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# Customer satisfaction in food retailing: comparing specialty and conventional grocery stores

Customer  
satisfaction in  
food retailing

63

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## Abstract

**Purpose** – The purpose of this paper is to compare and contrast customer perceptions related to satisfaction with conventional grocery stores as compared to specialty grocery stores. The study examines store attributes of product assortment, price, quality, and service in order to determine which attributes have the greatest impact on store satisfaction for each store format.

**Design/methodology/approach** – A mail survey was sent to a sample of specialty and conventional grocery store customers. The ten state sample was drawn from US households located in postal (ZIP) codes in areas where national specialty stores (e.g. whole foods) were located.

**Findings** – Perception of satisfaction were higher among specialty grocery store customers compared to conventional grocery store customers. For both store formats, store price, product assortment, service and quality positively influenced satisfaction. Stepwise regression indicated that each store attribute contributed differently to store satisfaction for conventional and specialty store formats.

**Research limitations/implications** – The results demonstrate that price, product assortment, quality, and employee service influence store satisfaction regardless of store type (conventional stores or specialty stores). However, the degree of influence of these attributes varied by store type. The results imply that while specialty store shopper satisfaction characteristics are clearly delineated, conventional store shopper characteristics are more difficult to pinpoint. Research limitations include a sample that is more highly educated and has higher incomes than the average American household.

**Originality/value** – Despite the growth of new product categories and new industry players, few studies have investigated customer satisfaction within the retail food industry. Comparisons of specialty and conventional food stores are equally scarce.

**Keywords** Customer satisfaction, United States of America, Shops, Retailing, Food products

**Paper type** Research paper



## 1. Introduction

The retail food industry is a highly competitive and challenging industry that has been experiencing significant change in the past few decades. As retailers have focused on creating successful retail formats, a natural distinction has developed between conventional and specialty format stores. Conventional grocery stores (e.g. Kroger, Meijer and Albertsons) operate under a traditional supermarket format offering a full

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line of groceries, meat and produce, with some operators offering a mix of general merchandise items. Additionally, conventional grocery stores are typically located as an anchor in a strip center or in a stand-alone location. With average annual sales of \$14 million, these stores are self-service formats that carry about 40,000 SKUs and range in size from 40,000 to 100,000 square feet (Hoovers, 2008a). Products sold may include national manufacturer brands as well as store brands/private label items. Promotion typically involves traditional methods: newspaper advertising, coupons, store events, and discount price sales (Hoovers, 2008a). Conventional grocery stores target the mass-market customer, and often compete heavily on prices.

Specialty grocery stores focus on a single food category (e.g. meats, produce, or bakery) or engage in selling special types of food products (e.g. natural/organic, gourmet and ethnic). Usually located in strip centers, specialty grocery store size varies widely from 1,000 to 20,000 square feet and generally stores carry fewer SKUs than conventional stores (Hoovers, 2008b). Often, the specialty products carried at a specialty grocery store may not be available in the range of assortment or at the same (or perceived) quality levels at conventional grocery stores. Examples of retailers that represent specialty grocery stores include Whole Foods Markets and Wild Oats, as well as local ethnic food stores, local butcher shops/produce markets, and local health food store operators. Affluent customers are the target for specialty food stores as products are often priced at a premium (Hoovers, 2008b). Grass roots marketing, word-of-mouth, and community support (e.g. recycling events and cooking classes) are important promotional techniques for specialty stores (Hoovers, 2008b).

The distinction between conventional and specialty supermarkets can be compared to the distinction historically made in the apparel industry between department stores and specialty apparel retail formats. While various research studies have examined customer preferences and shopping behaviors which compare department stores and specialty apparel formats (King and Ring, 1980; Lumpkin and McConkey, 1984), corresponding research on food retailing across those two dimensions (conventional versus specialty store formats) has received little attention. However, research focused on differentiating customer behavior of food retailing formats would be highly beneficial to both academics and practitioner audiences for several reasons. One reason, in particular, is that food retailing presents different challenges to understanding customer behavior because not all customers enjoy grocery shopping (*FMI News*, 2006). While shopping, in general, is stressful for consumers (Fram and Axelrod, 1990), Aylott and Mitchell (1998) found that customers associated more stress with grocery shopping than with other forms of shopping. Further, the food industry is changing rapidly as new retail formats develop (e.g. warehouse club stores) and capture market share from traditional formats. Finally, expansion of new product categories (e.g. organic/natural) and development and growth of relatively new food retailing players (e.g. Wal-Mart and Whole Foods Market) have created more customer choices.

