NC STATE UNIVERSITY

College of Textiles NC STATE UNIVERSITY

JTATM Journal of Textile and Apparel, Technology and Management

Volume 6, Issue 1, Spring2009

CONSUMER DEMOGRAPHICS, RETAIL ATTRIBUTES, AND APPAREL CROSS-SHOPPING BEHAVIOR

Jason M. Carpenter
Assistant Professor
University of South Carolina
Department of Retailing

Marguerite Moore
Associate Professor
North Carolina State University
College of Textiles

ABSTRACT

Apparel shoppers are provided with an unprecedented number of retail formats from which to choose. As a result, apparel retailers face intense competition from both intra-type and inter-type firms. The extant literature on cross-shopping is limited, and updated profiles of cross-shoppers versus single-format shoppers are needed to improve our understanding of retail format choice under current competitive conditions. This exploratory research considers variables including gender, age, income, education, race, marital status and household size among cross-shoppers and single-format shoppers using a sample of U.S. consumers. Additionally, the importance of retail attributes such as price competitiveness, product selection, and convenience is investigated. The results inform marketing strategy for apparel retailers.

Keywords: Cross-shopping, retail format, apparel, demographics, retail attributes, consumer behavior

INTRODUCTION

Slow population growth, a rising number of single-person households, and more women entering the workforce are a few of the marked demographic shifts occurring in the US market (Dunne and Lusch, 2008). In response, apparel retailers are struggling to offer the right combination of merchandise in the right place, at the right time, and at the right price. Mass merchandisers and supercenters aim at wide target markets offering convenience in the form of one-stop shopping, while department and specialty stores attempt to attract consumers by providing differentiated merchandise and higher levels of customer service. Catalog and Internet retailers offer the convenience of 24-hour, in-home shopping and low prices. While the competitive activity among retail formats benefits consumers by providing unprecedented levels of variety and convenience, it presents a unique challenge to retailers. In particular, researchers have noted substantial growth in the frequency of cross-shopping among retail formats and channels (Morgensen, 1992; Rousey &

Morganosky, 1996; Morganosky, 1997). The cross-shopping phenomenon presents an opportunity for retailers to divert shoppers from other formats, but also creates a challenge by enabling consumers to spread purchases across formats.

The academic literature on cross-shopping is limited, with few studies that focus specifically on apparel (e.g., Cassill & Williamson, 1994). Further, few studies have included a wide range of retail formats in order to study both intra-type and inter-type competition. In order to confront the challenges presented by current market conditions, apparel retailers must gain a better understanding of cross-shopping behavior and develop appropriate target marketing strategies. Taking an exploratory approach, the current study provides an updated view of retail cross-shopping among apparel shoppers in the U.S. This research extends the growing body of literature on cross-shopping by examining differences among apparel shopping segments (single-format and multi-format, or cross-shoppers) based on demographic characteristics and desired retail attributes in order to provide apparel retailers with timely, useful information for understanding these segments.

Due to the dearth of literature specific to apparel cross-shopping, the current study is conceived, planned and implemented from an exploratory perspective. Two broad research questions are posed to guide the inquiry:

RQ1: Do single format shoppers and multi-format shoppers (cross-shoppers) of apparel differ in terms of demographic characteristics (gender, age, income, education, race, marital status, household size)?

RQ2: Do single format shoppers and multi-format shoppers (cross-shoppers) of apparel differ in terms of their perceptions of the importance of retail attributes (price competitiveness, courtesy of personnel, product selection, hours of operation, convenience, atmosphere, and presence of new fashions)?

LITERATURE REVIEW

Cort & Dominguez (1977) define cross-shopping as "when a single customer patronizes multiple types of retail outlets which carry the same broad lines of merchandise, are operated by a single firm, and are designed to appeal primarily to different target segments (p. 187)." Over time, the definition has been modified by other researchers, omitting the requirement that the retail outlets "are operated by a single firm" (e.g., Cassill & Williamson, 1994; Schoenbachler & Gordon, 2002). For the purpose of this study, cross-shopping refers to consumers shopping for like products in different types of retail formats. It is important to note that most of the cross-shopping literature has focused on the grocery category. Therefore, the current study draws upon the findings of both the apparel-specific cross-shopping literature as well as cross-shopping literature from other categories (e.g., grocery) to support the investigation.

