Competitive Analyses between Regional Malls and Big-box Retailers: A Correspondence Analysis for Segmentation and Positioning

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This study compares demographic composition and retail attributes for four competing retailer formats: (a) regional malls, (b) supercenters, (c) category killers, and (d) warehouse clubs. A total of 569 consumers, from four geographically dispersed metropolitan areas, responded to Computer Assisted Telephone Interviews. A correspondence analysis was used to segment consumer groups based upon two demographic variables, gender and generation, to discover consumers' evaluation of utilitarian and hedonic retail attributes. The results revealed that Gen X females most frequently shopped at supercenters, Gen X males and Gen Y females at category killers, Baby Boomer males at warehouse clubs, and Gen Y males and Seniors at regional malls. Regional malls and category killers were evaluated positively on assortment, sales personnel, convenience, institutional image, and psychological benefits. Supercenters and warehouse clubs were evaluated positively on price, but were evaluated negatively on sales personnel, convenience, assortment, institutional image, and psychological benefits.

The increasing competition among retailers in the U.S. has been influenced by shifting consumer shopping preferences, slowdown of consumer spending, an abundance of retail choices due to diversified retail formats, and retail consolidation (Reynolds, Ganesh, & Luckett, 2002; Rogers, 2005). In this competitive environment, it is critical for retailers to determine improved ways to target consumers and thus increase market share.

Four types of retail formats that compete against each other within specific consumer product categories (e.g., home improvement, consumer electronics, books, and toys) because their consumers are within a reasonable distance are: (a) regional malls, (b) supercenters, (c) category killers, and (d) warehouse clubs.

Regional malls, typically between 400,000 to 800,000 square feet, have a primary trading area of 5 to 15 miles, and are composed of anchor stores and a variety of specialty retailers (International Council of Shopping Centers, 2004). Regional malls are often important gathering places, especially for Seniors and for teens (Setlow, 2002), as they provide climatic comfort, safety, distance from noise and traffic, and aesthetically pleasing design elements. However, regional shopping malls are in the decline stage of their life cycle as a result of product and tenant mixes being nearly identical from mall to mall ("The Future of the Mall," 2003). Additionally, regional malls are losing market share to big-box retailers such as supercenters, category killers, and warehouse clubs that emphasize value and convenience. Supercenters are a hybrid of supermarkets, discount, and department stores housed in a single 150,000- to 230,000 square-foot building (e.g., Super Wal-Mart, SuperTarget) that offer one-stop shopping for almost every category of merchandise at low prices to consumers, made possible through logistical efficiencies and increased economies of scale (Bianco et

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al., 2003). Warehouse clubs are membership-only stores (e.g., Sam's Club, Costco) that distribute packaged and bulk foods and general merchandise at low prices in a nofrills environment (O'Connor, 1999). Prices are kept low through minimum staffing levels, little overhead, a negligible use of credit cards and through minimal advertising (Gelbtuch, 1990). Category killers are huge, single-focus mega stores (e.g., Home Depot, Barnes & Noble, and PetSmart) that sell limited, yet comprehensive, assortments of products at such low prices that competition is difficult (Dunne & Lusch, 2005). The broad product assortments allow consumers to comparison shop without leaving the store (Berry, 1996).

The stand-alone locations of big-box retailers offer visibility and direct access to abundant parking areas, which makes them attractive to today's consumers with hurried lifestyles (O'Connor, 1999). However, big-box retailers have entered the mature stage of their lifecycle. Although warehouse clubs and supercenters exhibited the strongest growth (277%) from 1992 to 2002 (Rogers, 2003), warehouse clubs' growth has decreased to single-digit growth since 2002 (Gallo, 2002), and profit margins are under pressure at many supercenters (Plunkett, 2001, 2002). Category killers who enjoyed expansions and growth until the 1990s have also begun to see reduced sales (e.g., Toys 'R' Us), which has caused several stores to close (e.g., Incredible Universe, Just for Feet).

Though there has been a recent slowdown in the big-box retail store sales, competition between regional malls and big-box retailers is on the rise. In order for retailers to maintain or increase their vitality in this competitive market, they should revisit their marketing strategies by using segmentation analyses to identify their customers and positioning analyses to assess how to attract additional customers.

Research Background

Market Segmentation

Market segmentation is the process of identifying and grouping people based upon similar characteristics and/or behaviors so that a retail strategy can be adapted to meet the group's specific needs (Blackwell, Miniard & Engel, 2001). A frequently used method of segmenting consumers is through demographic statistics, which measure observable features of a population, such as age and gender.