The impact of new retail formats on the supermarket industry has been substantial. Roughly two decades ago, conventional store formats represented roughly 90 percent of food-at-home purchases made in US households. Now that share of sales is at 69 percent (Leibtag, 2005). To compete, conventional supermarkets have expanded into new product categories, such as prepared foods, private label brands, and natural/organic foods (Economic Research Service, 2003). Growth in organic food, as one example, has proliferated in the last few years – changing from a “niche market to a much more

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mainstream position” (Jones *et al.*, 2001, p. 360). As such, specialty retailers who focus on natural/organic products have also grown in popularity. For instance, Whole Foods Market Company (2007a) has grown from one store in 1980 to “the world’s leading retailer of natural and organic foods, with 195 stores in North America and the United Kingdom.”

Despite the growth of new product categories and new industry players, few studies have investigated customer satisfaction within the retail food industry. Yet, satisfaction is increasingly more important given the highly competitive environment in food retailing (Hare, 2003). Carpenter and Moore (2006) acknowledge that the changing competitive landscape within the grocery industry makes it critical for retailers to better understand grocery customers. This includes an attempt to examine customer choice with respect to store format and the store attributes that drive that choice. As such, the purpose of this paper is to compare and contrast customer perceptions of conventional food stores to specialty food stores by examining satisfaction levels with each store format, and investigating the relationship between satisfaction and store attributes, such as product assortment and store service.

First, we review pertinent literature with respect to retail satisfaction and develop hypotheses to be evaluated in this paper. Research methods are discussed including a description of the survey data collection instrument. We use factor analysis to develop the constructs, stepwise regression to understand the relationship between satisfaction and the constructs, and MANOVA to compare conventional and specialty formats across key constructs. Research findings and a discussion of the results are presented. Finally, conclusions and implications for further academic research as well as insights for retail food store managers are provided.

## 2. Literature review: retail store satisfaction

Satisfaction is a critical measure of a firm’s success and has been shown to influence attitude, repurchase, and work-of-mouth communication (Sivadas and Baker-Prewitt, 2000); to be a good predictor of future purchase behavior (Kasper, 1988); to influence profit (Anderson *et al.*, 1994); and, in the long run, to lead to customer loyalty (Oliver, 1997). Additionally, Day (1994) found that customer satisfaction led to greater customer retention, while Huber *et al.* (2001) found satisfied customers were willing to pay higher prices.

Despite the abundance of literature on customer satisfaction (Cardozo, 1965; Oliver, 1997), Giese and Cote (2000) acknowledge that a generally accepted definition of customer satisfaction has not been established. Giese and Cote’s (2000) multi-method study elicited the following definition: customer satisfaction is identified by a response (cognitive or affective) that pertains to a particular focus (i.e. a purchase experience and/or the associated product) and occurs at a certain time (i.e. post-purchase, post-consumption). Given this definition, a customer’s satisfaction with his/her shopping experience may be an outcome of the value provided by the shopping experience. Carpenter and Fairhurst (2005) showed that utilitarian shopping benefits and hedonic shopping benefits had a positive impact on satisfaction. Eroglu *et al.* (2005) looked at the relationship between perceived retail crowding, shopping value and satisfaction and found that perceived retail crowding had a negative effect on shopping value and, in turn, satisfaction. If the shopping experience provides qualities that are valued by the customer, satisfaction with the store is likely to result.

Individual customers have different motivations for shopping. These include diversion from daily routine, learning about new products or trends, or enjoyment of bargaining (Tauber, 1972). Some customers are more task-oriented while others are more activity-oriented (Babin *et al.*, 1994). These differences mean that they will find value in and also gain satisfaction from diverse aspects of the shopping experience. Retailers must understand these differences in order to create store formats and offer-related attributes that meet the needs of their target segment(s). Among apparel retailers, for example, department stores have different target markets, and, thus, different market strategies (product assortment, quality, price and services) than specialty apparel retailers (Ma and Niehm, 2006). As such, customer expectations surrounding the retail experience may vary across retail stores and products which can, in turn, mean that satisfaction will also vary by the type of retailer and/or type of product offered at retail.

While numerous studies on grocery/food retailers have been conducted (Brown, 2001; Doyle and Fenwick, 1974-1975; Hare, 2003), there is a scarcity of research which draws comparisons between specialty and conventional stores and food shopping behavior. Additionally, there is a lack of food industry research examining satisfaction and store attributes (Carpenter and Moore, 2006). Thus, we use department and specialty store literature focused on apparel where research on specific grocery format shopping behaviors is scant. We posit that the attitudes of conventional grocery shoppers will be comparable to those of department store shoppers, while specialty grocery store shoppers will share many of the same characteristics as specialty apparel shoppers.

In both the apparel and food industry, customers often shop in conventional store settings for the products they need and expect to find (e.g. national brand products and staple food items). Specialty stores can be categorized as offering customers something different (e.g. organic foods, unique brands and personalized service) and may differentiate themselves via product assortment or through customer relationship management (Hansen and Solgaard, 2004). Conventional food stores and department stores offer a broad merchandise selection and appeal to a wide range of customers. Specialty stores focus often more on personalized service or unique product offerings. "In effect, specialty shopping is a reaction against the impersonal coldness of supermarket shopping-it is an attempt to impart color and fun into an everyday activity" (Milligan, 1987, p. 66).