Prior research examines relationships between demographic characteristics of consumers and choice of retail format. For example, Crask and Reynolds (1978) compare the demographic profiles of frequent and non-frequent department store patrons, finding that frequent patrons are younger, more educated and have higher incomes. Cassill & Williamson (1994) report significant differences between department store cross-shoppers and non-cross-shoppers based on age, household size, annual spending, marital status, employment status, and occupation. Cross-shoppers of the three types of department stores examined in the study (traditional, national chain, discount) tend to be older and not employed outside

the home. In contrast, cross-shoppers of national chain and discount department stores tend to be younger and have a large household size. Arnold (1997) finds significant differences in the age, education, and household size of large-format department store shoppers as compared to non-shoppers. More recently, household size, income, and education level have been shown to influence consumers' choice of retail format in a study across three formats including grocery stores, mass merchandisers, and drug stores (Fox, Montgomery, & Lodish, 2004). The same study reports that education and income do not appear to influence the number of stores visited during a shopping trip.

Research in the non-store retailing context suggests that catalog and Internet shoppers are more educated and have higher incomes than in-store shoppers (Darian, 1987; Balabanis and Vassieiou, 1999). However, other research offers conflicting results (Peters & Ford, 1972; Akaah, Korganokar, & Lund, 1995). Donthu and Garcia (1999) demonstrate that consumers with higher incomes tend to shop online more often than consumers with lower incomes. Likewise, Beaudry (1999) finds that as age and income increase, catalog shopping also increases. Goldsmith and Flynn (2005) report a positive correlation between age and catalog buying, while a negative correlation is found between age and Internet purchasing.

The findings of previous studies also suggest that retail attributes including product assortment, pricing, and customer service are major factors in consumers' format choice decisions (Arnold, 1997; Grewal, Levy, Mahrotra, & Sharma, 1999; Seiders & Tigert, 2000; Hansen & Solgaard, 2004). Early work by Cort, Dienet & Dominguez (1980) establishes product assortment and price as important factors, while Donovan, Rossister, Marcoolyn & Nesdale (1994) and Turley & Milliman (2000) note the importance of store environment and atmosphere within the context of format choice. Rousey & Morganosky (1996) suggest that the manner in which formats combine price with all other elements of the marketing mix explains patterns of cross-shopping behavior. For example, discount stores and mass merchandisers tend to offer similar value propositions and use similar marketing strategies, resulting in more sharing of customers between these formats. Cude and Morganosky (2001) report that product assortment, price, convenience, and store location are influential retail attributes in encouraging cross-shopping. Fox et al. (2004) examine cross-shopping behavior across three retail formats including grocery stores, mass merchandisers, and drug stores. Findings indicate that product assortment, promotion, and price are influential; however, price appears to be the least influential of the three. Studies published in the trade literature echo these findings, suggesting product assortment, availability, pricing, and convenience as drivers of format choice (Taylor, 2003; *Chain Store Age, 2004).*

METHODOLOGY

To control for size and cost of the survey, the sampling method focuses upon providing representation among demographic groups rather than capturing demographics in exact proportion to the U.S. population. Data is collected using a telephone survey among a sample of U.S. consumers aged eighteen years and older. Telephone administration is used due to effectiveness and efficiency in reaching a range of consumer demographics within a short time period. A market research firm with expertise in telephone survey methods is contracted to carry out data collection. Subjects are selected using a telephone list from *Info USA (www.infousa.com)* that was consistent with the sampling criteria. *Info USA* compiles and continually updates consumer lists using sources such as telephone directories, lists of mail order buyers/subscribers, real estate information,

voter registration data, and survey responses.

A two-day pretest (*N*=50) is conducted prior to full data collection. The pretest allows the researchers and the firm to coordinate issues related to the wording of questions and the time required to administer the questionnaire. During final data collection, interviewers make calls until a representative sample of demographic characteristics is achieved (*N*=365). A minimum of three attempts are made to contact numbers drawn from the original sample in order to gain access to the focal range of demographics.

Subjects are asked to indicate how often they shop for apparel in various retail formats on a five point scale ranging from 'never' to 'always'. In order to define the formats, subjects are given examples of stores within each category. Formats include upscale department stores (e.g., Bloomingdales, Nordstrom), traditional department stores (e.g., Sears, JC Penney), value department stores (e.g., Kohl's, Goody's), specialty stores (e.g., Gap, Limited), discounters (e.g., Wal-Mart, Target), off-price stores (e.g., TJ Maxx, Marshall's), Internet only retailers (e.g., Bluefly.com, Overstock.com), and catalogs (e.g., LL Bean, Lands' End). Pretest results indicate that subjects clearly understand the format choice examples as well as the format choice scales. Respondents are also asked to indicate the importance of several retail attributes (price competitiveness, courtesy of personnel, product selection, hours of operation, convenience, atmosphere, and presence of new fashions) using a five-point interval scale ranging from 'not important at all' to 'extremely important' following the example of Yavas (2003). Demographic data including gender, age, income, education, race, marital status and household size are also collected.