Studies in consumer behavior have consistently reported differences based on gender. For instance, women generally enjoy shopping considerably more than their male counterparts (Van Slyke, Comunale, & Belanger, 2002). Further, women are also typically content to spend a considerable amount of time and mental energy on shopping (Bakewell & Mitchell, 2003). In contrast, men are more focused and goal-oriented shoppers and place more value on convenience and one-stop shopping (Buttle, 1992). Furthermore, as a consequence of lower task involvement, males are more apt to seek the assistance of store sales personnel than females, and tend to rely on available and quick sources of information (Cleveland, Babin, Laroche, Ward, & Bergeron, 2003). Retail formats, such as category killers, which supply large assortments of products in one category and reduce the time expenditure involved in the shopping task, tend to satisfy male consumers' desired shopping attributes. The

female consumers' desire for an enjoyable experience from a shopping is more suited to the aesthetically pleasing atmosphere of regional shopping malls or the vast product assortments available at category killers. Though both genders shop at category killers, the individual goal is different, as men view the vast product assortments as a way to decrease their expenditure of time and women view it as an opportunity for increased selection.

Another demographic segmentation base is age group, which is noted by generation. Common generational segments include Senior consumers, Baby Boomers, Generation X, and Generation Y. Senior consumers in the U.S. are the fastest growing demographic group and have more disposable income than other population segments (Eastman & Iyer, 2004). Though a large percentage of their income is spent on healthcare services, Senior consumers are frequent purchasers of groceries and other consumables that can be found at supercenters. Seniors are also frequent patrons of shopping malls where they gather information, meet friends, and exercise (Kim, Kang, & Kim, 2005).

Baby Boomers, make up the largest segment of the population at 39% of the U.S. adult population (Johnson, 2005) and have the greatest discretionary spending power in the U.S. (Seninger, 2000). They make "good value" a priority, but luxuries and high-end, high quality durables are also part of their shopping patterns (Seninger, 2000). Also, many Baby Boomers have more time to shop, but still desire friendly customer service, convenient locations, and accessible parking. Department stores in regional malls provide service and luxury products for these consumers, while supercenters and warehouse clubs meet their needs for convenience and value (Wright, 1996).

Generation X consumers have little leisure time due to busy schedules that require juggling of careers and families ("The Gen X Budget," 2002), resulting in a need for convenience and low prices. Many retail formats, such as supercenters, offer the convenience of one stop shopping, while others, such as category killers, offer wide assortments to allow these consumers to do comparison shopping.

Many of the Generation Y consumers are still teenagers and can be found frequenting shopping malls (Haytko & Baker, 2004). They have an ample amount of free time and many have money to spend on products, food, and entertainment. Regional shopping malls draw this consumer segment by providing entertainment and restaurant venues and by creating gathering places for meeting their friends.

Clearly, previous research supports that gender and generation constitute important segmentation bases for retailers, and after segmenting their target market, retailers can position themselves by examining how their customers assess their retail attributes.

Market Positioning

Market positioning is a technique used to classify the image or identity of a store in the target consumer's mind, by which retailers can focus on store attributes or characteristics that are consistent with their customers' shopping needs and priorities. Depending on their perception of store attributes, consumers may patronize or switch

retail formats (Paulins & Geistfeld, 2003; Wilde, Kelly, & Scott, 2004). Understanding the retail attributes that shoppers desire from their shopping trips enables retailers to attract more shoppers while retaining their existing shoppers.

Reynolds et al. (2002) identified five clusters of traditional mall shoppers based on their preferred retail attributes: (a) basic shoppers, who preferred mall essentials and convenience; (b) serious shoppers, who valued mall essentials, brand-name merchandise and convenience; (c) enthusiast shoppers, which were most interested in entertainment; (d) destination shoppers, who placed importance on mall essentials and brand name merchandise; and (e) apathetic shoppers, which was the smallest segment who rated all attributes as not important.

Retail attributes can be identified as utilitarian or hedonic. Utilitarian attributes offer practical functionality (e.g., convenience, price, and assortment), whereas hedonic attributes satisfy emotional wants (e.g., atmosphere, social experiences). Anecdotal evidence suggests that big-box retailers mainly provide utilitarian benefits such as low prices, a wide assortment of merchandise, and convenience (Gallo, 2002; Urban & Hoffer, 1997), while regional malls provide hedonic attributes that appeal to the consumers' five senses (Kim, 2002). To date, no empirical study has compared these retailers in terms of how their specific retail attributes are evaluated by their customers.

