

A PRODUCT-SPECIFIC EXAMINATION OF SHOPPING MODE CHOICE

Vicki L. Blakney, *University of Dayton*

William S. Sekely, *University of Dayton*

This study examines the influence of product determinants on the profiles of four shopping mode choice segments. Findings indicate that general across-product-category profiles have validity across a broad range of items including products in the adult clothing, children's clothing, toys/games, and beddings/linens categories.

INTRODUCTION

Retailers and communities may not be aware of how much consumers' shopping mode choices affect them. These choices are important to the retailer because a consumer can purchase the same or similar merchandise via a variety of different avenues. Shopping mode alternatives include shopping in a local retail store (local shopping), shopping out of town (outshopping), or shopping at home through mail, telephone, or computer (in-home shopping). Depending on the shopping mode decisions of consumers, retailers may have little, if any, chance of attracting consumers to their stores. That is, if certain consumers choose outshopping or in-home shopping for a significant portion of their purchases, local retailers will have lost their business, not to competitive stores, but to different shopping mode preferences. This loss of business for local retailers or intermarket leakage is a major problem for many retailers and communities (Carusone, 1971; Parcells, 1982).

Given the potential impact of shopping mode decisions that exclude the local retailer, more research should be done to understand why some people prefer outshopping and/or in-home shopping. In a preliminary study, Riecken and Yavas (1988) found evidence of four distinct segments defined on the basis of shopping mode choice. These were:

1. **Segment 1:** Significantly participates in outshopping, but not in-home shopping.

2. **Segment 2:** Significantly participates in in-home shopping, but not outshopping.

3. **Segment 3:** Significantly participates in both outshopping and in-home shopping.

4. **Segment 4:** Does not significantly participate in either outshopping or in-home shopping.

Blakney and Sekely (1993, 1992a, 1992b) expanded upon the Riecken and Yavas (1988) study. Using more powerful statistics and empirically based definitions of outshopping and in-home shopping activity, they found evidence that the four shopping segments had distinct household/buyer characteristics (1992b) and psychographic profiles (1992a). They also found that these groups were motivated by different shopping attributes (1993).

While these studies have contributed significantly to the understanding of shopping mode choice, all have ignored the influence of product category. Studies by both Lillis and Hawkins (1974) and Darden and Perreault (1976) indicate that some characteristics of outshopping consumers may be product specific. The issue of product category influence has not been directly addressed in the in-home shopping literature. However, there are many inconsistent findings that might be explained by product category influence. For example, Berkowitz, Walton, and Walker (1979) found that consumers who in-home shop for food were better educated than in-store food shoppers. On the other hand, Taylor and Taylor (1982) found that in-home shoppers for clothing were less educated.

The purpose of this study is to examine the relationship of product determinants to the makeup of the four shopping segments defined earlier. For easier recognition, segment 1 was named outshopper; segment 2,

in-home shopper; segment 3, supplement shopper; and segment 4, local shopper. Specifically, the study builds profiles of each segment based on household/buyer characteristics, psychographic characteristics, and shopping motivations. Then the stability of these profiles is examined across a number of different product categories.

SELECTION OF VARIABLES FOR PROFILES

MacKay (1972) as well as Monroe and Gultinan (1975) suggest that a patronage choice model should incorporate demographic, attitudinal, and shopping variables. Additionally, much of the literature has profiled outshopping and/or in-home shopping consumers using variables in one or more of these categories. Finally, the empirical evidence suggests that segments representing individual shopping mode choice can be differentiated on the basis of household/buyer characteristics, psychographic characteristics, and shopping motivations. The specific profile variables used for this study were selected based on a thorough review of the literature. Table 1 lists the variables used in this study to build group profiles and the supporting empirical evidence.

SELECTION OF PRODUCT CATEGORIES

Five product categories were selected for this study. These categories include adult clothing, children's clothing, furniture/home furnishings, linens/beddings, and toys/games. They were selected for a number of reasons. First, items within these categories are typically classified as shopping and/or specialty goods. These types of products explain a large proportion of shopping travel to major retail centers (Parcells, 1982). Additionally, they are available through in-home methods as well as being sold in local stores. Because they are available through each shopping mode, these items were much more likely to represent a consumer's true shopping mode preference when purchasing the items.

Secondly, these categories represent a majority of the products that have been examined with regard to outshopping and in-home shopping behavior (See Herrmann and Beik, 1968; Thompson, 1971; Lillis and Hawkins, 1974; Darden and Perreault, 1976; Papadopoulos, 1980; Taylor and Taylor, 1982). Of course, these categories do not include all products that have been mentioned in association with these behaviors, but the product categories represent groups of products that are commonly purchased by outshopping or in-home shopping consumers.

METHODOLOGY

The present research used a field study structure. The sample consisted of households from a small Southeastern community. The test community was selected so that the sample would include respondents from a variety of backgrounds, a mix of residential location categories, and a variety of outshopping and in-home shopping opportunities for respondents.