ANALYSIS & DISCUSSION

Sample Characteristics

Sample characteristics are analyzed for respondents' gender, age, income level, education level, race, marital status and household size. Seventy-five percent of the sample is female, with the remaining 25% male. The average age of the sample respondents is 43 years, with a range of 18 years of age to 84 years of age. Twenty-two and a half percent indicate incomes less than $25 thousand per year, 30.4 percent between $25,000 and $49,999, 15.6 percent between $50,000 and $74,999, 10.1 percent between $75,000 - $99,999, 11.2 percent greater than $100,000 and the remaining 10.1 percent refused to respond. For education levels, 3.3 percent of respondents indicate having never finished high school, 26 percent indicate a high school education, 55.3 percent indicate having some college or a college degree, 12.9 percent indicate holding a graduate or professional degree, while .2 percent declined the question. The majority of respondents report that they are Caucasian (81.1 percent), followed by African American (10.4%), Hispanic (2.5 percent), and a combined category of Native American, Asian Pacific and Mixed ethnicities accounted for 4.4 percent of the sample, while the remaining 1.6 percent refused to respond. In terms of marital status, most respondents are married (58.1%) or single (27.4%), with the remainder reporting being separated (.3%), divorced (6.8), or widowed (6.6%). Average household size of respondents is 2.87 with a range of 1 to 11 residents.

Cluster Analysis

Shopping frequency in each retail format (upscale department store, traditional department store, value department store, specialty store, discounter, off-price, Internet only, catalog) is measured using a five point scale that ranges from 'never' to 'always.' The shopping frequency data for each retail format is used in K-means cluster analysis in order to group (segment) respondents based on their frequency of

shopping in retail formats. K-means cluster analysis was chosen based on its ability to fit large samples and to minimize within-cluster variance while maximizing variance between clusters. Initially, the analyses are performed using a range of clusters, and a final solution is selected based on the ability to meaningfully interpret and differentiate clusters from one another. Non-significant values (significance values > .05) indicate retail formats that are less important for distinguishing clusters from one another (Table 1). Therefore, the results of the K-means cluster analysis suggest that off-price, Internet only and catalog formats are less influential in cluster formation. In other words, respondents report shopping for apparel less frequently in off-price, Internet only and catalog formats as compared to other formats (e.g., upscale department stores, traditional department stores, value department stores, specialty stores, discounters).

Table 1. Contribution of Individual Retail Formats to Formation of Shopping Clusters

Individual Retail Formats	Cluster		Error		F-value	Sig.
	Mean Square	df	Mean Square	df		
Upscale Dept. Store	26.58	3	1.26	361	21.10	.000[a]
Traditional Dept. Store	43.42	3	1.06	361	40.69	.000[a]
Value Dept. Store	116.86	3	.770	361	151.76	.000[a]
Specialty Store	64.91	3	.974	361	66.67	.000[a]
Discounter	116.14	3	.751	361	154.61	.000[a]
Off-price	35.98	3	1.228	361	9.307[b]	**.161**
Internet Only	.463	3	.268	361	1.729[b]	**.349**
Catalog	15.14	3	.877	361	17.260[b]	**.257**

[a] alpha < .001

[b] Small F-values indicate variables that are less important for separating clusters.

After identifying the retail formats that are statistically significant to shopping cluster formation, the mean shopping frequency for each retail format is assessed (Table 2). Higher mean shopping frequency suggests that respondents shop frequently in a given format. The highest numbers in each column (mean shopping frequency for each retail format) indicate cluster membership (Table 2). For example, the first cluster (named *department store cross-shoppers*) consists of apparel shoppers who most frequently shop in traditional and value department stores. Therefore, this cluster represents a group of consumers that tends to cross-shop for apparel in traditional (e.g., Sears, JC Penney) and value (e.g., Kohl's, Goody's) department stores. The second cluster (named *discount shoppers*) represents a group that tends to shop for clothing at discounters (e.g., Wal-Mart, Target). The third cluster (named *department/discount cross-shoppers*) represents a group that tends to cross-shop

in value department stores (e.g., Kohl's, Goody's) and discounters (e.g., Wal-Mart, Target). The final cluster (named *upscale/specialty cross-shoppers*) represents a group that tends to cross-shop in upscale department stores (e.g., Bloomingdales, Nordstrom) and specialty stores (e.g., Gap, Limited).