Objectives

The desired outcome of this study was to provide practical information that could be used by regional mall and big-box retailers for identifying their frequent shoppers and improving the patronage through positioning strategies. The first objective was to segment consumer groups for each of the four retail formats (e.g., regional malls, category killers, warehouse clubs, and supercenters) based on two demographic variables (e.g., gender, generation). The second objective was to examine consumers' evaluation of four retail formats in terms of utilitarian and hedonic retail attributes. These objectives were accomplished by employing correspondence analysis, which is a mapping technique that uses cross-tabulation data as input and converts the data into a joint space map (Hoffman & Frank, 1986).

Research Methodology

Data Collection and Sample

Quantitative data were obtained via random sampling from four geographically dispersed metropolitan areas: (a) Chicago, (b) Seattle, (c) Atlanta, and (d) Phoenix. Participants were selected based on three qualifications: (a) 18+ years of age, (b) primary or joint decision maker of purchasing goods, and (c) had purchased products in at least one of the selected four retail formats within the last three months. A total of 569 consumers responded to the Computer Assisted Telephone Interview (CATI) and each individual consumer reported on one or two of the four retail formats. Quota controls for proportionate representation across retail formats were enacted to ensure an adequate base size for analysis.

Measures

For the purpose of segmentation, shopping frequency was obtained by asking whether or not the respondent shopped at each retail format, within the past three months, for each of the seven product categories: (a) home improvement/furnishings, (b) consumer electronics, (c) automobile maintenance items, (d) sporting goods, (e) pet supplies, (f) books, and (g) toys. These product categories were taken from a list of category killer format stores ("Top U.S. Retailers," 2005) and were confirmed to be carried by the surveyed retail formats (e.g., regional malls, supercenters, and warehouse clubs). Shopping frequency at each retail format was created as a composite score by combining shopping frequencies of the seven product categories. Gender and generation were used in the segmentation analysis; however, other demographic variables (e.g., income, marital status, and children present) were not used, because they are to a certain degree, related to the generation variable.

For the positioning analysis, an evaluation of retail attributes was measured for each of the four retail formats. A multi-item scale for retail attributes was adapted from several sources (e.g., Bellenger, Robertson & Greenberg, 1977; Bloch, Ridgway & Dawson, 1994; Wakefield & Baker, 1998). These attributes encompassed both utilitarian and hedonic aspects of shopping. Evaluation of each attribute was measured by asking "How would you rate retail format in terms of attribute?" on a 5-point rating scale, with 1 being "poor," and 5 being "excellent."

Analyses and Results

The correspondence analysis with multi-way table was used to segment consumer groups and discover their evaluation of each retail format in terms of retail attributes. Correspondence analysis is suited to this study because mapping variables in a low-dimensional space (i.e., two dimensions) allows one to simply find dependencies among variables, which makes it possible to segment and interpret consumer groups (Greenacre & Hastie, 1987; Herrmann & Huber, 2000; Hoffman & Franke, 1986).

Segmentation Based on Gender, Generation and Retail Format

Shopping frequency at each retail format was combined with gender and generation variables to define consumer segmentation. To generalize correspondence analysis to multi-way data, the stacking method (i.e., a large matrix of data was formed by simply putting the tables next to another) was used to create a contingency table (Weller & Romney, 1990), as illustrated in Table 1. To obtain categorical generational data, age was divided into four categories: (a) Generation Y (born between 1981 and 1988), (b) Generation X (born between 1965 and 1980), (c) Baby Boomer (born between 1946 and 1964), and (d) Senior (born before 1946).

Because correspondence analysis only analyzes the association in contingency tables, a significant dependency between rows and columns should be obtained by chi-square statistics (Weller & Romney, 1990). The total chi-square in this model was 60.67 (df = 21, p = .001), indicating a significant dependency between rows and columns.

Table 1 Cross-tabulation of Shopping Frequency by Gender and Generation

Gender & generation	RM	SC	CK	WC
Female				
Gen Y	75	84	96	40
Gen X	102	179	147	65
Baby boomer	163	196	204	148
Senior	75	72	94	59
Male				
Gen Y	46	41	49	27
Gen X	73	85	106	46
Baby boomer	141	102	132	109
Senior	45	37	58	36

Note. RM = Regional mall, SC= Supercenter, CK = Category killer, and WC = Warehouse club.

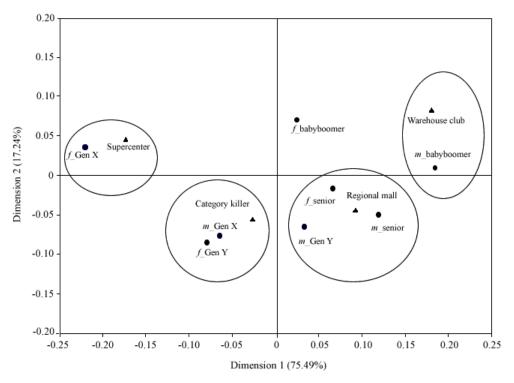


Figure 1. Correspondence analysis map of gender and generation.