The official city limits served as the outer boundaries for the sample selection process. The sample was stratified by census tract to ensure that the different types of neighborhoods representing different socioeconomic characteristics were included in the sample. All tracts within the city limits were used, weighted by population. Within each tract, blocks served as the initial sampling units. Within blocks, households served as the medium for sampling persons. Individuals responsible for a majority of the household purchases were asked to provide the required information regarding the entire household.

A total of 800 questionnaires was distributed and 420 questionnaires were collected, resulting in a response rate of 52.5 percent. However, only 380, or 47.5 percent of the returned questionnaires were usable.

A large portion of the sample (76.5%) was female. This is primarily because one person was asked to answer questions regarding shopping practices for the entire household. Women tend to play the role of major shopper in the household; therefore, more women than men completed the questionnaire. Table 2 contains information concerning other sample characteristics. These sample characteristics were compared with census information for the entire United States. For the most part, the sample was representative of the population. However, the sample distributions differed from the U.S. distributions in a few demographic categories.

The distribution with the most differences was the education category. The sample was more highly educated than the U.S. population. One possible explanation for the lack of response from lower educated individuals is the reading level requirements associated with completing a somewhat complex questionnaire. Additionally, the high and low income extremes were underrepresented and the three middle income categories were over represented. While minorities were slightly underrepresented, there is some evidence that this under representation may not severely bias the results. Gillett (1976) found that when the effect of income was removed, there were no differences

TABLE 1
LIST OF PROFILE VARIABLES AND SUPPORTING STUDIES

Household/Buyer Characteristics	Psychographic Characteristics	Shopping Motivations
List of Specific Variables	List of Specific Variables	List of Specific Variables
Socioeconomic Status Education Household Income Occupational Status Stage in Family Life Cycle Age Household Size Mobility Mobility Scale Tenure in the Community Activity Time Consciousness Leisure Orientation	Usage of Credit Number of Credit Cards Local Credit Out-of-town Credit Credit Orientation Self-Confidence Venturesomeness Fashion Consciousness Mall Orientation Loyalty to Local Retailers	Nonfunctional Shopping Motivations Risk Enjoyment/Entertainment Functional Shopping Motivations Convenience Price Merchandise Quality Merchandise Selection Service Quality Service Selection
Supporting Studies	Supporting Studies	Supporting Studies
Cox & Rich (1964) Herrmann & Beik (1968) Gillett (1970) Thompson (1971) Peters & Ford (1972) Reynolds & Darden (1972) Bonfield & Turnage (1973) Cunningham & Cunningham (1973) Reynolds (1974) Reynolds & Martin (1974) Darden & Perreault (1976) Bellenger & Hirschman (1979) Berkowitz, Walton, & Walker (1979) Cooper & Reidenbach (1979) Papadopoulos (1980) Taylor & Taylor (1982) Thomas (1982) Samli, Riecken, & Yavas (1983) Hawes & Lumpkin (1984) Lumpkin & Hawes (1985) Lumpkin, Hawes, & Darden (1986) Riecken & Yavas (1988) Blakney & Sekely (1992b)	Cox & Rich (1964) Herrmann & Beik (1968) Gillett (1970) Thompson (1971) Reynolds & Darden (1972) Peters & Ford (1972) Bonfield & Turnage (1973) Cunningham & Cunningham (1973) Reynolds & Martin (1974) Reynolds (1974) Paksoy (1975) Darden & Perreault (1976) Bellenger & Hirschman (1978) Berkowitz, Walton, & Walker (1979) Cooper & Reidenbach (1979) Taylor & Taylor (1982) Samli, Riecken, and Yavas (1983) Hawes & Lumpkin (1984) Reidenbach, Cooper, & Harrison (1984) Hozier & Stem (1985) Lumpkin & Hawes (1985) Lumpkin, Hawes, & Darden (1986) Riecken & Yavas (1988) Blakney & Sekely (1992a)	Cox & Rich (1964) Herrmann & Beik (1968) Gillett (1970) Thompson (1971) Peters & Ford (1972) Reynolds & Darden (1972) Bonfield & Turnage (1973) Samli & Uhr (1973) Lillis & Hawkins (1974) Reynolds (1974) Gillett (1976) Berkowitz, Walton, & Walker (1979) Papadopoulos (1980) Williams (1981) Taylor & Taylor (1982) Samli, Riecken, & Yavas (1983) Reidenbach, Cooper, & Harrison (1984) Hawes & Lumpkin (1984) Hozier & Stem (1985) Lumpkin, Hawes, & Darden (1986) Riecken & Yavas (1988) Blakney & Sekely (1993)

TABLE 2
CHARACTERISTICS OF THE SAMPLE
COMPARED TO CENSUS INFORMATION

Population Characteristic	Sample Percentage	Census Information
Type of Household		
Single Household	27.93	26.80
Family Household	72.07	73.20
Race		
White	90.42	82.00
Black	7.45	11.10
Other	2.10	6.90
Family Income		
\$00,000 to \$14,999	17.76	25.50
\$15,000 to \$24,999	22.86	18.50
\$25,000 to \$34,999	24.60	16.90
\$35,000 to \$49,999	21.93	18.60
\$50,000 and Over	12.83	20.40
Education		
Less than High School	6.13	23.10
High School	32.00	38.50
Some College	23.73	17.30
College Graduate and Beyond	38.13	21.10
Age		
17 to 21	3.66	9.88
22 to 31	20.38	22.51
32 to 41	21.45	21.35
42 to 51	16.35	14.78
52 to 61	18.23	11.61
Over 62	20.11	19.86

Note: Census percentages for household income and race reflect 1990 updates. Age and education are based on 1989 figures. All other percentages are based on 1980 information.

between blacks and whites in outshopping and in-home shopping behaviors.