Results of the cluster analysis (Table 2) indicate that approximately 24% of respondents can be described as intra-type cross-shoppers (24% traditional/value department store cross-shoppers). Twenty-six percent of respondents are classified as single format shoppers (discount shoppers). The remaining 50% of respondents are classified as inter-type cross-shoppers (29% department/discount store cross-shoppers and 21% upscale department/specialty store cross-shoppers).

Table 2. Mean Shopping Frequency for each Retail Format - Used in the K-Means Cluster Analysis to Form Shopping Clusters

Individual Retail Formats	**Shopping Frequency (Mean) for Each Retail Format within Shopping Clusters (Highest numbers in each column indicate cluster membership: 1= Never, 2= Rarely, 3 = Occasionally, 4 = Usually, 5 = Always)**			
Upscale Dept. Store	2	2	2	**3**
Traditional Dept. Store	**3**	3	3	2
Value Dept. Store	**3**	1	**4**	2
Specialty Store	2	2	3	**3**
Discounter	2	**4**	**4**	2
Off-price	2	2	3	2
Internet Only	1	1	1	1
Catalog	2	1	2	2
N / % of Sample	89/**24%**	95/**26%**	106/**29%**	75/**21%**
Cluster Name (based on shopping frequency in retail formats)	Department Store Cross-Shoppers (Intra-type Cross-Shoppers)	Discount Shoppers (Single Format Shoppers)	Department/Discount Cross-Shoppers (Inter-type Cross-Shoppers)	Upscale /Specialty Cross-Shoppers (Inter-type Cross Shoppers)

Examination of Demographic Variables across Shopping Clusters

The Chi-Square Test of Independence is used to compare gender, race, and marital status (categorical variables) among the shopping clusters (categorical variable). Results of the Chi-Square Test of Independence in Table 3 reveal a statistically significant outcome for gender (significance value < .05). Therefore, the shopping clusters differ based on gender. Specifically, examination of the cross-tabulation results reveals a higher number of males than expected within the department store cross-shopping cluster, while the number of females was lower than expected for this cluster (Table 3, Count vs. Expected). In addition, results show a lower number of males than expected within the department/discount store cross-shopping cluster, while the number of females was higher than expected.

Results in Table 3 also reveal statistical significance for race (significance value < .001). Therefore, the shopping clusters differ based on race. Specifically, cross-tabulation results show a higher number of Caucasians among the department store cross-shopping cluster than expected, while the number of African Americans is lower (Table 3, Count vs. Expected). Among the discounter shopper cluster, results reveal fewer than expected Caucasians and more than expected African Americans. Results also suggest more than the expected number of Caucasians and fewer than expected African Americans among the upscale/specialty cross-shopping cluster.

The Chi-Square result for marital status was statistically significant (significance value < .01), which suggests that the shopping clusters differ based on marital status (Table 3). Specifically, cross-tabulation results reveal a lower than expected number of singles and a higher than expected number of married respondents within the department store cross-shopping cluster (Table 3, Count vs. Expected). Fewer than the expected number of singles are also found in the discount cluster, while more than the expected numbers of divorced and widowed respondents are in the cluster. Results show greater than the expected number of singles within the upscale/specialty cross-shopping cluster, while fewer married respondents are members of the cluster.

Table 3. Gender, Race & Marital Status (categorical variables) vs. Shopping Cluster Membership (categorical variable) – Chi-Square Results

Pearson Chi-Square Results: Gender, Race & Marital Status vs. Shopping Cluster			
	Pearson Chi-Square	**Df**	**Sig.**
Gender	9.687	3	**.021**[a]
Race	55.450	24	**.000**[b]
Marital Status	37.796	20	**.009**[a]