Specialty stores offer merchandise targeted at specific customer segments, create niche market opportunities, and focus on providing outstanding service (Gagliano and Hathcote, 1994). While we did not identify studies which directly compared overall satisfaction between specialty and conventional stores, Anderson *et al.* (1994) posit that stores following "niche" or differentiated strategies are likely to be more successful at satisfying customers than stores pursuing other strategies. A differentiated approach is likely to lead to higher levels of satisfaction with specialty grocery stores compared to conventional stores. Building on this logic, we propose:

- H1.* Store satisfaction will be stronger for specialty stores than for conventional stores.

Research has historically shown a relationship between store attributes and retail format choice. Store choice is influenced by a customer's individual values and their store image which, in turn, is based on perceived store attributes (Newman and Cullen, 2001).

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Store attributes, such as quality, price, and variety, affect shopping habits in grocery chains (Doyle and Fenwick, 1974-1975). We focus on four store attributes: price, product assortment, quality and service and compare those attributes by store format (conventional and specialty stores). These attributes were selected because retailers can adjust strategies related to these attributes relatively easily, compared to other attributes, such as store location. Specific discussion of each follows.

### *2.1 Price*

Empirical studies suggest that price, as a determinant of satisfaction, varies by store format. For example, overall price image of a store affects store choice (Cox and Cox, 1990). Price image has implications for store patronage, and strategic decisions related to selecting a target customer base and creating in-store environments (Desai and Talukdar, 2003).

Grocery pricing strategy, for example high-low (HILO) pricing, has a direct effect on customer purchase behavior in conventional grocery stores: large basket customers prefer a store which offers an EDLP format, while small basket shoppers prefer a store that offers a HILO format (Bell and Lattin, 1998). People who shop for economical brands also tend to select “economical” store formats (Baltas and Papastathopoulou, 2003). Arnold *et al.* (1983) found low prices to be the second most important store characteristic for supermarket shoppers; store location was first. Price is a significant predictor of store satisfaction for Australian shoppers (Miranda *et al.*, 2005). Based on the premise that all retail store attributes are not equally important in affecting store choice, Paulins and Geistfeld (2003) investigated customer perceptions of store attributes across women’s apparel stores, and found that a larger portion of respondents perceived discount stores and department stores to have reasonable prices while only a moderate portion of respondents perceived specialty stores to have reasonable prices.

In contrast, specialty store customers may be less price sensitive. For example, midrange and high-fashion specialty store customers placed the lowest importance on low price as a patronage determinant (Lumpkin and McConkey, 1984). Price was ranked least important for specialty store customer groups, while it ranked much higher in importance for department store customers and discounter/mass merchandiser customers (King and Ring, 1980). Thus, specialty grocery store customers may be more willing to pay higher prices for their groceries than conventional shoppers. Thus, we propose:

*H2a.* Price is positively related to store satisfaction for both specialty and conventional stores.

*H2b.* The relationship between price and satisfaction is stronger for conventional stores than for specialty stores.

### *2.2 Product assortment*

Product variety influences a customer’s perception of a store (van Herpen and Pieters, 2002). In turn, perceptions concerning product variety influence both satisfaction and store choice (Hoch *et al.*, 1999). The availability of a wide variety of products is ranked higher as a store patronage attribute among department and discount store shoppers than specialty store shoppers (Lumpkin and McConkey, 1984), indicating expectations surrounding product assortment vary by store type.

Conventional grocery stores tend to be larger than specialty grocery stores and are likely to carry a wider variety of products in its assortment than a specialty store. Supermarket shoppers ranked product variety third behind location and price as determinants of store patronage (Arnold *et al.*, 1983).

Specialty stores focus on “a specific category or group of related merchandise categories, for relatively narrow target markets” (Ma and Niehm, 2006, p. 623). Gagliano and Hathcote (1994) indicated that specialty stores are able to tailor merchandise to specific customers in niche markets. Paulins and Geistfeld (2003) found that when a store had an appealing merchandise selection, it became a key reason why that store was considered desirable. As such, it is hypothesized that:

*H3a.* Product assortment is positively related to store satisfaction for both specialty and conventional stores.

*H3b.* The relationship between product assortment and satisfaction is stronger for specialty stores than for conventional stores.

### *2.3 Quality*

Product quality and product features were considered the most important product choice criteria in a study of Greek grocery customers (Baltas and Papastathopoulou, 2003). Quality is seen as “a satisfaction-maintaining factor in the supermarket sector” in that improvements in quality have a small positive impact on satisfaction while reductions in quality of the same magnitude have a significantly greater chance of reducing satisfaction (Gomez *et al.*, 2004, p. 273).