Measurement of Independent Variables

Age, education, income, occupational status, household size, and tenure in the community were each measured by a single question on the questionnaire. Mobility, time consciousness, leisure orientation, loyalty, self confidence, venturesomeness, shopping mall orientation, and credit orientation are constructs measured through summated multi-item scales. The scales were developed from measuring instruments utilized by Wells and Tigert (1971), Reynolds and Darden (1972), and Berkowitz, Walton, and Walker

(1979). Individual scale items and information concerning scale reliability are shown in Table 3.

The determinance values for price, merchandise selection, merchandise quality, service selection, service quality, convenience, salesperson quality, entertainment/enjoyment, and perceived risk were measured by asking respondents three questions regarding each attribute: (1) the importance of the attribute with regard to their shopping decisions (I); (2) if the shopping mode they choose most often has that attribute (R); and (3) if shopping modes in general have that attribute (G). Five-point scales were used for all three questions. Responses from these questions were used in the following formula to calculate determinance values:

TABLE 3
INFORMATION ON SCALE RELIABILITY AND VALIDITY

Scale Name and Scale Items	Factor Loadings	Cronbach's Alpha
Fashion Consciousness		.7088
When I must choose between the two, I usually dress for fashion, not for comfort.	.77371	
An important part of my life is dressing smartly.	.76682	
I usually have the clothes that are of the latest style.	.72499	
Self Confidence		.8125
I think I have more self-confidence than most people.	.80258	
I am more independent than most people.	.78032	
I think I have a lot of personal ability.	.77944	
I like to be considered a leader.	.67456	
Venturesomeness		.7426
I like to go to other places for the sake of novelty and variety.	.78225	
I like to try new and different shopping experiences.	.74485	
I like to experiment.	.72227	
Loyalty		.8760
I am loyal to my local shopping area.	.88475	
I owe it to my community to shop at local stores.	.86905	
I shop locally to support local merchants and business districts.	.80997	
Credit Orientation		.7157
I buy many things with a credit card or charge card.	.85423	
I like to pay cash for everything I buy.	.82897	
It is good to have charge accounts.	.70270	
Mobility		.7069
It would not bother me to move to a new town.	.56145	
We will probably move once in the next five years.	.56660	
Our family travels quite a lot.	.76560	
My job takes me to other cities where I shop.	.52630	
I often visit friends in other cities.	.62437	
Mall Orientation		.6229
I do not enjoy going to big shopping centers.	.20677	
I prefer shopping malls over downtown areas.	.90120	
Shopping malls are the best places to shop.	.87164	
Time Consciousness		.6604
I like to plan my activities by the clock.	.79463	
I try to save time when shopping.	.79450	
Time is a valuable asset and must be conserved whenever possible.	.63176	
Leisure Orientation		.8471
I take time off for leisure every day.	.88189	
I set aside time each day for myself.	.87160	
I make sure that I have time to do the activities I enjoy.	.83674	

$D = I((R-G) + C)$ where:

D = Determinance value for the attribute

I = Relative importance for the attribute

R = Belief as to the extent to which preferred shopping modes possess the attribute

G = Belief as to the extent to which shopping modes in general possess the attribute

C = A constant added to the formula to avoid problems with negative determinance values (in this instance the constant was 5, because a five-point scale for each question was used)

This method for measuring determinance value for an attribute was based on suggestions by Myers and Alpert (1968), Sheth and Talarzyk (1972), and Lumpkin, Greenberg, and Goldstucker (1985). Research by Alpert (1971) and Heeler, Okechuku, and Reid (1979) indicates that the method of direct, self-reporting, questions to measure determinance value is more efficient and reliable than methods such as conjoint analysis, information display boards, regression, or importance only questioning.

Dependent Variables

The dependent variables for the study are the four segments defined by their overall level of outshopping and in-home shopping activity (i.e., outshoppers, in-home shoppers, supplement shoppers, and local shoppers) and the product specific groups defined in a similar way.