Chi-Square Counts: Gender Race & Marital Status vs. Shopping Cluster						
			Department Store Cross-Shoppers	**Discount Shoppers**	**Department/ Discount Cross-Shoppers**	**Upscale/Specialty Cross-Shoppers**
Gender	Male	Count	**28**	26	**15**	22
		Expected	**22**	23	**26**	18
	Female	Count	**61**	69	**91**	53
		Expected	**66**	71	**79**	56
Race	Caucasian	Count	**82**	**59**	87	**68**
		Expected	**72**	**77**	86	**60**
	African	Count	**1**	**23**	12	**2**
	American	Expected	**9**	**9**	11	**8**
Marital Status	Single	Count	**19**	**19**	31	**31**
		Expected	**24**	**26**	29	**20**
	Married	Count	**58**	55	64	**35**
		Expected	**51**	55	61	**44**
	Divorced	Count	6	**11**	6	2
		Expected	6	**6**	7	5
	Widowed	Count	5	**10**	3	6
		Expected	6	**6**	7	5

[a]alpha < .05; [b]alpha < .001

One way analysis of variance (ANOVA) is used to compare age, income, education, and household size (continuous variables) across the clusters (categorical variable). Tukey's Honestly Significant Difference (HSD) statistic is then used to further investigate statistically significant differences (significance values < .05) among specific clusters. The models for age, income, education and household size produce statistically significant results (significance values < .05). This suggests that the shopping clusters differ based on age, income, education and household size (significance values < .01 or < .001).

Examination of the Tukey HSD test results (Table 4) reveals that age in the department store cross-shopping cluster tends to be higher than that of the department/discount cross-shopping cluster and the upscale/specialty cross-shopping cluster (mean differences are positive). In addition, the age of the discount cluster tends to be higher than that of the value department/discounter cross-shopping cluster and the upscale/specialty cross-shopping cluster (mean differences are positive). In terms of income, respondents in the department store cross-shopping cluster and the upscale/specialty cross-shopping cluster report higher incomes than those in the discount cluster (mean differences are positive). The results reveal that the education level of respondents in the discount cluster is lower than all other clusters (mean differences are negative). In addition, the education level of respondents in the upscale/specialty cross-shopping cluster is higher than that of the department store cross-shopping cluster and the department/discount cross-shopping cluster (mean differences are positive). Lastly, the results show that household size among the department/discount cross-shopping cluster is larger than that of the department store cross-shopping cluster and the upscale/specialty cross-shopping cluster (mean differences are positive).

Importance of Retail Attributes among Shopping Clusters

As previously discussed, respondents are also asked to indicate the importance of several retail attributes (price competitiveness, courtesy of personnel, product selection, hours of operation, convenience, atmosphere, and presence of new fashions) using a five-point interval scale ranging from 'not important at all' to 'extremely important'. One way analysis of variance (ANOVA) is used to compare the importance of the retail attributes (continuous variables) across the shopping clusters (categorical variable). Tukey's Honestly Significant Difference (HSD) statistic is then used to investigate statistically significant differences (significance values < .05) among specific shopping clusters. The results indicate a single statistically significant result for atmosphere (Table 5). Results for all other attributes are non-significant. Examination of the Tukey HSD test reveals that atmosphere is more important for the upscale/specialty cross-shopping cluster as compared to the discount cluster (Table 5, mean difference is positive). Otherwise, there are no statistically significant differences between the shopping clusters.

Table 4. Age, Income, Education & Household Size (continuous variables) vs. Shopping Cluster Membership (categorical variable) – ANOVA results

ANOVA Results: Age, Income, Education & Household Size vs. Shopping Cluster						
		Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Age	Between	5178.881	3	1726.294	6.185	**.000[a]**
	Within	100766.06	361	279.130		
	Total	105944.948	364			
Income	Between	104.060	3	34.687	15.244	**.000[a]**
	Within	821.436	361	2.275		
	Total	925.496	364			
Education	Between	269.603	3	89.868	5.768	**.001[b]**
	Within	5624.222	361	15.580		
	Total	5893.825	364			
Household Size	Between	36.488	3	12.163	5.940	**.001[b]**
	Within	739.200	361	2.048		
	Total	775.688	364			
Tukey HSD Results: Age, Income, Education & Household Size vs. Shopping Cluster						
	(I) Cluster Mean	**(J) Cluster Mean**		**Mean Difference (I-J)**	**Std. Error**	**Sig.**
Age	Dept store cross-shoppers	Dept/Discount cross-shoppers		6.837	2.402	**.024[b]**
		Upscale/Specialty cross-shoppers		7.340	2.619	**.027[b]**
	Discount shoppers	Dept/Discount cross-shoppers		7.717	2.360	**.006[b]**
		Upscale/Specialty cross-shoppers		8.220	2.581	**.009[b]**
Income	Dept store cross-shoppers	Discount shoppers		1.868	.582	**.008[b]**
	Upscale/Specialty cross-shoppers	Discount shoppers		2.243	.610	**.002[b]**
Education	Discount shoppers	Dept store cross-shoppers		-.806*	.223	**.002[b]**
		Dept/Discount cross-shoppers		-.844*	.213	**.001[b]**
		Upscale/Specialty cross-shoppers		-1.562*	.233	**.000[a]**
	Upscale/Specialty cross-shoppers	Dept store cross-shoppers		.756*	.236	**.008[b]**
		Dept/Discount cross-shoppers		.718*	.228	**.009[b]**
Household Size	Dept/Discount cross-shoppers	Dept store cross-shoppers		.528	.206	**.052[b]**
		Upscale/Specialty cross-shoppers		.892*	.216	**.000[a]**

