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# CONSUMERS' CRITERIA FOR SELECTING SUPERMARKETS WITHIN SHOPPING DISTANCE

By

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The author discusses patronage motives and examines the accuracy of consumers price perceptions and effectiveness of newspaper advertising.

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## Introduction

Many supermarkets operate near break-even. Since, in many cases, their costs of goods are alike, profit depends mainly on gaining a larger share of purchases from nearby households. The key question is, How?

## Objectives

The objective of this cross-sectional study is to explore the apparent determinants of supermarket patronage. According to an old maxim of retailing, supermarket executives should "give the lady what she wants." In more modern terms, the marketing concept suggests achieving profitable sales by finding out consumers' wishes and filling them through an integrated organization.

These prescriptions imply that food shoppers have particular criteria and can articulate them. Further, shoppers appraise supermarket performance accurately, and bestow their patronage on the most complaisant stores. Hence supermarket executives who strive for higher market share only need to survey shoppers within

their trading area and conform their marketing mix to the consumers' preferences. These implications are on trial here.

In seeking to discover patronage determinants, this study also examines the accuracy of shoppers' price perceptions and the apparent effectiveness of newspaper advertising. It tests whether price differentials are a function of market structure. The final subobjective is to illustrate the findings by profiling the leader in each market. All of this was digested from a series of eight studies, whose methodology will be discussed next.

## Methodology

Secondary research, visits to stores, and several focus groups of 30 food shoppers each, preceded this series of studies. In every city, research methodology comprised telephone interviews with the usual food shopper in 1,422 to 3,094 randomly selected households, market basket pricing audits of 114 to 200 identical items at all major supermarket chains, and analyses of newspaper advertising. Advertising lineage was measured for the current year and readership for the past seven days.

All marketing research is subject to methodological limitations including the familiar problems with aggregations and

comparisons. Although this research was designed by experts and conducted by independent, objective research firms, the usual caveats apply. Field Research Corporation of San Francisco was responsible for the Portland (Oregon) study during the summer of 1976 and the Minneapolis-St. Paul study during the winter of 1977. Marketing Information Service, Atlanta, Georgia, performed the other studies during the summer of 1977. The sponsor, The Sperry and Hutchinson Company, has allowed publication now that the original purpose of investigating opportunities for trading-stamp adoption no longer needs confidential treatment, whereas the interplay between consumer perceptions and patronage continues to offer an empirical contribution to the understanding of food retailing. All interpretations are solely by the author of this article.

This paper first contrasts the eight metropolitan areas' market structures. The rest focuses on consumer behavior in each chain's trading area. To avoid confusion from noncomparable amounts or percentages, entries in Tables 2 to 4 are ranks; #1 being the best, 2 is second best, and so on.

### Concentration Ratios

Although the economic structure in all eight metropolitan areas could be classified as oligopolistic, there are some substantial differences in the percentages of total sales accounted for by the leading supermarket chains. The most concentrated metropolitan area is Denver, Colorado, with a two-firm ratio of 83%. At the other extreme is Los Angeles, California, which encompasses over nine times as many households.

Among similar-sized population centers, Table 1 shows, Atlanta, Georgia, and Buffalo, New York, have five-firm concentration ratios of 86 and 90, respectively. This contrasts with Hartford, Connecticut, and Minneapolis-St. Paul, Minnesota, where the five leading super-

market chains' market shares are in the 60s. Portland, Oregon (excluding Clark County, Washington), and Indianapolis, Indiana, are in between. At the five-firm level the range of concentration ratios is 30 points.

Each of these metropolitan areas also accommodates independent supermarkets, small grocery stores, convenience stores, specialty food shops, and experimental units. Entry into food retailing is relatively easy. Rivalry is vigorous. Supermarkets also are under pressure from unlike organizations; e.g., fast-food outlets, that cater to changing lifestyles of food shoppers.

### Food Shoppers

Food shoppers' attitudes and actions toward the leading supermarket chains in their orbit are the focus of the balance of this report. The key concept is "shoppers within reach." It means that the survey first asked all respondents to designate the supermarkets where they could shop if they wanted to, and then confined the interview to this evoked set. In other words, the ratings, market shares, and all other measures in this section derive from the shoppers in each supermarket chain's trading area. Each chain (regardless of size or location) has the same base--100%.

Most criteria area, of course, subjective and not amenable to independent verification. An exception is a chain's price level.

### Pricing: Perceptions and Performance

Supermarkets first succeeded mainly as a lower-priced alternative to the traditional grocery store. Over the past half century, price has continued to be a key tool in attracting patronage. Since the late 1960s many food retailers have projected a discount image, reacting to the apparent price consciousness of consumers.

While discussing their feasible choices of supermarkets, shoppers identified the ones they liked on some 10 to 12 criteria including low prices. Their price perceptions are compared in Table 2 with a market basket's actual prices in competing stores. The professional research staff recorded the prices of 111 to 200 identical items or groups of items in each chain and weighed them according to the components of the Consumer Price Index. (An item-by-item compilation given different ranks but does not alter the following conclusions.)