The four were defined based on empirical guidance rather than arbitrary cutoffs. A pilot study was utilized

to determine the appropriate classification criteria for the shopping groups. In the pilot study, respondents were asked to allocate their total annual expenditures as a percentage among outshopping, in-home shopping, and local shopping. Then the distributions of outshopping and in-home shopping behaviors were examined to see if there were natural breaks in the data. Based on these distributions from the total sample, individuals were categorized as a member of one of the four groups using the following criteria:

Outshopper

Spends 15% or more of total annual expenditures out of town, but less than 5% through in-home methods

In-Home Shopper

Spends less than 15% of total annual expenditures out of town, but 5% or more through in-home methods

Supplement Shopper

Spends 15% or more of total annual expenditures out of town and 5% or more through in-home methods

Local Shopper

Spends less than 15% of total annual expenditures out of town and less than 5% through in-home methods

Respondents were also asked to allocate their total annual expenditures for each product category among outshopping, in-home shopping, and local shopping. Using the same criteria, they were placed into one of the four groups for each product category. Table 4 provides the numbers in each group after classification.

TABLE 4
NUMBER OF RESPONDENTS IN EACH GROUP AFTER CLASSIFICATION

	Overall Groups	Adult Clothing	Children's Clothing	Toys/ Games	Linens/ Beddings	Furniture/ Home Furnishings
Substitute Outshoppers	85	108	82	59	63	67
Substitute In-Home Shoppers	81	77	47	50	69	42
Supplement Shoppers	79	58	32	38	28	25
Local Shoppers	135	133	155	182	213	235

DATA ANALYSIS AND FINDINGS

The specific hypotheses tested in this study are:

- H01: General across-product-category descriptive profiles for the four groups of shoppers do not differ significantly for adult clothing shopping groups.
- H02: General across-product-category descriptive profiles for the four groups of shoppers do not differ significantly for children's clothing shopping groups.
- H03: General across-product-category descriptive profiles for the four groups of shoppers do not differ significantly for toys/games shopping groups.
- H04: General across-product-category descriptive profiles for the four groups of shoppers do not differ significantly for beddings/linens shopping groups.
- H05: General across-product-category descriptive profiles for the four groups of shoppers do not differ significantly for furniture/home furnishings shopping groups.

The testing of hypotheses involved several procedural steps. First, a general model was developed for the shopping groups by using discriminant analysis. Once the discriminant functions were evaluated, this general model was used to classify shoppers into one of the four

shopping groups for each of the five product categories previously mentioned. Next product-specific discriminant models were developed and also used to classify shoppers into the shopping mode groups for each product category. Third, the classification accuracy of the general model was compared to the classification accuracy of the product-specific models for each product category. Hypotheses were rejected if there were significant differences in the overall classification accuracy of the general model and the respective product-specific model. This process is illustrated in Figure 1.

The General Model

Multiple discriminant analysis was used to build a general model. Using this model, shoppers were classified as belonging to one of the four overall shopping groups described earlier. These groups were found to each have their own distinct profile. The unique distinguishing characteristics of each group are illustrated in Table 5. The general profiles were based on the entrance and significance of the independent variables in the general discriminant model and the magnitude of their total structure coefficients. The independent variables deemed most important, their rotated total structure coefficients, and group means, are presented in Table 6.

The general MDA model that was developed produces functions from the independent variables that represent dimensions along which the overall groups differ. Tables 7 and 8 provide information regarding the value of these functions in predicting group