For specialty store customers, merchandise quality is an important differentiating factor. In one study (Lumpkin and McConkey, 1984), specialty store customers scored product quality higher in comparison to other store formats, demonstrating the importance of product quality for these customers. A similar study also found product quality to rank considerably higher for specialty customers when compared to mass merchandiser and department store customers (King and Ring, 1980). We expect similar high ratings for product quality for specialty grocery store customers. Thus, we propose:

*H4a.* Product quality is positively related to store satisfaction for both specialty and conventional stores.

*H4b.* The relationship between product quality and satisfaction is stronger for specialty stores than for conventional stores.

### *2.4 Service*

While the literature on customer perceptions of service and its impact on food store shopping experiences is sparse, empirical work drawing comparisons between specialty and department store customers provides guidance on the strength and direction of these characteristics to store patronage. Specialty store shoppers view service (via store associates) to be one of the most important determinants of store patronage. Sales associates play a pivotal role in a customer service situation, with the most important attributes being store clerk attitude and treatment of customers (Gagliano and Hathcote, 1994). At the same time, for department and discount store

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shoppers, sales associate service ranks much lower on the list of important shopping determinants (Lumpkin and McConkey, 1984).

Knowledgeable and helpful salesclerks are viewed as the strongest determinant of store patronage among specialty store shoppers, considerably higher than department store and mass merchandiser shoppers (King and Ring, 1980). In one study of customer service in specialty and conventional grocery stores, customer perceptions of service were found to vary greatly (Kirkup *et al.*, 2004). Brown (2001) found that customers who shop small grocery chains placed greater importance on service quality than patrons of large grocery store chains. Thus, we propose:

*H5a.* Store service is positively related to store satisfaction for both specialty and conventional stores.

*H5b.* The relationship between store service and satisfaction is stronger for specialty stores than for conventional stores.

### 3. Research method

A survey was developed based on an extensive literature review of well-established constructs used in retail customer behavior studies. The survey was pretested among graduate students and academicians familiar with food store retailing. A mailing list of US households in ten states was purchased using ZIP codes in areas where national specialty stores (e.g. Whole Foods) were located, in order to gather data across an adequate and representative sample. Survey respondents were first asked if they shopped at conventional grocery stores, and, if so, they were asked to provide the name of their preferred store. Sample names of conventional grocery stores were provided. Respondents were then asked specific shopping behavior questions with respect to that store (e.g. shopping frequency and shopping spend). Next, respondents were asked if they shopped at specialty grocery stores, and, if so, they were asked to provide the name of their preferred store. The same shopping behavior questions were asked regarding that specialty store.

Questions relating to store satisfaction, price, product assortment, quality and store service were included in subsequent sections. Participants were asked to indicate their agreement with 27 questions on a five-point Likert scale (where 1 equals strongly disagree and 5 equals strongly agree). Each respondent had the opportunity to record his/her responses for either a conventional store (if they indicated in the first section that they only shopped at conventional stores) or a specialty grocery store (if they indicated in the first section that they only shopped at specialty stores) or for both types of stores (if they indicated in the first section that they shopped at both conventional and specialty stores).

Questionnaires were sent to 4,500 households. About 105 surveys were non-deliverable and ten were deemed unusable. A total of 659 usable questionnaires were returned providing a response rate of 15 percent. Of that total sample, 630 respondents completed the survey with respect to conventional stores, and 494 respondents completed the survey with respect to specialty stores – roughly 70 percent of respondents completed the survey with respect to shopping experiences at both types of stores.

To validate the response accuracy with respect to store choice, respondents were asked to provide a name of the store (whether conventional or specialty). Store names



were checked to ensure the store selected fit with the description of the corresponding store type where possible. Table I provides a list of conventional and specialty stores patronized by the respondents.

Non-response bias was evaluated using comparisons of early and late responders as recommended by Armstrong and Overton (1977). No significant differences between the respondent groups were found with respect to shopping behaviors (e.g. shopping frequency), demographics, or across the items included in this paper.

The sample was 39.3 percent male and 60.7 percent female. Nearly, 34 percent of the sample was between the ages of 35 and 54. Roughly, 43 percent were between the ages of 55 and 74, about 8 percent were between the ages of 18 and 34, and 15 percent were over the age of 75. The majority of the sample was highly educated: 28.9 percent had a bachelor's degree and 41.6 percent had a graduate or professional degree. Our sample was affluent, with the majority having a household income of more than \$80,000 per year (39.2 percent).

### 3.1 Survey results

The 27 questions for store satisfaction, price, product assortment, quality and store service were factor analyzed using SPSS principle component analysis with varimax rotation. The factor analysis, as shown in Table II, yielded six factors and reduced the total number of items to 24, due to unacceptable factor loadings for three items. Each of the six factors had from three to six items per factor; coefficient  $\alpha$ 's ranged from 0.809 to 0.927 across both conventional and specialty stores. These coefficient  $\alpha$  values are well above the established 0.70 minimum recommended value (Nunnally, 1994).