Note. Female (f_{-}) , Male (m_{-}) , Retail formats (\triangle) , Retail attributes (\bullet) .

The spatial configuration shown in Figure 1 maps the result of the correspondence analysis. The two dimensions accounted for 92.73% of variance (75.49% for the first dimension and 17.24% for the second dimension), indicating that the horizontal spread (first dimension) of the points captures the most essential information. Figure 1 depicts four different groups of consumers. The top-left quadrant shows that the Gen X female and the supercenter are associated, meaning that Gen X females shopped most frequently at supercenters. The bottom-left quadrant indicates that the Gen X males and the Gen Y females shopped most frequently at category killers. The bottom-right quadrant shows that Senior males and females and Gen Y males were regional mall shoppers. The top-right quadrant depicts that male Baby Boomers were most likely to shop at warehouse clubs. Female Baby Boomers were positioned close to the origin (0.0) of each dimension and apart from all groups, meaning that they did not have a strong preference for any specific retail format.

Market Positioning Based on Retail Attributes

The retail attributes were factor analyzed and seven factors emerged: (a) price of merchandise, (b) assortment of merchandise, (c) sales personnel, (d) convenience, (e) post transaction satisfaction, (f) psychological benefits, and (g) institutional image (see Table 2).

The seven factors were categorized into hedonic and utilitarian retail attributes based on the previous conceptualization of these two dimensions (Bloch et al., 1994; Hirschman & Holbrook, 1982; Kim, 2002; Wakefield & Baker, 1998). The utilitarian retail attributes comprised price, assortment, convenience, sales personnel and post transaction satisfaction. The hedonic retail attributes consisted of psychological benefits and institutional image.

A stacked matrix from the contingency table (see Table 3) was input into the correspondence analysis of retail attributes by retail format. Responses were transformed to frequency data to perform correspondence analysis. Because the reliability of each factor was high enough to use the composite score for analysis, the average score of items in each factor was computed and divided into three categories: high (3.50 to 5.00), middle (2.50 to 3.49), and low (1.00 to 2.49).

Table 2

Retail Attribute Factors

Factor	Item		Cronbach's α			
1 40101		RM	SC	CK	WC	
Price of merchandise	Being able to find a real bargain Being able to find many items on sale Not having to purchase products at regular retail prices Being able to find competitive prices Being able to find many items on sale	.86	.87	.85	.85	
Assortment of merchandise	Being able to find famous name brands Being able to find high quality products Being able to find out about new products Being able to find the latest products Being able to find unique products Being able to find a wide selection of merchandise	.84	.85	.85	.84	
Sales personnel	Being helped by knowledgeable sales personnel Being able to find prompt help when needed Being able to find nice courteous sales personnel	.87	.85	.86	.89	
Convenience	Having an easy time parking Having convenient store hours Having a convenient store location from home Having convenient store location from work Being able to find exactly what you want in the least amount of time Having other services (e.g., gift wrapping, bank, photo processing, restaurant, snack corner) Having adequately wide aisles Having clear signage Having easy-to-follow layout	.80	.82	.80	.81	
Post-transaction satisfaction	A no-hassle return policy Ease and convenience of returning merchandise	.78	.83	.80	.86	
Psychological benefits	Being able to enjoy an attractive décor Feeling that the physical environment is comfortable Being able to find some entertainment while shopping Being able to enjoy time with your family or friends Being able to relax Finding an exciting shopping environment Being able to enjoy a pleasant shopping atmosphere Feeling that the store environment is safe	.88	.90	.87	.88	
Institutional	The reputation that this retailer is known for The prestige that this retailer is known for	.69	.74	.77	.75	

Note. RM = Regional mall, SC= Supercenter, CK = Category killer, and WC = Warehouse club.

Table 3

Cross-tabulation of Retail Format by Retail Attribute

Retail attribute	RM	SC	CK	WC
		Utilitarian	'	
Price				
Low	116	21	70	21
Middle	337	201	341	106
High	275	568	477	410
Assortment				
Low	17	37	21	35
Middle	211	318	187	172
High	500	435	680	330
Convenience				
Low	23	34	25	36
Middle	245	254	242	216
High	460	509	621	285
Sales personnel				
Low	130	219	109	182
Middle	253	278	298	174
High	345	290	481	181
Post-transaction satisfaction				
Low	50	45	25	38
Middle	120	147	131	67
High	504	552	655	363
		Hedonic	'	
Psychological benefits				
Low	45	125	48	79
Middle	233	281	331	237
High	450	391	509	221
Institutional image				
Low	20	38	27	26
Middle	122	174	110	109
High	574	574	737	401

Note. RC = Regional mall, SC= Supercenter, CK = Category killer, and WC = Warehouse club.