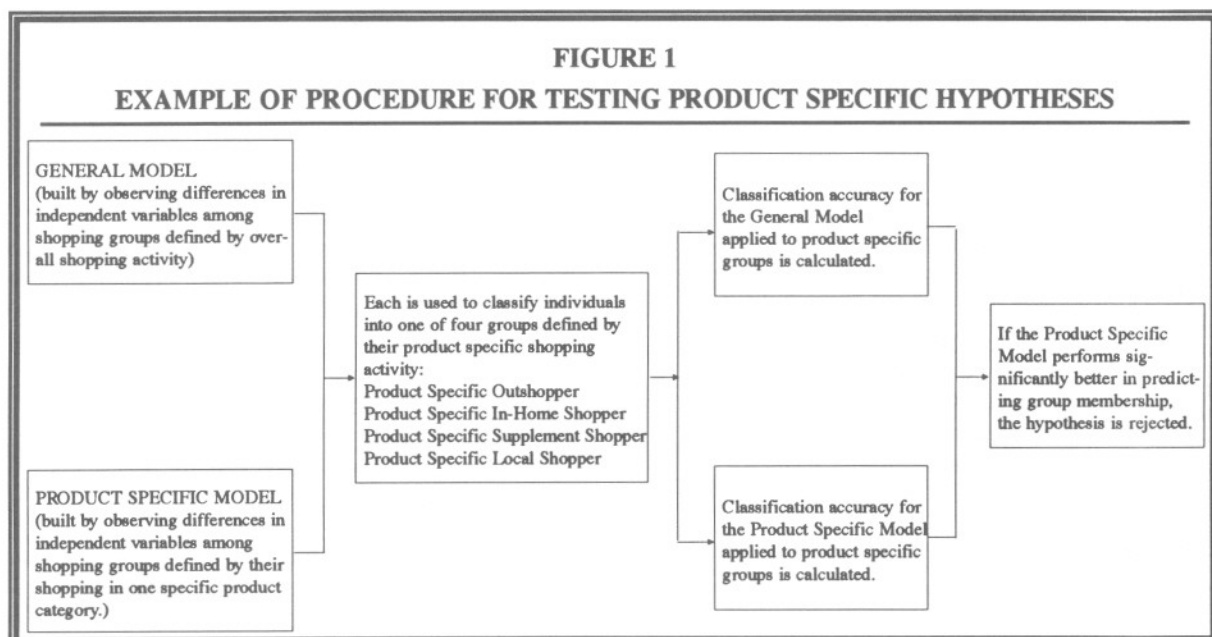


TABLE 5
SUMMARY OF GROUP PROFILES

Local Shopper	Supplement Shopper
Socioeconomic Status Lowest Income Stage in Family Life Cycle Oldest Mobility Lowest Mobility Scores Usage of Credit Least Amount of Out-of-Town Credit Venturesomeness Lowest Venturesome Score Loyalty to Local Retailers Most Loyal to Local Retailers Nonfunctional Shopping Motives Higher Determinance Score for Enjoyment/ Entertainment than In-Home Shoppers but Lower than Outshopping Groups Functional Shopping Motives Highest Determinance Score for Convenience	Socioeconomic Status Highest Income Stage in Family Life Cycle Youngest Mobility Highest Mobility Scores Usage of Credit Higher Amount of Out-of Town Credit than In-Home Shoppers or Local Shoppers, but Lower than Outshoppers Venturesomeness Highest Venturesome Score Loyalty to Local Retailers Ties with Outshoppers as Least Loyal to Local Retailers Nonfunctional Shopping Motives Highest Determinance Score for Enjoyment/ Entertainment Functional Shopping Motives Lowest Determinance Score for Convenience
Outshopper	Local Shopper
Socioeconomic Status Higher Income than Local Shoppers but Lower than the Other Groups Stage in Family Life Cycle Younger than Local Shoppers but Older than the Other Groups Mobility Second Highest Mobility Scores Usage of Credit Largest Amount of Out-of-Town Credit Venturesomeness More Venturesome than Local Shoppers but Less than the Other Groups Loyalty to Local Retailers Tied with Supplement Shoppers as Least Loyal to Local Retailers Nonfunctional Shopping Motives Second Highest Determinance Score for Enjoyment/Entertainment Functional Shopping Motives Second Lowest Determinance Score for Convenience	Socioeconomic Status Second Highest Income Stage in Family Life Cycle Older than Supplement Shoppers but Younger than the Other Groups Mobility Second Lowest Mobility Scores Usage of Credit More Out-of-Town Credit than Local Shoppers but Less than the Outshopping Groups Venturesomeness Second Highest Venturesome Scores Loyalty to Local Retailers More Loyal to Local Retailers than Outshopping Groups but Less Loyal than Local Shoppers Nonfunctional Shopping Motives Lowest Determinance Score for Enjoyment/Entertainment Functional Shopping Motives Second Highest Determinance Score for Convenience

TABLE 6
PROFILE VARIABLES MOST IMPORTANT IN DISCRIMINATING
AMONG OVERALL GROUPS

Variable	Total Structure Coefficients		Group Means			
	Function 1	Function 2	Outshopper	In-Home Shopper	Supplement Shopper	Local Shopper
Venturesome	.49385		11.16	11.61	12.00	10.24
Loyalty	-.49251		9.49	10.23	9.49	11.72
Age	-.48781		44.34	43.43	39.04	52.37
Household Income	.40199		37374.06	39682.56	43051.00	32119.12
Mobility	.37467		14.93	13.43	15.26	11.94
Enjoyment		.56008	20.96	15.92	21.90	17.65
Out-of-Town Credit		.39433	1.78	0.92	1.69	0.77
Convenience		-.30356	24.85	28.03	24.83	29.67

TABLE 7
INFORMATION REGARDING THE GENERAL MODEL
DISCRIMINANT FUNCTIONS

Function No.	Eigenvalue	Percent of Variance	Canonical Correlation	Wilk's Lambda	Chi-Square	Significance
1	.48052	68.40	.5697033	.5389321	210.220	.0000
2	.17314	24.65	.3841748	.8127052	72.689	.0000
3	.04885	06.95	.2158220	.9534208	16.718	.2125

TABLE 8
INFORMATION REGARDING THE FULL SAMPLE CLASSIFICATION ACCURACY
OF THE GENERAL MODEL APPLIED TO THE OVERALL SHOPPING GROUPS

	Percentage Correctly Classified		Tau
	Chance Probability		
All Groups	26.24	51.58	34.25
Outshopper	22.16	24.70	3.26
In-Home Shopper	21.88	53.10	39.95
Supplement Shopper	21.33	43.00	27.59
Local Shopper	34.63	72.60	58.07

membership. Table 7 indicates that two of the three discriminant functions were significant well below the .05 level. This means that the functions did have some power in discriminating among the shopping groups. Table 8 provides evidence regarding the classification accuracy of the discriminant functions. The hit ratio of the discriminant model based on the full sample was 51.58 percent. As shown in Table 8, this percentage was much greater than would have been expected by chance. The Tau statistic indicates that the discriminant model provided a 35.24 percent improvement over chance assignments. When examined individually, the accuracy of the classification procedure performed better than chance for all shopping groups. Additionally, F Statistics, shown in Table 9 indicate that all pairs of shopping groups were significantly different.

