believe that price signals quality. Thus, one would expect that consumers who believe that price reflects quality would be more likely to shop in stores that implement relatively high pricing strategies. Based upon this logic the following hypotheses that link price/quality planning to store patronage choice are set:

- *H*₇. *Price/quality planning is positively related to shoppers' choice of stores that implement status-oriented pricing strategies.*
- *H*⁸. *Price/quality planning is negatively related to shoppers' choice of stores that offer valueoriented pricing strategies.*

These hypotheses were tested using the proceeding method for data collection and measurements as underlined below.

Methodology

Data were collected using a postal survey approach on a cross-section of grocery consumers. The sampling method was focused on capturing grocery shoppers across an array of age groups, income levels, education levels, and residence in a London Borough. A questionnaire consisting of structured questions were administered to grocery shoppers at the car park of four large supermarkets. The questionnaire was pre-tested among a small convenience sample (n = 50) of grocery shoppers that were not included in the final sample. Following the pre-testing of the questionnaire, wording and question order issues were raised and resolved.

Data collection was initiated during a three-week period in early May 2007. Respondents were contacted until a substantial cross-section across the demographic variables was attained (see Table 1). The sample used for the current research (n = 250) was obtained from grocery shoppers based on whether or not shoppers responded to the category of questioning related to price indicator and patronage behaviour. Drawing on methods used in past research, the current study used groceries as the product classification for examining the effect of price and store choice (McGowan and Sternquist, 1998). Groceries present the consumer with a number of store options that are typically positioned on some dimension of price including: supermarket, discount food store, specialty food store, premium food store, and the Internet. Given the variety of store types available to the consumer and the increased incidence of cross-shopping for grocery products, this category provides an appropriate context in which to test the focal research question.

Measures

The final sample size (n = 250) was determined by consumers' response to a single screening question that asked how often they shopped for groceries for their household on a five point Likert-type scale ranging from never to always. If the shopper responded always, usually or occasionally they continued with the store choice questions as well as the price intention questions. Shoppers who responded that they rarely or never shopped for groceries were eliminated from the rest of the survey procedures.

In order to measure food store type choice, interviewers instructed shoppers to indicate how often they frequent the following types of retailers when shopping for groceries on a five-point interval scale from never to always: supermarket, discount food store, specialty food store, premium food store, and the Internet retailer. The interviewer provided specific examples of each store type using national retail chains to ensure shoppers' understanding of questions. Consumer price perceptions were measured using an adapted version of the Lichtenstein, et al.'s (1993) scale. After respondents were asked the store choice questions, they were asked to indicate their agreement or disagreement with a number of statements that describe their shopping behaviour for groceries on a five-point scale from strongly disagree to strongly agree. During the pre-testing phase respondents indicated difficulty in answering the price indicator questions, so it was deemed necessary to reduce the Lichtenstein scale across the four constructs.

Analysis of the Results

Analysis of variance (ANOVA) was used in testing the research hypotheses. The four price indicator factors that constitute the independent variables were divided into high and low groups by mean score. The author adopted a general linear modelling (GLM) procedure in order to test the effects of the fixed price indicator factors on the dependent variables for store type choice across the selected food store types. Price indicators were interpreted for significant relationships between price element and the choice of food store type in order to evaluate the direction of the relationships. An evaluation of the reliability of measures for the price indicator factors was undertaken using Cronbach's coefficient alpha before performing the ANOVA analyses. Also, further analyses on sample characteristics were carried out using descriptive statistics.

Demographic Variables	Number of Respondents	Percentage (%)
Gender		
Male	112	44.8
Female	138	55.2
Age Group		
Under 20 years	30	12.0
21 - 30	75	30.0
31 - 40	62	24.8
41 – 50	54	21.6
51 and over	29	11.6
Types of Employment		
Looking for work	28	11.2
Private company employee	56	22.4
Public sector employee	52	20.8
Self-employed	58	23.2
Home maker	35	14.0
Retired	21	8.4

Table 1:	Demographic	Characteristics of Grocery	y Consumers

Household Income		
Under 20,000	58	23.2
21,000 - 30,000	62	24.8
31,000 - 40,000	40	16.0
41,000 - 50,000	36	14.4
51,000 - 60,000	31	12.4
61,000 and over	23	9.2
Level of Education		
Secondary school	40	16.0
'A' Level/ Diploma	56	22.4
Higher Diploma	35	14.0
University degree	60	24.0
Postgraduate qualification	59	23.6

Sample characteristics were analysed for respondents' gender, age group, type of employment, household income, and level of education (see Table 1). The average age of the sample respondents is 35 years, with a range of 16 years of age to 70 years of age. A total of 23.2 percent indicated incomes less than £20,000 per annum; 24.8 percent indicated incomes between £21,000 and £30,000; 30.4 percent indicated incomes between £31,000 and £50,000. Finally 9.2 percent indicated incomes between £61,000 and over.