[a]alpha < .001; [b]alpha ≤ .05

Table 5. Importance of Retail Attributes (continuous variables) vs. Shopping Cluster Membership (categorical variable) – ANOVA Results

Independent variable	Dependent variable	Sum of Squares	df	Mean square	F	Sig.
Atmosphere	**Cluster**					
	Between	10.012	3	3.337	2.889	**.035** [a]
	Within	416.963	361	1.155		
	Total	426.975	364			

Tukey HSD Results: Importance of Retail Attributes vs. Shopping Cluster					
Variable	**(I) Cluster Mean**	**(J) Cluster Mean**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**
Atmosphere	Upscale/Specialty cross-shoppers	Discount shoppers	.423	.166	**.044**[a]

[a]alpha < .05

For ease of interpretation, Table 6 provides a complete summary of the findings of this study.

Table 6. Summary of Findings by Shopping Cluster

	Department Store Cross-Shoppers (Intra-Type Cross-Shoppers)	Discount Shoppers (Single Format Shoppers)	Department/ Discount Cross-Shoppers (Inter-Type Cross-Shoppers)	Upscale/Specialty Cross-Shoppers (Inter-Type Cross-Shoppers)
Gender	**More males/Fewer females than expected**		**Fewer males/More Females than expected**	
Race	**More Caucasians/Fewer African Americans than expected**	**Fewer Caucasians/More African Americans than expected**		**More Caucasians/Fewer African Americans than expected**
Marital Status	**Fewer singles/More married than expected**	**Fewer singles/ More married More divorced/ More widowed than expected**		**More singles/Fewer married than expected**
Age	**Older than cross-shopping segments, but not discount shoppers**	**Older than cross-shopping segments except for department store cross-shoppers**	**Younger than department store cross-shoppers and discount shoppers**	**Younger than department store cross-shoppers and discount shoppers**

Income	**Higher than discount shoppers**	**Lower than department store cross-shoppers and upscale/specialty cross-shoppers**		**Higher than discount shoppers**
Education	**Higher than discount shoppers, but not higher than other clusters**	**Lower than all other clusters**	**Higher than discount shoppers, but not higher than other clusters**	**Higher than all other clusters**
Household Size	**Smaller than department/discount cross-shoppers**		**Larger than department store cross-shoppers and upscale/specialty cross-shoppers**	**Smaller than department/discount cross-shoppers**
Atmosphere		**Less important for this cluster as compared to upscale/specialty cross-shoppers**		**More important for this cluster as compared to discount shoppers**

CONCLUSIONS

Overall, the findings provide evidence that cross-shopping for apparel is very prevalent between intra- and inter-type retail competitors. Consumers appear to be taking advantage of the variety of retail formats offered. This emphasizes the need for retailers to focus on effective positioning, making full use of any competitive advantage held, and developing focused target marketing strategies in order to be successful under the current competitive conditions. In answer to our first research question, the findings of this study suggest that demographic characteristics do vary among single-format shoppers and cross-shoppers. Intra-type department store cross-shoppers include a large number of male, Caucasian and married shoppers. Shoppers of this cross-shopping segment are older than shoppers of other cross-shopping segments, and their income and education levels are higher than that of single-format discount shoppers. In addition, the household size of intra-type department store cross-shoppers appears to be smaller than that of single-format discount shoppers. The intra-type department store segment includes those who cross-shop between traditional department stores (e.g., Sears, JC Penney) and value department stores (e.g., Kohl's, Goody's). Based on the findings of this study, traditional department stores should continue to focus on providing the types of products and in-store experience expected by the older, higher income, educated shopper. Traditional department stores should be careful not to allow these shoppers to be lured away to value department stores with similar offerings but lower prices.