The weakest area of classification accuracy was in the outshopper category. Further analysis indicates that outshoppers were most often misclassified as supplement shoppers. A plot of group centroids, shown in Figure 2, gives insight as to why outshoppers were more difficult to differentiate. Function 1 separates the local shopper from the other shopping groups and could be labeled the "Anti-Local Function." Function 2 separates the supplement shopper and the outshopper from the in-home shopper and the local shopper and could be called the "Outshopping Function." Based on these results, the centroids for the local shopper and the in-home shopper are clearly delineated by the two functions. The centroids for the supplement shopper and the outshopper are located in the same quadrant and less clearly differentiated. Differences between the supplement shopper and the outshopper with regard to these functions appear to be ones of intensity. Both group centroids are posi-

tively related to the functions and are significantly different from the other groups. Although the two groups were more closely related than the others, Table 9 indicates that they are distinct groups. Other variables outside the scope of this study might add insight into additional differences between these two shopping groups.

Because creating and testing the discriminant functions with the same data set creates an upward bias in classification accuracy, the data were randomly split into three subsamples to validate the accuracy of the classification procedure. In each split, approximately 70 percent of the respondents were used to create the functions and 30 percent were used to test the procedure. The results of these splits are summarized in Table 10. The average hit ratio was 46.48 percent. This number, while smaller than the full sample hit ratio, was still significantly greater than chance allocation. Additionally, the average number correctly classified in each group was significantly better than chance.

Comparison of Classification Accuracy

Tables 11 through 15 compare the classification accuracy of the product specific models with the general model. For adult clothing, children's clothing, toys/games, beddings/linens, there was no significant difference in the classification accuracy of the models. Therefore, hypotheses one through four could not be rejected.

As Table 15 illustrates, the furniture/home furnishings model did perform significantly better than the general model. Hypothesis five was, therefore, rejected.

TABLE 9
F STATISTICS AND SIGNIFICANCES BETWEEN PAIRS OF OVERALL SHOPPING GROUPS

	Outshopper	In-Home Shopper	Supplement Shopper
In-Home Shopper	3.5035 0.0000		
Supplement Shopper	1.5406 0.0888	4.0665 0.0000	
Local Shopper	6.0819 0.0000	5.9034 0.0000	9.4790 0.0000

Note: The top number is the F statistic and the bottom number is the significance of the statistic. Each F statistic has 15 and 343 degrees of freedom.

FIGURE 2
PLOT OF OVERALL GROUP CENTROIDS

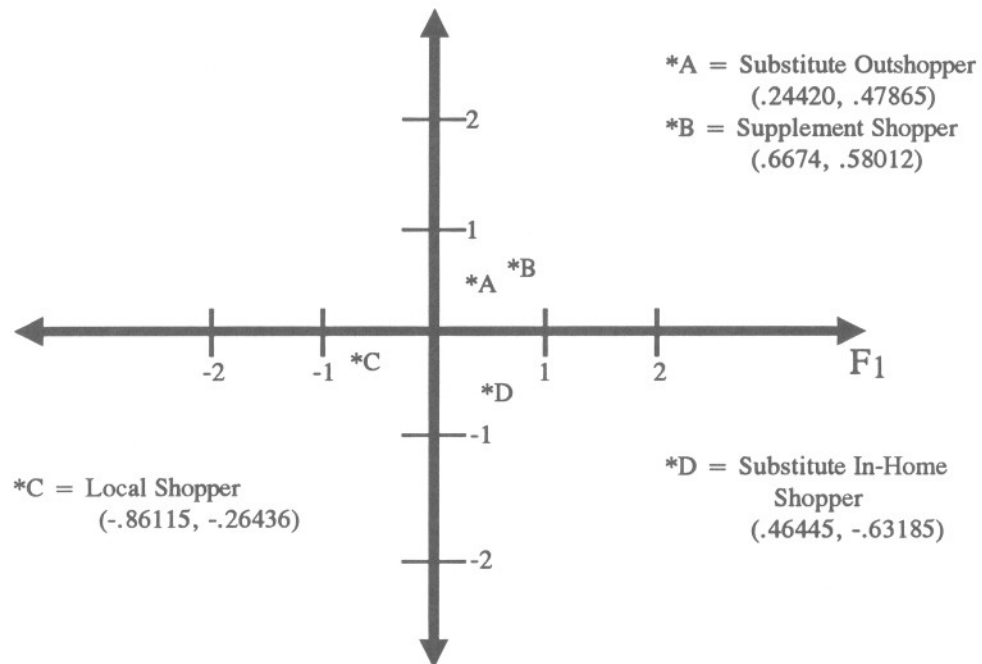


TABLE 10
INFORMATION REGARDING THE SPLIT SAMPLE CLASSIFICATION
ACCURACY OF THE GENERAL MODEL APPLIED TO THE OVERALL SHOPPING GROUPS