Table 2: <u>Anal</u>	ysis of variance for effect of price indicator on store choice

Price	Choice of Store	Sum of	df	F	Sig.
Indicator		Squares			C
Price	Supermarket	23.159	1	13.886	0.000***
awareness	Discount store	19,822	1	13.540	0.000***
	Specialty store	44.541	1	28.115	0.000***
	The Internet	0.117	1	0.153	0.696
Sale	Specialty store	1.110	1	0.799	0.391
susceptibility	Supermarket	27.759	1	16.777	0.000***
	Discount food store	10.978	1	7.308	0.007**
	The Internet	0.056	1	0.074	0.786
Status	Specialty store	7.581	1	5.109	0.024
sensitivity	Supermarket	16.956	1	11.633	0.001**
	Discount food store	0.704	1	0.468	0.494
	Premium food store	17.421	1	10.347	0.001**
	The Internet	31.374	1	19.360	0.000***
Price/quality	Premium food store	9.009	1	6.224	0.013*
Planner	Specialty store	3.555	1	2.378	0.124
	Supermarket	2.206	1	1.278	0.259
	Discount food store	4.357	1	2.571	0.110

Notes: * Significant at 0.01 level, *** Significant at 0.001 level

For education levels, 16 percent of respondents indicated having finished secondary school education only; 22.4 percent indicated a high school education, 24 percent indicated having had university degree and 23.6 percent indicated a postgraduate qualification.

Reliability of measures

Cronbach's alpha was used to examine the reliability of the data for the price indicator constructs. Based on Nunnally and Bernstein's (1994) criterion of a minimum 0.60, Cronbach's alpha, the test for acceptable reliabilities for the price indicator data was as follows: price sensitivity ($\alpha < 0.749$), sale susceptibility ($\alpha < 0.656$), price/quality planning ($\alpha < 0.680$), and status sensitivity ($\alpha < 0.688$). During this phase of the analysis two reverse-order items were removed from the price indicator scales: one from the price awareness scale and one from the sale susceptibility scale.

Price cue factor groupings

In order to test the effect of each of the four price indicator factors on the dependent variable for store choice, each price indicator variable was grouped in high and low groups using the mean as the point of division. Based upon descriptive data for the price indicator factors as well as the basic logic of the scales, the mean was determined to be an appropriate criterion for dividing the data. The mean cut-offs for each of the price indicators are as follows: price awareness, 10.08, range, 3-15, status sensitivity, 3.9, range 2-10, sale susceptibility, 6.7, range 2-10, and price/quality planning, 9.25, range 5-15. Values of each price construct that were equal to or above the mean were determined as high groups and all values falling below the mean were determined as low groups.

Testing the hypothesis

ANOVA was used to test the effect of the independent price cue factors on the store choice variables according to the eight stated hypotheses. The ANOVA models indicated strong support for H_1 and H_6 and partial support for H_3 , H_4 , H_5 and H_7 , at a 0.05 level of significance (Table 2). Statistical tests did not support H_2 and H_8 .

Beta estimates were interpreted to determine the direction of relationships between the price indicator factors and store choice for each of the significant ANOVA models (Table 3). The data indicated support for H_1 which stated that consumer price awareness positively impacts choice of stores that implement low cost strategies including supermarkets (*F*<13.886, *p*<0.000, 1df) discount food stores (*F*<13.540, *p*<0.000, 1df) and specialty stores (*F*<28.115, *p*<0.000, 1df). Beta estimates were positive for the effect of price awareness on the three store types: supermarket (beta<0.502), discount food store (beta<0.446) and specialty food store (beta<0.698). ANOVA tests for H_2 did not indicate a significant, negative relationship between price awareness and the higher price stores including supermarket and specialty food stores. The third (H_3) and fourth (H_4) hypotheses examined the effect of sale susceptibility on store choice. ANOVA models for the positive effect of sale susceptibility on store choice for supermarket (F<16.777, p<0.000) and discount food store (F< 7.308, p<0.007) generated significant statistics. A positive relationship between sale susceptibility and the Internet was not indicated in the data. The significant relationships between sale susceptibility and supermarket (beta<0.554) and discount food store (beta<0.344) were positive and consistent with H_3 . Statistical tests for H_4 indicated partial support for a negative relationship between sale susceptibility and stores that implement higher price strategies with a significant, negative estimate for the specialty format (F< 5.109, p<0.024, beta<-0.287).

