

**GROCERY SHOPPING STRATEGIES:  
CONSUMERS' CHOICES AND SELECTION CRITERIA**

*Brenda J. Cude  
University of Illinois*

Economic theory [1] suggests consumers select a shopping strategy by balancing the expected return and cost. The goal is to select a strategy or strategies for which the return is equal to or greater than the cost. The objective costs of implementing a strategy include transportation and the value of the shopper's time. Subjective costs may also result if the consumer dislikes shopping. The return from a strategy is primarily monetary savings although subjective benefits may be realized if the consumer also enjoys shopping.

In discussing grocery shopping strategies, consumer educators frequently focus on monetary savings and often recommend unit pricing since it results in the largest money savings when correctly implemented [4]. Yet unit pricing is only one of many grocery shopping strategies a consumer may choose. Buying generics and/or store brands, buying larger sizes, and coupon clipping are three other strategies that have received considerable attention. Various studies have indicated that consumers believe generics and store brands to be lower in price as well as in quality than brand name items [8, 9, 11]. Whether coupons result in net monetary savings to consumers as a class [13] and factors affecting coupon redemption rates [12] are topics that have also been investigated. Cude and Walker [3], Widrick [15, 16], and Nason and Bitta [10] have all examined the monetary savings possible from a strategy assuming that larger sizes are less expensive than smaller sizes.

Consumer educators [2, 5, 13, 14] have recently begun to place more emphasis on the time cost of a strategy as an important selection criteria for consumers. The value of time spent in using a strategy depends on how efficiently the consumer implements the strategy as well as on his or her perception of the benefits lost by using that time in shopping rather than in other activities. Yet potential differences in methods used by consumers are often ignored as an element affecting time costs. For example, unit pricing is widely accepted as a time-intensive strategy. However, buying the largest size and buying sale items are generally considered time-saving strategies. Yet the time intensity of either strategy depends on how it is implemented. If the consumer simply scans the shelf and/or store

circular and picks up an item on sale, implementation time is relatively brief. However, is the consumer buys a sale item after first comparing its price to those of some or all other options, the amount of time required for implementation may be comparable to that needed to unit price.

It was the primary purpose of this research to investigate grocery shopping strategies selected by consumers and the method of implementation. A second purpose was to identify factors related to consumers' choice of strategies.

**METHODOLOGY**

A survey instrument developed by the author was mailed to 600 respondents along with a self-addressed stamped envelope in April 1985. The sample was randomly selected from a telephone directory containing residential listings for four counties in southern Illinois. An accompanying letter asked that the person in the household who was primarily responsible for grocery shopping complete the questionnaire. A follow-up letter was mailed one week after the initial mailing.

Of the 600 surveys originally mailed, 123 were returned completed. An additional 22 were not deliverable and 18 were returned with incomplete responses.

**RESULTS**

Nearly one-fourth of the respondents were male and just over one-third of the total were unmarried. (See Table 1.) All age groups were fairly equally represented. Nearly one-half (47 percent) were employed, and 42 percent were the principal wage earner in their household. Education levels were relatively high with 54 percent having completed at least some college work. Only 23 percent had completed a consumer education course at any level in their education. Nearly one-half of the respondents lived in rural communities with populations ranging from 500 to 9,999. Household incomes were fairly equally distributed; 21 percent had an annual income of less than \$10,000 and 24 percent earned \$40,000 or more per year.

**Table 1. Demographic Characteristics of the Respondents**

Variables	n	Percent
Sex (n = 119)		
Male	29	24%
Female	90	76

	n	Percent
Marital Status (n = 119)		
Single, widowed, divorced	43	36
Married	76	64
Age (n = 118)		
24 and under	12	10
25 to 34	34	29
35 to 50	24	20
51 to 64	20	17
65 and over	28	24
Employment Status (n = 120)		
Employed	56	47
Full time homemaker	29	24
Unemployed, retired, disabled	35	29
Education (n = 121)		
Less than high school	20	16
Completed high school	36	30
Completed college courses	26	21
Four year degree	14	12
Completed graduate work/degree	25	21
Residence (N = 120)		
Farm, rural area	26	22
Community, pop. 500-9999	58	48
Community, pop. 10,000 or more	36	30
Household income (n = 114)		
Less than \$10,000	24	21
\$10,000 to \$19,999	24	21
\$20,000 to \$29,999	23	20
\$30,000 to \$39,999	16	14
\$40,000 or more	27	24

The survey included a list of 13 shopping strategies. Respondents were asked to indicate how frequently (not at all, a few shopping trips, during most shopping trips) they had used each strategy during the past month. As shown in Table 2, strategies used during most shopping trips by 40 percent or more of the respondents were clipping and using coupons (43 percent), reading and comparing store ads prior to shopping (46 percent), comparing posted unit prices (70 percent), and buying large sizes (41 percent) and sale items (66 percent) after comparing prices to other alternatives. Only 6 percent of the sample indicated that they bought large sizes without comparing prices, while 14 percent bought sale items without first making price comparisons.