The findings suggest that single-format discount shoppers (e.g., Wal-Mart, Target) include a large number of African Americans and a number of married, widowed or divorced shoppers. Single-format discount shoppers are older than other cross-shopping segments with the exception of intra-type department store cross-shoppers. In addition, the income and education level of this group appears to be lower than other segments. The findings suggest due to their lower income and education level, this group seeks low prices when shopping for apparel. Discounters should continue to focus on providing low prices in order to serve this core customer.

The department/discount cross-shopper group includes a large number of females and appears to be younger as compared to intra-type department store cross-shoppers and pure discount shoppers. The income of this group appears to be higher than that of pure discount shoppers, but not as high as intra-type department store cross-shoppers or upscale/specialty cross-shoppers. The findings suggest that this younger, higher income than pure discount shoppers group tends to seek low prices but does not make a strong distinction between value department stores (e.g., Kohl's, Goody's) and discounters (e.g., Wal-Mart, Target). This is a credit to discount apparel retailers in terms of being able to appeal to higher income groups, while it can be dangerous for value department stores in terms of distancing themselves from discounters at the lower end of the market.

Upscale/specialty cross-shoppers include large numbers of Caucasians and singles. The group appears to be younger than intra-type department store cross-shoppers and discount shoppers. In addition, this group reports higher income than pure discount shoppers and higher education levels than all other groups. Lastly, the group also reports smaller household sizes as compared to department/discount cross-shoppers. Overall, shoppers in this segment appear to prefer shopping in the upscale, unique shopping environments provided by upscale department stores (e.g., Bloomingdales, Nordstrom) and specialty stores (e.g., Gap, Limited). While upscale/specialty retailers should continue to focus on serving this core customer, they could also work to influence consumers in other segments (e.g., value and traditional department stores) to trade up by offering a moderate level of budget friendly merchandise.

In answer to our second research question, the findings of this study suggest that the importance of one retail attribute (atmosphere) does vary among two of the shopping clusters. Specifically, atmosphere appears to be more important to upscale/specialty cross-shoppers than single-format discount shoppers. This suggests that upscale department stores and specialty stores should continue working to create a unique, upscale atmosphere suitable for upscale/specialty shoppers. Although results suggest the single-format discount shopper is less concerned with atmosphere, discounters may still seek to provide a slightly more upscale environment if they are interested in attempting to attract upscale shoppers away from upscale department stores and specialty stores.

Interestingly, the findings do not suggest differences among the shopping clusters based on the importance of other retail attributes (price competitiveness, courtesy of personnel, product selection, hours of operation, convenience, and presence of new fashions). This could suggest that as retail formats have evolved, parity based on basic retail attributes has become the norm. Because shoppers have become accustomed to having a wide range of retail formats from which to choose when shopping for apparel, perhaps they have also come to expect all apparel retailers (regardless of format) to offer a threshold level of each basic attribute. If this is the case, it is more critical than ever for apparel retailers to identify new sources of differentiation to create competitive space in which to build competitive advantage.

Overall, the findings of this study tend to support those of Cassill & Williamson (1994) and Arnold (1997), who report significant differences in demographics across shopping segments. The findings also partially support those of Crask and Reynolds (1978), although department store patrons in this study tend to be older rather than younger than those in other segments. Although the findings of previous research indicate that various retail attributes influence format choice, the findings of this study suggest that only atmosphere significantly influences cross-shopping and

this effect is only applicable to single-format discount shoppers and upscale/specialty cross-shoppers.

LIMITATIONS & FUTURE RESEARCH

This study offers valuable information on apparel cross-shopping behavior and the importance of retail attributes among apparel shoppers, but future studies could expand our knowledge. For example, an experimental design could be useful to examine cross-shopping behavior under a range of shopping conditions (e.g., available retail formats, retail attributes, and consumer demographic profiles). Future studies could also continue to identify key demographic predictors and improve the accuracy of prediction. In addition, lifestyle or psychographic factors could be investigated for their effect on cross-shopping behavior. The failure of the non-store channels and the off-price format to contribute to cluster formation is also a limitation of this study. Conducting future research with a sample engaging in higher levels of shopping in these formats could provide further insight into the cross-shopping phenomenon. In addition, future research could explore additional retail attributes that may be influential among apparel shoppers. Lastly, generalizations of the findings of this study to markets outside the United States are limited due to the differences in consumers and the range of retail formats available in various countries. Future research could compare consumer behavior and retail format offerings across global markets to improve our understanding of cross-shopping.