The same factor structure existed for both conventional and specialty store data. As shown in Table II, the first four factors were satisfaction, price, product assortment, and quality. Interestingly, the service items generated two separate factors. The first service factor focuses on service levels provided by store employees and will now be referred to as employee service. The second service factor focuses on actions and activities that stores engage into build customer relationships/customer loyalty. This factor will be referred to as loyalty-building service. The reliability of each factor is

Conventional store	Specialty store
Albertson's	Central Market
Farmer Jack	Fresh Market
Harris Teeter	Henry's Market
HEB	Nino Salvaggio's
Jewel	Sun Harvest
Kroger	Trader Joes
Meijer	Treasure Island
Publix	Whole Foods
Ralph's	
Safeway	
ShopRite	
Stop & Shop	
Tom Thumb	
Vons	
Wal-Mart	

**Table I.**  
Conventional and  
specialty store patronage

Question	Conventional loading	Specialty loading
<i>Satisfaction</i> <sup>a</sup>	( $\alpha = 0.911$ )	( $\alpha = 0.865$ )
Compared to other stores, I am very satisfied with this store	0.929	0.898
Based on all my experiences with this store, I am very satisfied	0.931	0.920
In general, I am satisfied with the store	0.904	0.842
Eigenvalue	2.547	2.361
<i>Price</i>	( $\alpha = 0.914$ )	( $\alpha = 0.898$ )
I am satisfied with the price/quality ratio offered at the store <sup>b</sup>	0.919	0.904
I am satisfied with the general price level of merchandise at the store	0.927	0.923
Provides a good value for the money <sup>c</sup>	0.925	0.907
Eigenvalue	2.561	2.493
<i>Product assortment</i> <sup>c</sup>	( $\alpha = 0.877$ )	( $\alpha = 0.809$ )
The store offers the assortment of products I am looking for	0.835	0.752
This store is well-stocked across its different departments	0.776	0.826
This store has the right merchandise selection	0.872	0.840
This store has an extensive assortment of products	0.827	0.712
Eigenvalue	3.468	2.915
<i>Quality</i> <sup>c</sup>	( $\alpha = 0.836$ )	( $\alpha = 0.822$ )
This store has good quality merchandise	0.777	0.774
I shop this store because its products are superior to its competitors	0.890	0.886
The products at the store are of high quality	0.852	0.811
The products at this store are very satisfactory compared to other stores	0.781	0.777
Eigenvalue	2.730	2.645
<i>Employee service</i>	( $\alpha = 0.927$ )	( $\alpha = 0.926$ )
In general, I am satisfied with the service offered at this store <sup>b</sup>	0.728	0.794
The employees at this store are polite to me <sup>c</sup>	0.788	0.798
This store has helpful employees <sup>c</sup>	0.865	0.888
This store has friendly employees <sup>c</sup>	0.839	0.868
This store has an adequate number of employees available to assist me <sup>c</sup>	0.750	0.818
This store is service oriented <sup>d</sup>	0.724	0.836
Eigenvalue	7.245	5.460
<i>Loyalty-building service</i> <sup>d</sup>	( $\alpha = 0.911$ )	( $\alpha = 0.882$ )
The store makes an effort to increase customer loyalty	0.855	0.868
This store makes every effort to improve its tie with regular customers	0.882	0.878
The store really cares about keeping their customers	0.823	0.792
I am happy with the efforts that this store is making toward keeping me as a customer	0.767	0.795
Eigenvalue	1.5884	1.91

**Sources:** <sup>a</sup>Questions adapted from Bettencourt (1977); <sup>b</sup>Bloemer and DeRuyter (1998); <sup>c</sup>Maddox (1977); <sup>d</sup>de Wulf *et al.* (2001)

**Table II.**  
Results of factor analysis

listed next to each construct in Table II. Each construct was computed as the mean of its items, and the resulting constructs were used to conduct the remaining analysis.

In order to test the relationship between each of the six constructs (satisfaction, price, product assortment, quality, employee service, and loyalty-building service), correlation matrices were analyzed. Table III illustrates the correlation matrices. As shown, the bivariate correlations for all constructs across both store types are significant at the 0.01 level. Note, the *R*-scores range from 0.292 to 0.709. All correlations are positive, supporting the hypotheses that price, product assortment, quality, and service (employee service and loyalty-building service) are all positively related to store satisfaction.

Stepwise regression analysis was used to further evaluate *H2a-H5a* and to determine which, if any, of the five independent constructs should be included in the final regression equation. Since stepwise estimation examines the contribution of each predictor variable before it considers adding the variable to the regression equation, this form of regression also illustrates which independent constructs have the greatest impact on store satisfaction. The stepwise regression was completed for both conventional and specialty stores. The final regression equations (Table IV) showed similarities and differences across store type. The same four constructs loaded into both models, but in a different order, illustrating that price, product assortment, quality, and employee service all influence store satisfaction. Our results also indicate that, based on store type, each construct contributes differently to store satisfaction. Loyalty-building service did not contribute to store satisfaction for either conventional stores or specialty stores.