**Table 2. Grocery Shopping Strategies Selected by Respondents.**

Strategy	Used During Most Shopping Trips	
	n	Percent
<b>GROUP I</b>		
Clips and uses coupons	53	43%
Calculates unit prices when not posted	36	31
Reads and compares store ads prior to shopping	56	46
Reads store ads while shopping	44	35
Compares posted unit prices	83	70
After comparing prices buys:		
Generics/store brands	44	36
Large sizes	49	41
Sale items	79	66
<b>GROUP II</b>		
Without comparing prices buys:		
Generics/store brands	19	16
Large sizes	7	6
Small sizes	3	2
Sale items	16	14
Brand name items	36	30

N = 123

The strategies in Table 2 are divided into two groups. Group I, which consists of the first eight strategies listed, was judged by the author to include strategies that required more time for implementation than those in Group II. Respondents were classified based on how frequently they indicated use of strategies from the two groups. Group I respondents were those who used five or more of the Group I strategies during most shopping trips but seldom employed strategies in Group II. Group II respondents include those who indicated they primarily used strategies from Group II or those who generally used a relatively equal combination of strategies from both groups.

Chi-square analyses were used to identify variables which were significantly related to the respondents' choice of Group I or Group II strategies. The variables analyzed are listed in Tables 3 and 4.

**Table 3. Variables Significantly Related to Choice of Shopping Strategy.**

Variables	Shopping Strategies				Chi-Square Statistic
	Group I		Group II		
	n	%	n	%	
Grocery Shopping Attitude (n = 103)					7.86*
Enjoys	24	51.1%	23	48.9%	
Neutral	13	36.1	23	63.9	
Dislikes	3	15.0	17	85.0	
Time Spent Shopping Per Week (n = 98)					91.6*
One hour or less	7	21.2	26	78.8	
One to three hours	12	63.2	7	36.8	
Three hours or more	19	41.3	27	58.7	
Principal Wage Earner (n = 95)					6.87*
Yes	9	22.5	31	77.5	
No	27	49.1	28	50.9	

\*Significant at the .025 level.

Three categories of variables were examined for a significant relationship to strategy choice: knowledge and attitude, shopping characteristics, and demographics. The variable assessing attitude toward grocery shopping was significantly related to the class of strategies chosen. (See Table 3.) As might be expected, shoppers using the more time intensive Group I strategies were less likely to dislike shopping or to be neutral in attitude. Only 15 percent of those who disliked grocery shopping used Group I strategies.

**Table 4. Results of Chi Square Analyses of Choice of Strategy by Selected Variables.**

Variables	Chi-Square Statistic
Knowledge of Unit Pricing (n = 107)	0.195
Number of Stores Where Usually Shop (n = 107)	0.47
Frequency of Shopping Trips (n = 106)	3.33
Uses a Written Shopping List (n = 106)	0.30
Weekly Grocery Expenditures (n = 100)	3.60
Other Household Members Shop (n = 04)	0.31
Sex (n = 109)	1.21
Marital Status (n = 105)	4.94
Age (n = 104)	0.13
Employment Status (n = 107)	0.17

Education (n = 106)	1.01
Consumer Education course (n = 105)	0.19
Residence (n = 106)	0.77
Annual Household income (n = 93)	4.31

Knowledge of unit pricing was a variable computed from responses to two questions, one involving the use of unit price tags and one requiring computation of unit prices. This variable was not significantly related to the strategy choice. (See Table 4.)

Six variables describing grocery shopping characteristics were included in the analyses: number of stores usually patronized, frequency of shopping, time spent in grocery shopping per week, weekly grocery expenditures, whether other persons in the family shared responsibility for grocery shopping, and whether the respondent made a written grocery list. Only time spent shopping per week was significantly related to the choice of strategies. Of those who shopped one hour or less per week, over three-fourths (78.8 percent) used the less time intensive Group II strategies.

The final nine variables included in the analyses were demographic characteristics: sex, marital status, age, employment status, status as principal wage earner, education level, consumer education, residence, and annual income. Whether the respondent was the principal wage earner was the only one of the nine demographic variables significantly related to strategy choice. Only 22.5 percent of those who were principal wage earners used the more time intensive strategies compared to 49.1 percent of those who were secondary earners or unemployed. This finding is consistent with the notion that individuals consider the value of their time in choosing a strategy. One would expect an individual who is the principal wage earner in a household to value time spent in shopping at a higher rate than one who is a secondary or non-earner and thus to adopt strategies requiring a smaller time commitment.