Utilitarian Retail Attributes

Evaluation of utilitarian retail attributes were analyzed by retail format. The total chi-square in this model was 614.4 (df = 42, p = .001). Figure 2 shows the position of each utilitarian retail attribute and retail format in the correspondence space. Since dimension 1 accounted for 76.52% of total variance and dimension 2 accounted for only 16.49% of total variance, the map should be examined horizontally first to compare the relationships among variables.

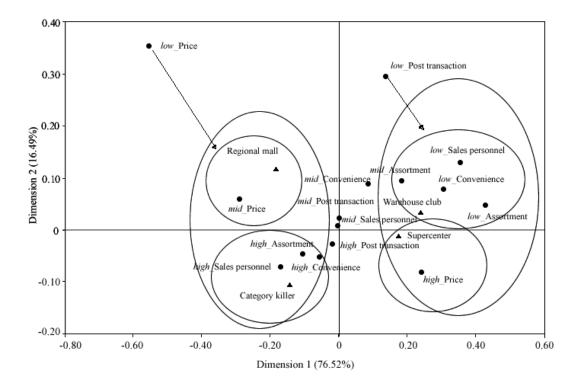


Figure 2. Correspondence analysis map of utilitarian retail attributes.

Note. Retail formats (), Retail attributes ()

Using the correspondence analysis map (see Figure 2), two big groups emerged: (a) regional malls and category killers, and (b) supercenters and warehouse clubs. Respondents rated regional malls and category killers "excellent" on merchandise assortment, convenience, and sales personnel. Since these attributes are positioned nearer to category killers than regional malls on the map, the attributes are more closely associated with category killers. Supercenters and warehouse clubs were rated low in assortment, convenience, and sales personnel; these attributes were more closely associated with warehouse clubs rather than with supercenters. In terms of offering low prices, supercenters were evaluated higher than warehouse clubs.

Though two points (i.e., "low_Price," "low_Post transaction") appear to be outliers, their positions within the quadrants indicate an association with regional malls and warehouse clubs, respectively. In other words, regional malls were evaluated negatively in reference to merchandise price while warehouse clubs were evaluated negatively in reference to post transaction satisfaction. These negative evaluations are indicative of minimal association between these formats and retail attributes.

Hedonic Retail Attributes

Evaluation of hedonic retail attributes were also analyzed by retail format. The total chi-square in this model was 148.4 (df = 15, p = .001). As illustrated in Figure 3, regional malls and category killers were rated high on psychological benefits and institutional image, with regional malls providing more psychological benefits and category killers having a better institutional image. Supercenters and warehouse clubs had a low performance in institutional image and psychological benefits, while the institutional image of supercenters was slightly better than that of warehouse clubs. Since the coordinates of the "mid_Psychological benefit" were close to the origin (0.0) in both dimensions, this attribute was virtually identical to the average profile. Thus there is no significant difference between retail formats in terms of this retail attribute.

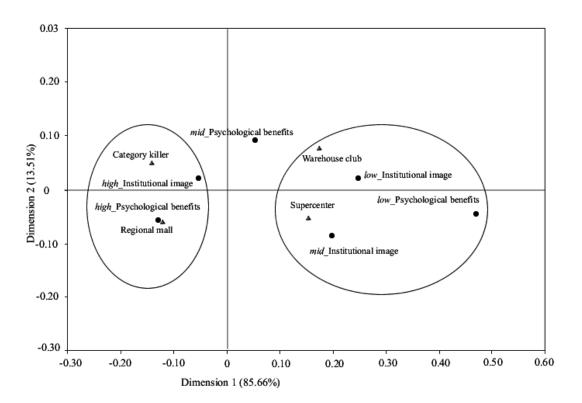


Figure 3. Correspondence analysis map of hedonic retail attributes.

Note. Retail formats (\blacktriangle), Retail attributes (\bullet)

Analytical approach. Correspondence analysis adds a fresh dimension to exploratory and evaluative research, and provides a clear picture of quantitative data results (Whipple, 1994). It can be used in conjunction with other methods for those who want to see statistical precision of their assessment in addition to a graphical representation (Atilgan, Akinci, & Aksoy, 2003). Thus, univariate analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA) were used to confirm the results of correspondence analysis of retail attributes by retail format. Regional malls and category killers vs. supercenters and warehouse clubs were significantly different in terms of price, assortment, sales personnel, and psychological benefits confirming the result of the correspondence analysis (see Table 4 and Table 5).