The four constructs accounted for 67.6 percent (conventional) and 56.7 percent (specialty) of the variation in store satisfaction. For conventional stores, the constructs entered in the following order: product assortment (std.  $\beta = 0.253, p < 0.0001$ ), price (std.  $\beta = 0.291, p < 0.0001$ ), employee service (std.  $\beta = 0.252, p < 0.0001$ ), and quality (std.  $\beta = 0.214, p < 0.0001$ ). All four constructs contributed positively to conventional store satisfaction. For specialty stores, the constructs entered in the following order: employee service (std.  $\beta = .287, p < 0.0001$ ), price (std.  $\beta = 0.327, p < 0.0001$ ), product assortment (std.  $\beta = 0.208, p < 0.0001$ ), and quality (std.  $\beta = 0.172, p < 0.0001$ ). Again, all four constructs contributed positively to specialty store satisfaction.

	Satisfaction	Price	Product assortment	Quality	Employee service	Loyalty-building service
Satisfaction	***	0.668	0.709	0.666	0.656	0.516
Price	<i>0.540</i>	***	0.559	0.531	0.476	0.391
Product assortment	<i>0.616</i>	<i>0.379</i>	***	0.691	0.632	0.529
Quality	<i>0.559</i>	<i>0.292</i>	<i>0.561</i>	***	0.577	0.521
Employee service	<i>0.610</i>	<i>0.384</i>	<i>0.587</i>	<i>0.591</i>	***	0.594
Loyalty-building service	<i>0.366</i>	<i>0.421</i>	<i>0.340</i>	<i>0.313</i>	<i>0.421</i>	***

**Table III.**  
Correlation matrices

**Notes:**  $p < 0.01$ . The figures in italics represent correlation matrix for specialty stores; non-italicised figures represent correlation matrix for conventional stores

Variable	Order entered	Regression coefficient	Std. error	t-statistic	Sig.	Standard coefficient
<i>Conventional stores</i>						
Product assortment	1	0.267	0.037	7.134	0.000	0.253
Price	2	0.276	0.027	10.247	0.000	0.291
Employee service	3	0.248	0.029	8.478	0.000	0.252
Quality	4	0.230	0.037	6.280	0.000	0.214
Intercept		0.014	0.113	0.124		
$R^2 = 0.678$ , adj. $R^2 = 0.676$ , * $p < 0.001$						
<i>Specialty stores</i>						
Employee service	1	0.272	0.038	7.127	0.000	0.287
Price	2	0.233	0.024	9.901	0.000	0.327
Product assortment	3	0.207	0.039	5.302	0.000	0.208
Quality	4	0.195	0.045	4.317	0.000	0.172
Intercept		0.536	0.165	3.26		
$R^2 = 0.571$ , adj. $R^2 = 0.567$ , * $p < 0.001$						

**Table IV.**  
Regression results

Based on these analyses, *H2a-H4a* are supported in that price, product assortment, and quality all are positively related to store satisfaction – regardless of the type of store. *H5a* is also supported with respect to employee service only for both conventional stores and specialty stores. Loyalty-building service did not show a significant relationship to store satisfaction for either conventional stores or specialty stores. Since employee service was the only service construct included in the regression equation, it will be the only service construct discussed for the remainder of this paper.

*t*-Tests were used to test the hypothesis that store satisfaction would be greater for specialty stores (*H1*), and the secondary hypotheses (*H2b-H5b*) concerning the strength of the relationship between the independent constructs and store satisfaction. Table V illustrates the results of paired sample *t*-tests. The mean values for store satisfaction, product assortment, quality, and employee service are statistically and significantly greater for specialty stores than for conventional stores. This supports *H1* with respect to store satisfaction being greater for specialty stores. This also lends initial support

Scale	Mean	SD	N	Sig.
Satisfaction-conventional	3.94	0.83	463	0.000
Satisfaction-specialty	4.32	0.65		
Price-conventional	3.77	0.87	464	0.516
Price-specialty	3.73	0.92		
Product assortment-conventional	4.02	0.77	464	0.000
Product assortment-specialty	4.17	0.65		
Quality-conventional	3.68	0.77	464	0.000
Quality-specialty	4.41	0.57		
Employee service-conventional	3.96	0.84	464	0.000
Employee service-specialty	4.32	0.69		
Loyalty-building service-conventional	3.34	0.99	450	0.916
Loyalty-building service-specialty	3.34	0.97		

**Table V.**  
*t*-tests across summated scales

for *H3b-H5b*. The difference in mean values for price (*H2b*) comparing specialty stores to conventional stores was not significantly different. As such, while price was very important in determining satisfaction, it was not a differentiator across the store types.