	Chance Probability	Average Percentage Correctly Classified	Average Tau	Chi-Square	Level of Significance
All Groups	26.24	46.48	27.68	80.46	.005
Outshopper	22.16	31.70	12.27	4.48	.050
In-Home Shopper	21.88	40.87	24.29	16.85	.005
Supplement Shopper	21.33	43.17	27.75	22.21	.005
Local Shopper	34.63	64.87	46.28	55.80	.005

TABLE 11
CLASSIFICATION ACCURACY OF GENERAL MODEL
COMPARED WITH ADULT CLOTHING MODEL

Model	Correctly Classified	Misclassified	Totals
Across Products Model	44.95	55.05	100
Adult Clothing Model ^a	42.42	57.58	100
Totals	87.37	112.63	200

$$X^2 = .13 \text{ df} = 2 \text{ p} \leq .9$$

^aNumber correctly classified is based on the average hit ratio from three split samples.

TABLE 12
CLASSIFICATION ACCURACY OF GENERAL MODEL
COMPARED WITH CHILDREN'S CLOTHING MODEL

Model	Correctly Classified	Misclassified	Totals
Across Products Model	46.48	53.16	100
Children's Clothing Model ^a	46.17	53.83	100
Totals	93.01	106.99	200

$$X^2 = .009 \text{ df} = 2 \text{ p} \leq .995$$

^aNumber correctly classified is based on the average hit ratio from three split samples.

TABLE 13
CLASSIFICATION ACCURACY OF GENERAL MODEL
COMPARED WITH TOYS/GAMES MODEL

Model	Correctly Classified	Misclassified	Totals
Across Products Model	43.16	56.84	100
Toys/Games Model ^a	52.29	47.71	100
Totals	95.45	104.55	200

$$X^2 = 1.67 \text{ df} = 2 \text{ p} \leq .25$$

^aNumber correctly classified is based on the average hit ratio from three split samples.

TABLE 14
CLASSIFICATION ACCURACY OF GENERAL MODEL
COMPARED WITH LINENS/BEDDINGS MODEL

Model	Correctly Classified	Misclassified	Totals
Across Products Model	46.38	53.62	100
Linens/Beddings Model ^a	52.70	47.30	100
Totals	99.08	100.92	200

$$X^2 = .79 \text{ df} = 2 \text{ p} \leq .5$$

^aNumber correctly classified is based on the average hit ratio from three split samples.

DISCUSSION

The general profiles for the four groups of shoppers appear to have validity with regard to shoppers for adult clothing, children's clothing, toys/games, and beddings/linens. There was no significant difference in the classification accuracy of the general model and the product specific models for those product categories. Additionally, the Tau statistics shown in Table 16 indicate that the general model performed at least 20 percent better than chance for those product categories.

Although items in these categories are shopping/specialty goods that are easily transported or delivered, they represent a wide diversity of items. Products in these categories represent a variety of different price points, purchase and usage situations, and purchase cycles. They are available from all shopping modes and from many different types of retailers including discounters, off-price retailers, specialty stores, and department stores. The consumers of these products also represent a variety of different lifestyles, ages, and income levels. Because of the validity of the general profiles across these product categories, this means that the general profiles represent a very stable model across a wide variety of goods.

The overall group profiles were not found to be valid for furniture/home furnishings shopping groups. This

product category does not fit the description provided for the product categories in which the overall profiles performed well in classifying group membership. Furniture/home furnishings products have a longer purchase cycle, represent at times large investments, and are not easily transported or delivered over long distances. The decision to purchase this category of products may also be a family decision rather than a personal decision. Additionally, households that tend to purchase furniture/home furnishings more heavily may be in the earlier stages of the family life cycle. Finally, while they are available from all of the shopping modes, there are fewer in-home offerings of some products within the furniture/home furnishings category. The profile variables most important in distinguishing furniture/home furnishings shopping groups are presented in Table 17.

The profiles of the furniture/home furnishings groups are similar to the overall profiles with regard to venturesomeness, loyalty, age, and mobility. However, there are also several differences in the profiles. First, convenience, enjoyment, service quality, age, education, and mobility were not important discriminating variables for the furniture/home furnishings groups. Secondly, tenure in the community, a variable not important in the overall profiles was important to the furniture/home furnishings profiles. The fact that these differences exist may explain some of the inconsistent findings in the outshopping and in-home shopping literature.

TABLE 15
CLASSIFICATION ACCURACY OF GENERAL MODEL
COMPARED WITH FURNITURE/HOME FURNISHINGS MODEL

Model	Correctly Classified	Misclassified	Totals
Across Products Model	42.82	57.18	100
Furniture/Home Furnishings Model ^a	62.89	37.11	100
Totals	105.71	94.29	200

$$X^2 = 8.26 \text{ df} = 2 \text{ p} \leq .025$$

^aNumber correctly classified is based on the average hit ratio from three split samples.