Table 4
F-test Result for Group Comparison of Utilitarian Attributes

Utilitarian attributes	F	e valua	E41	Levene's test
Otimarian attributes	Γ	<i>p</i> -value	Eta squared	(p-value) ^a
Price				
RM & CK vs. SC & WH	71.19	.000	.063	.834
RM vs. CK	22.24	.000	.038	.539
SC vs. WH	1.27	.261	.003	.677
Assortment				
RM & CK vs. SC & WH	25.88	.000	.024	.554
RM vs. CK	3.23	.073	.006	.920
SC vs. WH	0.10	.757	.000	.627
Convenience				
RM & CK vs. SC & WH	2.38	.123	.002	.094
RM vs. CK	1.31	.253	.002	.990
SC vs. WH	6.66	.010	.013	.654
Sales personnel				
RM & CK vs. SC & WH	35.50	.000	.032	.187
RM vs. CK	9.23	.002	.016	.276
SC vs. WH	3.57	.059	.007	.217
Multivariate test	Hotelling's trace	p-value	Eta squared	Box's test
RM & CK vs. SC & WH	51.56	.000	.163	.003

Note. RM = Regional mall, SC= Supercenter, CK = Category killer, and WC = Warehouse club.

^a High p-value (p > .05) indicates homogeneity of the groups

TT-4:44-ib4	F	,	E4	Levene's test
Hedonic attributes	F	<i>p</i> -value	Eta squared	(p-value) a
Psychological benefits				
RM & CK vs. SC & WH	31.60	.000	.290	.066
RM vs. CK	0.03	.856	.000	.747
SC vs. WH	4.56	.033	.009	.421
Institutional image				
RM & CK vs. SC & WH	2.63	.105	.002	.002
RM vs. CK	1.61	.205	.003	.692
SC vs. WH	1.65	.199	.003	.341
Multivariate test	Hotelling's trace	<i>p</i> -value	Eta squared	Box's test
RM & CK vs. SC & WH	18.93	.000	.035	.112

Table 5
F-test Result for Group Comparison of Hedonic Attributes

 $Note.\ RM$ = Regional mall, SC= Supercenter, CK = Category killer, WC = Warehouse club.

Convenience and institutional image, however, were not significantly different between the two big groups. This result is possible because the "high_Convenience" point and "high_Institutional image" point were close to the origin (0.0) on each map. Regional malls and category killers were significantly different in price and sales personnel, while supercenters and warehouse clubs differed significantly in convenience and psychological benefits. The correspondence analysis used in conjunction with ANOVA and MANOVA improved statistical precision and confirmed the results of the correspondence analysis.

Conclusions and Implications

The market for each retail format narrows as the retail environment continues to expand. In this market environment, retailers must have an accurate analysis of their consumer market. Demographic determinants are an important criteria in the first stage of structuring consumer markets (Herrmann & Huber, 2000). Retail attributes that assist in identifying market positions of retail formats should be used to further evaluate the market needs. The first correspondence analysis revealed important insights into the demographic segments of each retail format based upon gender and generation of consumers. The second analysis revealed current market positions of different retail formats in terms of utilitarian and hedonic retail attributes. A summary of the findings of this study is listed in Table 6.

^a High p-value (p > .05) indicates homogeneity of the groups

Table 6

Consumer Profiles and Managerial Implications

Retail format	Demographic profile	Evaluation of retail attributes	Managerial implications		
Regional malls	Male Gen Y	high_Assortment	Continue to provide a pleasing		
	Male Senior	high_Convenience	shopping environment and focus on the "value" of the		
	Female Senior	high_Sales personnel	experience reducing the identification with high prices.		
		high_Institutional image	identification with high prices.		
		<pre>high_Psychological benefits mid_Price</pre>			
		low_Price (outlier)			
Category killers	Female Gen Y	high_Assortment	Differentiate from malls through		
	Male Gen X	high_Convenience	assortment and price; from su- percenters and warehouse clubs.		
		high_Sales personnel	through enjoyable shopping ex-		
		high_Psychological benefits periences. high_Psychological benefits			
		mid_Price			
Supercenters	Female Gen X	high_Price	Maintain low price offering		
		mid-to-low_Assortment	improve convenience of overall shopping experience.		
		mid-to-low_Institutional image	11 0 1		
		low_Convenience			
		low_Sales personnel			
		low_Psychological benefits			
Warehouse clubs	Male Baby Boomer	high_Price	Differentiate from supercenters		
		mid-to-low_Assortment	by offering frequent merchan- dise turnover to create a sense of		
		low_Convenience	shopping excitement or focusing		
		low_Sales personnel	on specific product categories.		
		low_Institutional image			
		low_Psychological benefits			
		low Post transaction (outlier)			