REFERENCES

Akaah, I., Korgaonkar, P., Lund, D. (1995). "Direct marketing attitudes." *Journal of Business Research,* 34 (2): 211-219.

Arnold, S. (1997). "*Shopping habits at Kingston department stores: Wave III: Three years after Wal-Mart's entry into Canada."* Report No. 3, Queen's University School of Business, Kingston.

Balabanis, G., Vassileiou, S. (1999). "Some attitudinal predictors of home-shopping through the Internet." *Journal of Marketing Management,* 15 (3): 361-385.

Beaudry, L. (1999). "The catalog age 1999 consumer catalog shopping survey." *Catalog Age,* 16 (6): A5-A18.

Cassill, N., Williamson, N. (1994). "Department store cross-shoppers." *Journal of Applied Business Research,* 10 (4): 88-97.

Chain Store Age (2004). *Age doesn't affect buying patterns.* June, p. 33.

Cort, S., Dominguez, L. (1977). "Cross-shopping and retail growth." *Journal of Marketing Research,* 14 (May): 187-192.

Cort, S., Dienet, B., Dominguez, L. (1980). "An empirical analysis of competitive structure in retailing." In: Stampfl, R., Hirschman, E. (Eds.), *Competitive Structure in Retail Markets: The Department Store Perspective.* American Marketing Association, Chicago, IL, pp. 22-32.

Crask, M., Reynolds, F. (1978). "An indepth profile of the department store shopper." *Journal of Retailing,* 76 (2): 23-33.

Cude, B., Morganosky, M. (2001). "Why do consumers cross-shop between different types of retail food outlets?" *Journal of Food Distribution Research,* 32 (3): 14-23.

Darian, J. (1987). "In-home shopping: Are there consumer segments?" *Journal of Retailing,* 63 (2): 163-186.

Donovan, R., Rossiter, J., Marcoolyn, G., Nesdale A. (1994). "Store atmosphere and purchase behavior." *Journal of Retailing,* 70 (3): 283-294.

Donthu, N., Garcia, A. (1999). "The Internet shopper." *Journal of Advertising Research,* 39 (3): 52-58.

Dunne, P., Lusch, D. (2008). *Retailing* (6th Ed.). South-Western College Publishing, Cincinnati, OH.

Fox, E., Montgomery, A., Lodish, L. (2004). "Consumer shopping and spending across retail formats." *Journal of Business,* 77 (2): 25-60.

Goldsmith, R., Flynn, L. (2005). "Bricks, clicks, and pix: Apparel buyers' use of stores, Internet, and catalogs compared." *International Journal of Retail & Distribution Management,* 33 (4): 271-283.

Grewal, D., Levy, M., Mahortra, A., Sharma, A. (1999). "Planning merchandising decisions to account for regional and product assortment differences." *Journal of Retailing,* 75 (3): 405-25.

Hansen, T., Solgaard, H. (2004). *New Perspectives on Retailing and Store Patronage Behavior.* Kluwer Academic Publishers, Boston, MA.

Morgenson, G. (1992). "Here come the cross-shoppers." *Forbes* 150 (13): 90.

Morganosky, M. (1997). "Retail market structure change: implications for retailers and consumers." *International Journal of Retail & Distribution Management,* 25 (8): 269-274.

Peters, W., Ford, N. (1972). "A profile of urban in-home shoppers: The other half." *Journal of Marketing,* 15 (2): 62-64.

Rousey, P. Morganosky, M. (1996). "Retail format change in US markets." *International Journal of Retail & Distribution Management,* 24 (3): 8-16.

Schoenbachler, D., Gordon, G. (2002). "Multi-channel shopping: Understanding what drives channel choice." *Journal of Consumer Marketing,* 19 (1): 42-53.

Seiders, K., Tigert, D. (2000). "The impact of supercenters on traditional food retailers in four markets." *International Journal of Retail & Distribution Management,* 28 (4/5): 191-193.

Taylor, R. (2003). "Top of mind: Saving America's grocers." *Brandweek,* 44 (18): 22-23.

Turley, L., Milliman, R. (2000). "Atmospheric effects on shopping behavior: A review of the experimental evidence." *Journal of Business Research,* 49 (2): 193-211.

Yavas, U. (2003). "A multi-attribute approach to understanding shopper segments." *International Journal of Retail & Distribution Management,* 31 (11): 541-548.