In Table 2, the chain with the lowest price per audit is \$1. The highest-priced chain has the highest number. These ranks appear in order of perceptions. Thus, in Atlanta, shoppers rated as the least expensive, the chain that ranks as second lowest in the audit. They rated as most expensive the third lowest-priced chain per the audit.

The households' usual food shoppers identified correctly the lowest-priced chain in three out of eight cities. But nowhere did the majority of consumers' price perceptions coincide with performance. An almost inverse order emerges, notably in Indianapolis, Minneapolis-St. Paul, and Denver.

The comparisons among chains revealed wide price differences for individual items or even product classes. Much of this variance was offsetting. Total spread for the market baskets among all stores ranged from 2.5% in Minneapolis-St. Paul to 9.9% in Indianapolis.

#### Pricing: Concentration and Conduct

Do these different ranges (i.e., from 2.5% to 9.9%) reflect differences in market structure or other factors? Presumably as a market structure tends toward monopolistic competition, pricing discretion increases.

In the following comparison, the smallest price spread ranks #1 up to the highest #7. The least concentrated area ranks #1, the second #2, and so on. (Concentration ratios are in Table 1. Price spreads per audit are on the last line of Table 2.) Correlation should be inverse.

<u>Metro Area</u>	<u>Concentration</u>	<u>Price Spread</u>
Hartford	1 (least)	6
Minneapolis-St. Paul	2	1 (least)
Portland	3	3
Indianapolis	4	7 (highest)
Atlanta	5	5
Buffalo	6	4
Denver	7 (highest)	2

The results do not sustain the above prediction that price spreads increase as concentration decreases. Perhaps theory is no more dependable than opinion in assessing price levels. More likely, the omission of locations, promotions, atmosphere, and other influences contaminate this comparison. It is true, however, that market structure is not so strong a determinant of pricing conduct as to overwhelm these omissions. Perhaps market structure influences conduct less decisively than shoppers' responses.

#### Newspaper Linage and Readership

As noted, in many cases, shoppers' opinions about price levels strayed from the objective findings. One possible reason for misperceptions of price levels is that some chains are more aggressive or adroit than others in advertising bargains.

Indeed, in three of seven cities measured, the smallest newspaper advertiser among the leading supermarket chains had only one-half to three-fifth of the top advertiser's lineage, yet attain the highest readership. According to Table 3, newspaper advertising practices and readership (the only medium measured) varied widely in each market.

Except perhaps in Denver, it appears that in every city there are some chains that could benefit substantially from an advertising expert's advice about the quantity and quality of newspaper ads. An adviser would need to supplement the results of this research with information about a chain's communication objectives, use of other advertising media, and the relationship of readership to effectiveness.

In five of the seven markets, this research (not charted here) reveals, correlation between a chain's image for good price specials and advertising readership is fairly high. Apparently, formulation of advertising policy should draw on a profile of a company's image.

#### Image of Market-Share Leaders

To conserve space, only one chain per city will be profiled, the chain with the highest market share in its trading area. The interviewers asked all respondents repeatedly to state what they "especially liked" about each chain within their reach. (Interestingly, "dislike nothing in particular" by far leads all answers, followed by "like nothing in particular," in the four studies that tabulated those reactions.) Some 10 to 12 criteria emerged, but the seven on Table 4 were the only ones mentioned widely. Then an overall evaluation was elicited by asking the respondents for a composite rating of superior, satisfactory, or inferior.

Atlanta exhibits generally close correspondence between votes on these criteria and "votes" with dollars. Portland is probably second most consistent in this respect (but for the leading chain only). Table 4 shows wide divergences between shoppers' ratings and patronage in Buffalo, Hartford, and Indianapolis.

Five of the market leaders ranked most favorably on perception of the lowest prices. None received top rating on meats. The leader scoring best on meats sustained the most unfavorable rating for prices. Does a price-quality association lurk here? Detailed analyses of individual cities support this suspicion. As noted earlier, perceptions of low prices often did not hold up against findings in a professional audit. This disparity casts doubt on an alternative possibility, that a policy of low prices constrained those chains' meat quality.

Another interesting juxtaposition occurs in Los Angeles where two supermarket chains tie for top market share. Apparently they serve different segments. One uses low prices as the overriding criterion. The other segment emphasizes clean stores, courteous employees, and produce.

Is consumer approbation a dependable predictor of patronage? Table 4 indicates some correspondence between an overall rating of superior and top market share. What correspondence exists falls apart, however, when in each city the ranks of superior composite ratings are paired with ranks in market share. The individual criteria show even less parallelism between perceptions and patronage. Perhaps a greater consistency would emerge from separate analyses for each chain.