Based on these findings, managerial implications can be provided. Regional malls can focus on providing a comfortable and pleasant shopping environment and emphasize the overall "value" of the shopping experience (i.e., good assortment, convenience, knowledgeable sales personnel, prestige, reputation), thus reducing the risk of being identified with high prices. Focusing on these other valuable attributes could minimize the consumer's negative perception of higher prices because the overall experience feels "worth it." Category killers can differentiate themselves from regional malls through assortment and price, and from supercenters and warehouse clubs

through creating more enjoyable shopping experiences. For example, Home Depot offers "Do-It-Herself workshops," which provide a friendly, supportive environment where women can build new skills and undertake interesting home improvement and decorating projects. Supercenters should maintain their low price offerings while improving the overall convenience of the shopping experience. Convenience could be improved in parking, store services, clear signage and easy-to-follow layouts. Warehouse clubs could differentiate themselves from supercenters by capitalizing upon frequent product turnover of the limited assortment of merchandise to create a sense of shopping excitement. Additionally, they could also differentiate themselves by focusing on specific product categories within the store as BJ's Wholesale Club has recently done in their food department. BJ's is also offering food in smaller-sized packages for consumer convenience, which has increased their business ("Behind the Numbers," 2005).

The research design employed in this study used correspondence analyses to segment consumer groups and discover their evaluation of each retail format in terms of retail attributes. It is clear that different consumer groups patronize different retail formats, and that they rate formats differently based on retail attributes. To be competitive in the current retail environment, retailers must determine ways they can compete with other store formats to attract more customers. This can be accomplished by segmenting existing customers and identifying appropriate positioning strategies as suggested in this study. Additionally, retailers can use this research design to identify potential consumer segments whose needs are not currently being met. They could also enhance their image by identifying their retail attributes that received low ratings and create strategies to improve on these key attributes. Further, retailers could use segmenting and positioning techniques to analyze competitors' weaknesses to identify areas of opportunity within the marketplace. In sum, correspondence analysis of segmentation and positioning provides a basis for diagnosing current strategies and determining potential areas for retail competitiveness.

Some limitations of this study must be acknowledged. First, this study measured only performance of the retail attributes. Future research could employ both the importance and performance of retail attributes to understand consumers' attitudes toward each retail format. Second, although correspondence analysis allows easy visualization of the differences between variables, and it has several advantages for practitioners and scholars, it cannot provide exact distances between the variables. Future research could combine it with other statistical tests (e.g., multiple regression, structural equation modeling) or use an alternative approach (e.g., multi-dimensional scaling technique) to expand the understanding of the relationship among demographic variables, retail attributes, and retail formats.

References

Anonymous (2005). 2004 Top U.S. retailers. Chain Store Age, 81(8), 6A-14A.

Atilgan, E. Akinci, S., & Aksoy, S. (2003). Mapping service quality in the tourism industry. *Managing Service Quality, 13*(5), 412-422

Bakewell, C., & Mitchell, V. W. (2003). Generation Y female consumer decision making styles. *International Journal of Retail and Distribution Management*, 31(2), 95-106.

Behind the Numbers at BJ's Wholesale Club. (2005). *DSN Retailing Today*, 44(13), 22.

Bellenger, D., Robertson, D., & Greenberg, B. (1977). Shopping center patronage motives. *Journal of Retailing*, 53(2), 29-38.

Berry, L. (1996). Retailers with a future. *Marketing Management*, 5(1), 9-38.

Bianco, A., Zellner, W., Brady, D., France, M., Lowry, T., Byrnes, N., Zegel, S., Arndt, M., Berner, R., & Palmer, A.T. (2003). Is Wal-Mart too powerful? *Business Week*, 38(52), 100-110.

Blackwell, R. D., Miniard, P. W. & Engel, J. F. (2001). *Consumer behavior* (9th ed.). New York, NY: Harcourt College Publishers.

Bloch, P. H., Ridgway, N. M. & Dawson, S. A. (1994). The shopping mall as consumer habitat. *Journal of Retailing*, 70(1), 23-42.

Buttle, F. (1992). Shopping motives constructionist perspective. *Service Industries Journal*, 12(3), 349-367.