To further test the relationships between these constructs and store satisfaction, MANOVA was used, as it can test the difference between groups (conventional and specialty stores) across several dependent variables simultaneously. Paired *t*-tests (shown in Table V) can only test the differences across means by individual construct, but cannot test the simultaneous relationships between those constructs. As shown in the correlation tables, all of the constructs included in this research are significantly correlated. As such, MANOVA is important as it tests the significance of relationships given these interdependencies. In other words, MANOVA allows a more accurate comparison of satisfaction among conventional shoppers and satisfaction among specialty shoppers given it takes into account the correlations between all of the constructs (e.g. price, product assortment, quality, and employee service) and so it has more power to test group differences.

As shown in Table VI, store type accounts for approximately 30 percent of variability across the four constructs (price, product assortment, quality, and employee service). All univariate and between subject effects are significant at the 0.05 level except for price. Product assortment, service, and quality levels were all higher for specialty stores than conventional stores. These results provide further support for *H3b-H5b*.

#### 4. Discussion and conclusions

The purpose of our study was to compare customer perceptions concerning satisfaction across conventional grocery stores and specialty grocery stores. In addition, the research examined store attributes to determine the relationship between those attributes and satisfaction as well as to determine if perceptions of attributes differ by type of store. Our results depict distinct differences between two types of grocery shoppers. Specialty grocery store customers are more satisfied, in general, but also perceive that these types of stores provide greater product assortment, higher quality, and better employee service than conventional stores. Grocery retailers should take these results into consideration when developing their retail format and promotional strategies. Specialty grocers should focus their attention on providing superior customer service as well as

<i>Test</i>	<i>Value</i>	<i>Approx. F (all df = 5)</i>		
Pillai's trace *	0.296	93.39		
Wilks' $\lambda$ *	0.704	93.39		
Hotelling's trace *	0.421	93.39		
Roy's largest root *	0.421	93.39		
<i>Between subjects effect</i>	<i>Mean square</i>	<i>F</i>	<i>Significance</i>	<i>Observed power</i>
Satisfaction	25.85	47	0.000	1.0
Price	2.658	3.438	0.064	0.457
Product assortment	3.736	7.286	0.007	0.769
Quality	135.501	294.054	0.000	1.0
Employee service	25.504	44.295	0.000	1.0

**Table VI.**  
MANOVA results

**Notes:** \*Significance of all *F*-stats = 0.000; partial  $\eta^2$  is equivalent to 0.295

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maintaining and promoting a large variety of quality products in line with the types of products their target customers seek. Promotional strategies should highlight employee service dimensions (e.g. friendly and helpful) since service is a critical determinant of satisfaction for specialty store shoppers.

Our results imply that conventional store shopper characteristics are more difficult to pinpoint. These shoppers did not exhibit stronger perceptions of product assortment, quality or employee service as compared to specialty stores. Thus, there appears to be few “bonding” ties with their preferred conventional grocery store; this could help to explain why conventional shoppers are often lured away easily by the competition. Because product assortment was the strongest determinant of satisfaction for conventional store customers, emphasizing broad and deep assortments in promotions is warranted.

Our results demonstrate that price, product assortment, quality, and employee service influence store satisfaction regardless of store type (conventional stores or specialty stores). However, the degree of influence of these attributes varied by store type. Employee service, followed by price, product assortment, and quality, was the stepwise order of impact on satisfaction for specialty stores. While product assortment, followed by price, employee service, and quality, was the stepwise order of impact on satisfaction for conventional stores. Each store attribute will be discussed in greater detail below.

#### 4.1 Price

Price was found to have a positive impact on satisfaction, but the difference in means comparing specialty stores to conventional stores (Table V) showed no significant differences for price based on store format. The MANOVA confirmed that price did not differentiate satisfaction by store type. Our findings differ from previous work that suggests that specialty store customers place little importance on price (Lumpkin and McConkey, 1984), while department store and mass merchandise customers rank price much higher in importance (Arnold *et al.*, 1983; King and Ring, 1980).

One potential explanation is that customers expect to pay more for products at specialty stores because these products are of higher quality, are perceived to be of higher quality, or are unavailable at conventional supermarkets. The price questions in this survey do not ask participants to compare the actual price levels of products at the two types of stores, but rather ask about the perception of price “acceptability.” In other words, if a customer accepts that price will be higher because the product is of better quality or the product is less available at other store formats, customers may accept paying a higher price, and, yet, still be satisfied with that price point. The mean values for price was 3.73 (specialty store) and 3.82 (conventional store), indicating moderate satisfaction for price point at both store types. This could suggest that as long as customers are not dissatisfied with price points, price will be important for store satisfaction, but will not differentiate across store types.

In the future, it would be beneficial to develop a deeper analysis to examine whether price is a predictive factor for patronage for either type of customer by comparing actual price points. While both types of shoppers are relatively neutral in their perceptions of price in this study, specialty store customers may be willing to pay more for products (due to perceived greater product assortment and higher quality) than conventional store customers.