### SUMMARY, LIMITATIONS, AND SUGGESTED LEARNING ACTIVITIES

The implications of this study are limited due to the small sample size. Additionally, respondents were primarily rural with above average education and income. Nevertheless, the results indicate that consumers do use a variety of strategies in most shopping trips and that strategies may be implemented in more than one way. For example, 36 percent of the respondents indicated that on most shop-

ping trips they bought generics/store brands *after* comparing prices to other items. In contrast, 16 percent bought generics/store brands *without* comparing prices to other items. Additionally, although the sex of the respondent was not significantly related to the choice of strategies, this study is noteworthy in that nearly one-fourth of the respondents were male. With few exceptions [6, 7], the primary focus in the past has been on women as food shoppers.

The findings highlight the importance of consumer educators assisting students in developing individualized shopping strategies. While an educational unit on selecting a shopping strategy would logically begin with an explanation of the use of unit pricing, students should learn about the advantages and disadvantages of other strategies as well as alternative ways they can be implemented. Students could then be encouraged to develop a set of individualized strategies, each of which may be used for different products in a single shopping trip. For a more realistic presentation, attitudes about grocery shopping and the value placed on shopping time should be emphasized as important criteria for selecting shopping strategies. In a more advanced unit, attention could be directed to helping students determine an efficient tradeoff between time spent in comparative shopping and monetary savings. (See [4] for additional teaching suggestions.)

### REFERENCES

1. Becker, G., "A Theory of the Allocation of Time," *Economic Journal*, Vol. 75, September 1966, pp. 493-517.
2. Crowell, P.M. and J.S. Bowers, "Impacts of Time and Transportation Costs on Food Shopping," *Journal of Consumer Affairs*, Vol. 11, Summer 1977, pp. 102-109.
3. Cude, B.J. and R. Walker, "Quantity Surcharges: Are They Important in Choosing a Shopping Strategy?" *Journal of Consumer Affairs*, Vol. 18, Winter 1984, pp. 287-195.
4. Cude, B. and R. Walker, "Unit Pricing and Alternatives: Developing an Individualized Shopping Strategy," *Journal of Business Education*, Vol. 60, January 1985, pp. 168-172.
5. Hawkins, D.I. and G. McCain, "An Investigation of Returns to Different Shopping Strategies," *Journal of Consumer Affairs*, Vol. 13, Summer 1979, pp. 67-74.

6. Johnson, M., "Cooking, Cleaning, Shopping, the Manly Thing to Do," *Progressive Grocer*, July 1983, p. 19.
  7. Langehr, V.B. and F.W. Langehr, "A Comparison of the Attitudes and Behaviors of Utah Men and Women in Their Roles as Primary Household Food Shoppers," 24th Annual Western Regional Home Management-Family Economic Educators Conference *Proceedings*, 1984, pp. 13-17.
  8. McEnally, M.R. and J.M. Hawes, "The Market for Generic Brand Grocery Products: A Review and Extension," *Journal of Marketing*, Vol. 48, Winter 1984, pp. 75-83.
  9. Murphy, P.E. and G.R. Laczniaik, "Generic Supermarket Items: A Product and Consumer Analysis," *Journal of Retailing*, Vol. 55, Summer 1979, pp. 3-14.
  10. Nason, R.W. and D.J.D. Bitta, "The Incidence and Consumer Perceptions of Quantity Surcharges," *Journal of Retailing*, Vol. 59, Summer 1983, pp. 46-53.
  11. *Progressive Grocer*, "Generics - Who Buys: Rich Shopper, Poor Shopper, They're All Trying Generics," March 1979, pp. 92-110.
  12. Reibstein, D.J. and P.A. Traver, "Factors Affecting Coupon Redemption Rates," *Journal of Marketing*, Vol. 46, Fall 1982, pp. 102-113.
  13. Uhl, J.N., "Cents-Off Coupons: Boon or Boondoggel for Consumers?" *Journal of Consumer Affairs*, Vol. 16, Summer 1982, pp. 161-165.
  14. Walker, R. and B. Cude, "In-Store Shopping Strategies: Time and Money Costs in the Supermarket," *Journal of Consumer Affairs*, Vol. 17, Winter 1983, pp. 356-369.
  15. Widrick, S.M., "Measurement of Incidents of Quantity Surcharge Among Selected Grocery Product," *Journal of Consumer Affairs*, Vol. 13, Summer 1979, pp. 99-107.
  16. Widrick, S.M., "Quantity Surcharge: A Pricing Practice Among Grocery Store Items — Validation and Extension," *Journal of Retailing*, Vol. 55, Summer 1979, pp. 47-58.
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