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Table 3: Significant relationships between price indicator and food store type choice

Statistical tests for H_5 and H_6 that examine the relationship between status sensitivity and store choice indicated mixed results. The ANOVA model that examined the positive effect of status sensitivity on the choice of premium food stores was significant in the expected direction (*F*<11.633, *p*<0.001, beta=0.521). However, a significant positive relationship between status sensitivity and specialty store choice was not indicated by the data suggesting partial support for H_5 . The ANOVA models for H_6 which examined the adverse affect of status sensitivity on choice of low price strategy store indicated strong support for both dependent variables: supermarket (*F*<10.437, *p*<0.001, beta =-0.534) and discount food store (*F*<19.360, *p*<0.000, beta <-0.705).

The last hypothesis (H₈), examined the effect of the price/quality plan on store choice. Statistical tests indicated partial support for H_8 which predicted a positive relationship between price/quality planning and the Internet (*F*<6.224, *p*<0.013, beta<0.316). The ANOVA model for the specialty store format did not indicate a significant relationship. Further, the models generated to test the negative effect of price/quality plan on the choice of low price store including supermarket and discount food store were not significant.

Discussion

The results suggest that the four dimensions of the price indicators are related to store choice. Grocery shoppers (consumers) that scored high on the price awareness factor indicated frequent patronage of supermarkets, discount food stores and specialty food stores. The same shoppers did not indicate that they shopped over the internet, which is often noted for its efficiency and effectiveness in price search. The data indicated no adverse relationship between price awareness and shopping in typically high price stores such as premium food stores. Sale susceptibility, which represents the second negative price indicator in the study, was positively related to patronage of low price stores with the exception of the Internet. The data also indicated that sale susceptibility was negatively related to specialty food store patronage thus deterring patronage for this type of store.

Status sensitivity and the price/quality planning represent price as a positive indicator for patronage. The statistical tests suggest that status sensitivity positively impacts patronage for the premium food store but is unrelated to specialty food store patronage. Further, the data suggest that status sensitivity deters patronage for supermarkets and discount food stores. Grocery shoppers from the high group for price/quality plan indicated significant patronage for premium food store and but no significant patronage pattern for the specialty food store or the lower price stores.

Managerial Implications

Interpretation of the results confirms past thought and observation on the operation of price as a marketplace indicator and extends the influence of these indicators by examining each factor both as an inducement and as a deterrent for store choice (see for example, Dodds, 1995). Sale awareness and status sensitivity indicated an adverse relationship with patronage in typically high and low price stores, respectively. This finding underscores the importance of pricing strategy within the overall strategy of a

grocery retailer. If grocery shoppers are using price as a driver for store patronage, it is critical that grocery retailers align pricing strategy with the overall direction of the retailer's retail marketing objective. Pricing strategy must be consistent with existing functional strategies that communicate the retailer's overall value proposition to the consumer including, promotional strategy, brand strategy and merchandising strategy.

The data also reveal several useful observations related to the specific store formats employed in the study. For three out of four hypotheses that tested consumer use of the price indicator and patronage, results supported the predicted directions. This finding suggests that supermarkets are capitalising on the consumer that perceives price in a negative role. On the other hand, grocery shoppers who perceive price in a positive role through status sensitivity indicated avoidance of supermarkets and opt for premium food stores. Taken overall, it appears that the supermarket sector is communicating a clear message to the price sensitive consumers. Discount food stores and Specialty food retailers indicated similar patterns of results across the hypothesis tests which also indicate that these store formats are more popular with grocery shoppers who perceive price in a negative manner.