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#### 4.2 Product assortment

Conventional stores often carry a wider range of products than specialty stores. While customers often state they like variety, studies also show that too much variety can overwhelm customers and “yield less confident choices” (Chernev, 2006, p. 58). Gourville and Soman (2005) used the term “overchoice” to describe situations where product assortment has a negative impact on customer choice. Specialty stores are able to focus specifically on the range of merchandise that satisfies a narrower, more specific target market. We hypothesized and found specialty store customers were more satisfied with product assortment than conventional store customers.

However, it is important to note that product assortment was the first construct that entered the stepwise equation regarding impact on satisfaction for conventional stores. As such, product assortment is of critical importance to customers who shop at conventional stores. Conventional grocers should take care to understand what types of products their customers are looking for as well as ensuring that the right merchandise is available and well-stocked. Further, understanding where choice is warranted and where choice might be limited can avoid “overchoice” situations that may negatively impact satisfaction. Huddleston *et al.* (2004) found preferred product-related characteristics among grocery shoppers included a wide variety of products, consistently fresh produce/meats, a good store brand, and carrying general merchandise along with food.

#### 4.3 Quality

As expected, specialty grocery store customers were more satisfied with product quality than conventional grocery store customers. Our findings were similar to the apparel industry studies (Lumpkin and McConkey, 1984; King and Ring, 1980). A specialty food store’s competitive advantage is usually promoted as superior product quality, so our results support this notion as well. Many specialty grocers promote natural/organic products which are thought to have a higher quality than the products sold in conventional stores. This may motivate customers who are looking for the best quality foods to seek out and shop at specialty grocers.

Quality entered the stepwise regression equation last for both specialty and conventional grocery store. As such, it contributes less to satisfaction than other store attributes. As we hypothesized, the mean value for quality at specialty stores was statistically significantly higher than the mean for quality at conventional stores. Since specialty stores often offer unique products, it is more difficult to make a comparison of quality to stores not offering those products. Further, customer perceive products at specialty stores (e.g. organic/natural) are of higher quality than “conventional” products offered at conventional grocery stores. Conventional stores may consider offering more opportunities for customers to sample products in store as a way to allow customers to test their quality, particular for store branded items.

Now that many conventional stores (e.g. Wal-Mart) are offering a broader range of organic/natural products, it will be interesting to see if this quality differential remains. However, Whole Foods, for example, has created its own quality certification program, called Whole Trade Guarantee (Whole Foods Market Company, 2007b). By creating standards that are unique and in line with the overall corporate philosophy, specialty stores may continue to differentiate themselves as offering high quality and prevent competitive inroads from conventional stores carrying similar products.

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#### 4.4 Service

Most previous research on customer service in specialty retailers has not focused on the grocery store format. We included this store attribute in our study because specialty grocery stores offer higher levels of service than conventional stores as one point of differentiation and we wanted to investigate the impact of service on satisfaction. For other specialty retail formats (e.g. specialty apparel), customer service was found to be an important determinant of patronage. Our findings show that this is true for grocery store customers as well.

The specialty grocery store customers surveyed for this study perceived higher levels of employee service in their preferred store than the conventional grocery store customers. Employee service entered the stepwise regression equation first for specialty store formats, indicating it is the strongest predictor of specialty store customer satisfaction compared to the other attributes in this study. Our results confirm previous work (King and Ring, 1980; Gagliano and Hathcote, 1994) which found that sales associates play a critical role in customer patronage of and satisfaction with specialty stores. Further, our results support studies which found less emphasis on service for shoppers at larger store formats, such as department stores (Lumpkin and McConkey, 1984).

#### 4.5 Research limitations

Our sample was derived from households in targeted ZIP codes across ten states where a national specialty store existed in order to ensure an adequate number of specialty store shoppers. As such, the sample population may not be representative of the overall US population. However, based on participants providing their preferred store name, we were able to ascertain that specialty stores ranged from the national specialty stores we targeted (e.g. Whole Foods Market and Wild Oats) to local ethnic stores, other natural/organic food stores, as well as other specialty stores (e.g. butcher shops and bakeries). This range of specialty store types does lend to greater potential for generalizable results. Additionally, our sample had a particularly high-education level and a much higher average household income than the US average. However, this is not particularly unexpected since specialty stores often have higher price points, and, thus, are shopped by more affluent and educated customers.

Finally, another limitation of our study was the selection of only five out of many possible store attributes. From a practical standpoint, researchers must weigh the trade-offs associated with breadth of constructs and participant response rate. To ensure an appropriate sample size, we had to limit the number of constructs included in our research. As such, our selection of attributes to include in the research focused on the attributes that a retailer could adjust relatively quickly and easily (e.g. pricing, product assortment, quality and service) as opposed to attributes, such as store location, which require a longer time to implement. Additionally, since specialty stores could conceivably be a one-store operation or a small independent operator (e.g. a family owned butcher shop), an attribute such as location may not be feasible to change.

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