#### Implications

Altogether the eight studies show, to the extent that they are valid, that

TABLE 1  
 CONCENTRATION RATIOS FOR SUPERMARKET CHAINS IN EIGHT METROPOLITAN AREAS

Metropolitan Area	Number of Households	Year of Study	Concentration Ratios		
			Three-Firm	Four-Firm	Five-Firm
Atlanta, Georgia	563,000	1977	62%	77%	86%
Buffalo, New York	447,000	1977	82%	86%	90%
Denver, Colorado	350,000	1977	89%	91%	92%
Hartford, Connecticut	277,000	1977	44%	56%	62%
Indianapolis, Indiana	390,000	1977	62%	70%	77%
Los Angeles, California	3,293,000	1977	39%	50%	58%
Minneapolis-St. Paul, Minnesota	690,000	1977	44%	57%	68%
Portland, Oregon (except Clark County)	354,000	1976	60%	70%	76%

TABLE 2  
 SUPERMARKETS' ACTUAL PRICES VERSUS SHOPPERS' PRICE PERCEPTIONS  
 (RANKS FROM AUDITS SEQUENCED BY SHOPPERS' LIKINGS OF PRICES)

Array of Perceptions	Relative Standings in Actual Field Audits						Portland
	Atlanta	Buffalo	Denver	Hartford	Indianapolis	Los Angeles	
Liked Best							
1st	2*	1	3	1	6	1	3
2nd	1		4	4	4	5	4
3rd	5	2,4	1	5	2	2	2
4th	4	3	2	2	1	4	1
5th	6	6		3	3	6	5
6th	3	5			5	3	
Liked Least							
Number of Items Audited	114	200	160	111	167	Not available	124
Price Spread Per Audit	7.7%	4.7%	2.7%	8.3%	9.9%		2.5%
							3.9%

\*Read: The chain that Atlantan shoppers within reach perceived as lowest in price ranked second in the audit.

TABLE 3  
 NEWSPAPER ADVERTISING LINAGE VERSUS READERSHIP  
 (LINAGE RANKS SEQUENCED BY SHOPPERS' READING OF ADS)

Array of Readership	Minneapolis-						Portland
	Atlanta	Buffalo	Denver	Hartford	Indianapolis	Los Angeles	
Read Most							
1st	3*	4	1	5	4	5	1
2nd	1	3	2	3,4	1	4,2	3
3rd	2	5	3		3		4,5
4th	4		4	1	2	1	
5th	5	1,2,6		2		3	2
Read Least							
Lowest Linage (Highest=100)	17	38	6	60	48	61	47
							45

\*In Atlanta the chain with the highest ad readership among shoppers is its trading area had the third highest advertising linage.



TABLE 4  
RANKS OF FAVORABLE RATINGS FOR THE SUPERMARKET CHAINS  
WITH THE HIGHEST MARKET SHARE IN THEIR RESPECTIVE TRADING AREAS

Ranks of Shoppers' "Likes"	Atlanta	Buffalo	Denver	Hartford	Indianapolis	Los Angeles TIE	Minneapolis-St. Paul	Portland
Accessibility	2	3½	5	4	4	6	1	1
Meats	4	5	5	4	4	4½	2	3
Low Prices	1	2½	1	1	2	1	5	1
Employees	1	1	3½	3	2	4	1	1
Produce	1	2	3	3	2½	5	2	2
Clean Store	1	3	3	4½	4	3½	2	4
Merchandise Variety	2	2	1	3	3	2	2	2½
Overall "Superior"	1½	1	1	3	2½	1	1	2
Number of Respondents	1422	1498	1788	1524	1577	2908	3021	3094

1 = Best rating.

supermarkets' efforts to satisfy consumer preferences are fraught with pitfalls. One obstacle is consumers' misperceptions. Another is diversity of opinion. The state of the art in marketing research is yet another barrier.

Where this information is available, a surprisingly large percentage of shoppers seem apathetic. This implies that supermarkets' merchandising and promotional strategies fail, in many cases, to engage the targeted prospects. On the other hand, even shoppers who articulate strong views often do not follow through with consonant actions. And, given the difficulties of accurate measurement and the multiplicity of influences, industrial-organization theory is not a reliable guide in this instance, either.

These obstacles discourage but do not excuse a quest to ascertain prospects' preferences and a commitment to meet them. Supermarkets are under intensifying constraints, both competitively and politi-

cally. That is, consumers examine ever-widening alternatives among food sources. Consumerists exert ever-growing pressures.

Enlightened managements respond by learning more about the shopping behavior of their prospects and tailoring strategies commensurately. They keep current through personal contacts in stores, consumer panels, and formal marketing research. A report of the type presented here can serve as a multiple benchmark. One, it suggests many commercially significant questions for which a company could seek answers at relatively low cost. Two, it reveals some of the nuances of consumer complexity, replacing slogans with evidence. Three, it should be a point of departure for periodic research to monitor shifts in competition and consumer behavior, discover unsatisfied wants that are opportunities to attract more patronage, and alert management about new agitation or regulations.

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