Methodological Limitations

There are a number of limitations associated with the study's methodology that must be noted. As a part of a larger study on food store patronage, the sample drawn for the study was heterogeneous across age groups, income levels, and education levels. When initially testing theoretical constructs, it is often advantageous to capture a homogenous sample to ensure that sampling error does not confound relationships between focal variables. It is likely that the current study sacrificed a degree of internal validity in order to adopt a generalised perspective. Depending on the goal of future studies in this area, it may be advantageous to examine targeted samples to first understand the price and non-price drivers of their patronage behaviour, and then expand this research to wider food consuming populations.

In addition, grocery retailing was used as the context for the study. Although the context was intentionally selected for the number of store formats that it offers to consumers, the findings may not hold in additional retailing contexts such as the clothing category or consumer electronics or predominantly service oriented contexts. Pricing practices specific to context such as every day low pricing (EDLP) versus hi-low promotional pricing in the grocery industry could confound the operation of the price cue as a motivator or deterrent to specific store patronage that may not apply in other retail sectors.

Future Research Direction

The study's results raise a number of questions that can be addressed through future research. With the proliferation of new retail formats, retailers and academics in the retail industry need to understand the relation of price and non-price indicators in the store choice decision. The findings of this study demonstrate that grocery shoppers react to price in their store choice at extremes (i.e. low price store choice versus high status/price

store choice). What is not as clear in the results is how the consumer weighs the price variable in their decision to choose an Internet retailer or a specialty food store that does not implement a clear pricing strategy. There are a number of streams of literature that could inform an extension of the current research including: consumer value perceptions, consumer quality perceptions, reference pricing and non price-related issues such as branding, retail location and store loyalty.

Conclusion

The current research examined the effect of price perceptions on the choice of a single store format in the grocery context. As has been noted in the literature review, the phenomenon of cross-shopping complicates the otherwise simple concept of patronage choice. Researchers have noted the incidence of cross-shopping in the grocery (Fox et al., 2004). Research that examines the relationship of price perceptions to cross-shopping behaviour can augment and update the body of knowledge related to grocery store choice by incorporating combinations of store choice in a single investigation. Additional knowledge of the price and cross-shopping behaviour relationship can provide valuable strategic direction in pricing for industry incumbents that deal with cross-shopping on a daily basis.

References

- Bell, D.R., Lattin, J.M. (1998), "Shopping behaviour and consumer preference for store price format: why large basket shoppers prefer EDLP", Marketing Science, Vol. 17 No.1, pp.66-88
- Biswas, A., Pullig, C., Yagchi, M.I., Dean, D.H. (2002), "Consumer evaluation of low price guarantees: the moderating role of reference pricing and store image", Journal of Consumer Psychology, Vol. 12 No.2, pp.107-18.
- Brucks, M., Zeithaml, V.A., Naylor, G. (2000), "Price and brand name as indicators of quality dimensions for consumer durables", Journal of the Academy of Marketing Science, Vol. 28 No.3, pp.359
- Bucklin, L.P. (1966), "Testing propensities to shop", Journal of Marketing, Vol. 30 No.1, pp.22-7.
- Cassill, N.L., Williamson, N.C. (1994), "Department store cross-choppers", Journal of Applied Business Research, Vol. 10 No.4, pp.88-96.
- Cort, S.G., Dominguez, L.V. (1977-1978), "Cross shopping as incremental business in concentric growth strategies", Journal of Retailing, Vol. 53 No.4, pp.316
- Cronbach, L. (1951), "Coefficient alpha and the internal structure of tests", Psychometrica, Vol. 16 pp.297-334
- Dawar, N., Parker, P. (1994), "Marketing universals: consumers' use of brand name, price, physical appearance and retailer reputation as signals of product quality", Journal of Marketing, Vol. 58 No.2, pp.81-95.
- Dodds, W.B. (1995), "Market cues affect on consumers' product evaluations", Journal of Marketing Theory and Practice, Vol. 3 No.2, pp.50-63.