TABLE 16
TAU STATISTICS FOR THE OVERALL MODEL APPLIED TO PRODUCT SPECIFIC GROUPS

	Adult Clothing	Children's Clothing	Linen/Beddings	Toys/Games
Tau	25.08	24.30	26.01	20.04

TABLE 17
PROFILE VARIABLES MOST IMPORTANT IN DISCRIMINATING
AMONG FURNITURE/HOME FURNISHINGS GROUPS

Variable	Total Structure Coefficients		Group Means			
	Function 1	Function 2	Outshopper	In-Home Shopper	Supplement Shopper	Local Shopper
Loyalty	.54660		9.18	10.37	8.37	11.00
Out-of-Town Credit	-.49164		1.98	1.22	2.28	.92
Age		-.62722	40.75	39.24	35.80	49.57
Venturesome		.61861	11.57	12.22	12.08	10.72
Mobility		.38457	14.91	14.54	15.80	12.83
Tenure in the Community		-.31655	17.27	19.85	10.92	22.10

MANAGERIAL IMPLICATIONS

The study suggests that retail trade areas can benefit from understanding shopper segments defined on the basis of outshopping and in-home shopping and the forces that influence each of these types. Of the 380 respondents answering questions regarding overall shopping behavior, 245 heavily participated in outshopping, in-home shopping or both. In other words, about 65 percent of the shoppers in the study were involved in shopping behaviors that significantly contribute to intermarket leakage. To combat this problem, retailers should try to learn as much as possible about these shopping segments. This study found that these shoppers have very stable profiles across a wide variety of items. Certainly, the identification and description of the segments are essential before local retailers can plan reasonable strategies to counter the attractions of other shopping alternatives.

Five more specific implications may also be relevant. First, based on the profiles shown in Table 5, the local area appears to be losing the patronage of the younger, higher income shopping groups. Because of these characteristics, these consumers make up an extremely attractive market for local retailers to attract and retain.

Second, because shoppers that stray from the local shopping area are less loyal to local retailers, retailers should focus some effort toward building not only relationships with individual stores but also with the community itself. This would require a united effort by

retailers within a particular trading area. Developing promotional campaigns and activities designed to bolster civic pride might begin to establish a closer tie with the local community for these shoppers. Additionally, special events that educate consumers with regard to the retail facilities available in the local area might be helpful. Shoppers may seek other alternatives simply because they are unaware that the local area has facilities that could meet their needs. Therefore, better knowledge of retail offerings in the area might encourage shoppers to try a hometown store.

Once a consumer patronizes a local store, retailers should try to establish a continuing relationship with him or her. This study found that the outshopping groups in particular had a higher level of out-of-town credit. This indicates that they may have developed continuing relationships with out-of-town stores. Additionally, other studies have found evidence that outshoppers are store loyal (Herrmann and Beik, 1968; Thompson, 197; Bonfield and Turnage, 1973; Scott and Gillett, 1973; Reidenbach, Cooper, and Harrison, 1984). Perhaps local retailers could take advantage of the possibility that the outshopping groups desire patronage consistency. Things like offering credit accounts, maintaining a mailing list, and offering incentives like special discounts for regular patronage might help keep new customers coming back.

Third, for furniture/home furnishings retailers, it is important to establish relationships with newcomers to the community. The nonlocal furniture shopping

groups in this study had lived in the community a shorter period of time than local shoppers. In addition to the recommendations given above, perhaps furniture/home furnishings retailers should provide newcomer welcoming services like offering discounts on products or free advice for decorating their homes.

Fourth, all of the groups involved in outshopping or in-home shopping were more venturesome than local shoppers. Additionally, the supplement shopper and the outshopper place more value on enjoyment/entertainment in their shopping decisions. Convincing these consumers to shop in the local area requires a different approach than those used to attract local shoppers. Therefore, retailers should try to make the shopping experience pleasant and more stimulating. Indoor shopping malls are in an advantageous position to provide free family entertainment by presenting exhibits, activities, and various other attractions that are of interest to consumers in the area. Additionally, improving the dining, entertainment, and recreational facilities within the community might enhance the appeal of the local trading area.

Finally, providing additional shopping enjoyment probably will not attract the in-home shopper. They valued entertainment least in their shopping decisions. However, retailers can reach the consumer groups by making shopping more convenient. As the local shopper also seeks convenience, actions to increase shopping convenience may increase the patronage of the local shopper as an added benefit. One way to offer more shopping convenience is to provide personal shopping services to interested customers.

In conclusion, the outshopping and in-home shopping behavior is too important for retailers to ignore. This research indicates that four distinct shopping groups can be defined on the basis of outshopping and in-home shopping behavior. Although not applicable to all product lines, these groups represent a sizable market and are fairly stable across a variety of retail lines. It is hoped that the profiles of the four overall shopping groups will aid retailers in developing more clearly defined and effective marketing mixes to respond to the competitive environment and the needs of customers in their trading area.

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ABOUT THE AUTHORS

Vicki L. Blakney is Assistant Professor of Marketing in the School of Business Administration at the University of Dayton.

William S. Sekely is Associate Professor of Marketing in the School of Business Administration at the University of Dayton.