Cleveland, M., Babin, B. J., Laroche, M., Ward, P., & Bergeron, J. (2003). Information search patterns for gift purchases: A cross-national examination of gender differences. *Journal of Consumer Behavior, 3*(1), 20-47.

Dunne, P. & Lusch, R. (2005). Retailing (5th ed.). Thompson South-Western.

Eastman, J. & Iyer, R. (2004). The elderly's uses and attitudes towards the Internet. *Journal of Consumer Marketing*, 21(3), 208-220.

The future of the mall. (2003). *Retail Forward*. Retrieved October 16, 2005, from http://www.retailforward.com

Gallo, R (2002). Discount stores: A soft-economy windfall. *Chain Store Age*, 78(8), A20-A21.

Gelbtuch, Howard C. (1990). The warehouse club industry. *The Appraisal Journal*, 58(2), 7-153.

The Gen X Budget. (2002). American Demographics, 24(7), 55.

Greenacre, M. & Hastie, T. (1987). The geometric interpretation of correspondence analysis. *Journal of the American Statistical Association*, 82(5), 437-447.

Haytko, D., & Baker, J. (2004). It's all at the mall: Exploring adolescent girls' experiences. *Journal of Retailing*, 80, 67-83.

Herrmann, A. & Huber, F. (2000). Value-oriented brand positioning. *The International Review of Retail, Distribution and Consumer Research*, 10(1), 95-112.

Hirschman, E. C. and Holbrook, M.B. (1982). Hedonic consumption: emerging concepts, methods and propositions. *Journal of Marketing*, 46 (3), 92–101.

Hoffman, D. L. & Franke, G. R. (1986) Correspondence analysis: graphical representation of categorical data in marketing research. *Journal of Marketing Research*, 23(2), 213-217.

Shopping center definitions (2004). International Council of Shopping Centers. Retrieved January 25, 2006 from http://www.icsc.org/srch/lib/SCDefinitions.pdf

Johnson, B. (2005). Graying boomers will drive new market. *Television Week*, 24(30), 56.

Kim, Y-K, Kang, J., & Kim, M. (2005). The relationships among family and social interaction, loneliness, mall shopping motivation, and mall spending of older consumers. *Psychology & Marketing*, *27*(12), 995-1015.

Kim, Y-K. (2002). Consumer value: An application to mall and Internet shopping. *International Journal of Retail and Distribution Management*, 30(12), 595-602.

O'Connor, P. C. (1999). Which retail properties are getting market share? *The Appraisal Journal*, 67(1), 37-40.

Paulins, V. A., & Geistfeld, L. (2003). The effect of consumer perceptions of store attributes on apparel store preference. *Journal of Fashion Marketing & Management*, 7(4), 371-385.

Plunkett's retail industry almanac (2001-2002), Galveston, TX: Plunkett Research, Inc.

Reynolds, Kristy E., Ganesh, J., & Luckett, M. (2002). Traditional malls vs. factory outlets: comparing shopper typologies and implications for retail strategy. *Journal of Business Research*, *55*, 687-696.

Rogers, D. (2005). Department store consolidation: Causes and consequences. *European Retail Digest*, 45, 57-59.

Rogers, D. (2003). Winners and losers. European Retail Digest, 40, 66-72.

Seninger, S. (2000). Winnebagos, funeral homes, and cruise ships: The graying of baby boomers in the new millennium. *Montana Business Quarterly*, 38(1), 2-5.

Setlow, C. (2002). Parents and teens collaborate to do some serious shopping. *DSN Retailing Today*, 41(13), 14.

Urban, D. J., & Hoffer, G. E. (1997). The super automotive category killer: Why now? what future? *Journal of Consumer Marketing*, 14(1), 3-12.

Van Slyke, C., Comunale, C. L., & Belanger, F. (2002). Gender differences in perceptions of web-based shopping. *Communications of the ACM*, 45(8), 82-86.

Wakefield, K. L, & J. Baker (1998). Excitement at the mall: Determinants and effects on shopping response. *Journal of Retailing*, 74(4), 515-539.

Weller, K. N., & Romney, A. K. (1990). *Metric scaling*. London: Sage Publications

Wilde, S. J., Kelly, S. J., & Scott, D. (2004). An exploratory investigation into e-tail image attributes important to repeat, internet savvy customers. *Journal of Retailing & Consumer Services*, 11(3), 131-139.

Whipple, T.W. (1994). Mapping focus group data. Marketing Research, 6(1), 16-21.

Wright, G. (1996). Aging boomers will revamp retail scene. *Brandweek*, 37(39), 18.