- Finn, A., Louviere, J.J. (1996), "Shopping centre image, consideration, and choice: anchor store contribution", Journal of Business Research, Vol. 35 No.3, pp.241-51.
- Fox, E.J., Montgomery, A.L., Lodish, L.M. (2004), "Consumer shopping and spending across retail formats", Journal of Business, Vol. 77 No.2, pp.s25-s60.
- <u>Grewal, D., Marmorstein, H., Sharma, A. (1996), "Communicating price information</u> <u>through semantic cues: the effects of store name, brand name, and price discounts</u> <u>on consumers' evaluation of purchase intentions", Journal of Retailing, Vol. 74 No.3,</u> <u>pp.148-55.</u>
- Grewal, D., Monroe, K., Krishnan, R. (1998), "The effects of price comparison advertising on buyers' perceptions of acquisition value and transaction value", Journal of Marketing, Vol. 62 No.2, pp.46-59
- Grewal, D., Krishnan, R., Baker, J., Borin, N. (1998), "The effects of store name, brand name, and price discounts on consumers' evaluations and purchase intentions", Journal of Retailing, Vol. 74 No.3, pp.331-52.
- Keen, C., Wetzels, M., de Ruyter, K., Feinberg, R. (2004), "E-tailers versus retailers: which factors determine consumer preferences?" Journal of Business Research, Vol. 57 No.7, pp.685-95
- Lichtenstein, D.R., Netemeyer, R.G., Burton, S. (1990), "Distinguishing coupon proneness from value consciousness: an acquisition-transaction utility theory perspective", Journal of Marketing, Vol. 54 No.3, pp.54-67.
- Lichtenstein, D.R., Ridgway, N.M., Netemeyer, R.G. (1993), "Price perceptions and consumer shopping behaviour: a field study", Journal of Marketing Research, Vol. 30 No.2, pp.234-45.
- McGowan, K., Sternquist, B. (1998), "Dimensions of price as a marketing universal: a comparison of Japanese and US consumers", Journal of International Marketing, Vol. 6 No.4, pp.49-65.
- Monroe, K., Krishnan, R. (1985), "The effect of price on subjective product evaluations", in Jacoby, J., Olson, J.C. (Eds), Perceived Quality: How Consumers View Stores and Merchandise, Lexington Books, Lexington, MA, pp.209-32
- Nunnally, J.C., Bernstein, I.H. (1994), Psychometric Theory, McGraw-Hill, New York, <u>NY.</u>
- Omar, O.E. (1999) Retail Marketing, London: FT/Prentice Hall.
- Olson, J.C. (1977), "Price as an informational cue: effects on product evaluations", in Woodside, A.G., Sheth, J.N., Bennet, P.D. (Eds), Consumer and Industrial Buying Behaviour, North Holland, New York, NY, pp.267-86.
- Price, L.L., Feick, L.F., Guskey-Federouch, A. (1988), "Couponing behaviours of the market maven: profile of a super couponer", Advances in Consumer Research, Vol. <u>15 pp.354-9.</u>
- Rao, A., Monroe, K.B. (1989), "The effect of price, brand name and store name on buyers' perception of product quality: an integrative review", Journal of Marketing Research, Vol. 26 No.3, pp.351-7.
- Richardson, D., Dick, A.S., Jain, A.K. (1994), "Extrinsic and intrinsic cue effects on perceptions of store brand quality", Journal of Marketing, Vol. 58 No.4, pp.28-36

- Seiders, K., Costley, C.L. (1994), "Price awareness of consumers exposed to intense retail rivalry: a field study", Advances in Consumer Research, Vol. 21 pp.79-85.
- Sharma, A., Krishnan, R. (2002), "Clicks only, clicks and bricks, and bricks only: are retail salespeople an important factor in choice?", Journal of Marketing Management, Vol. 18 No.3-4, pp.317-36.
- Stephenson, P.R. (1969), "Identifying determinants of retail patronage", Journal of Marketing, Vol. 33 No.3, pp.57-61
- Sweeney, J.C., Soutar, G.N. (2001), "Consumer perceived value: the development of a multiple item scale", Journal of Retailing, Vol. 77 No.2, pp.203-20.
- Tellis, G.J., Gaeth, G.J. (1990), "Best value, price seeking and price aversion: the impact of information and learning on consumer choices", Journal of Marketing, Vol. 54 No.2, pp.34-45.
- Urbany, J.E., Bearden, W.O., Weilbaker, D.C. (1988), "The effect of plausible and exaggerated references prices on consumer perceptions and price search", Journal of Consumer Research, Vol. 15 No.1, pp.95-110.
- Williams, J., Dardis, R. (1972), "Shopping behaviour for soft goods and marketing strategies", Journal of Retailing, Vol. 48 No.3, pp.32-42
- Yavas, U. (2003), "A multi-attribute approach to understanding shopper segments", International Journal of Retail & Distribution Management, Vol. 31 No.11, pp.541-8
- Zeithaml, V.A. (1988), "Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence", Journal of Marketing, Vol. 52 No.3, pp.2-22.