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**EXPANSION OF NON-TRADITIONAL
FOOD RETAIL OUTLETS: EFFECT ON
CONSUMER WELFARE**

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EXPANSION OF NON-TRADITIONAL FOOD RETAIL

OUTLETS: EFFECT ON CONSUMER WELFARE

ABSTRACT

In this study three different methods of data collection (telephone interviews/focus groups/on-line consumer surveys) were used to assess the impact of non-traditional retail outlets on consumer welfare. We analyzed consumer cross patronage between supermarkets and non-traditional food retail channels, examined reasons for cross patronage, and made a preliminary assessment of consumer response to one of the newest retail channels: on-line food shopping. Telephone interviews were conducted in a medium-size market with 300 individuals and focus groups were conducted in two major metropolitan markets and one medium-size market. The on-line survey consisted of responses from 243 on-line food shoppers in six different markets. High levels of cross patronage were identified between supermarkets and non-traditional food retail outlets with the highest between traditional supermarkets and supercenter formats. A primary objective of the focus group interviews was to learn *how* consumers incorporate non-traditional retail formats into their grocery shopping. Focus group participants indicated they *add* these formats to the existing mix of stores from which they shop. Despite the increased number of types of food retail outlets they patronize, most focus group participants said they don't feel they spend more time grocery shopping now than before. None of the focus group participants had purchased groceries from on-line services. Therefore, we collaborated with a major supermarket chain offering on-line grocery shopping to survey consumers that were actually buying groceries on-line. Convenience was the primary reason given for shopping on-line but a significant segment mentioned physical and/or constraint issues as a major factor. A fairly small but interesting group said their primary reason for using on-line services was to avoid going to the grocery store because they "hate shopping" and "hate grocery stores." Of all the retail outlets examined in this three-part study, on-line shopping appears to meet the specific needs of consumers in a way that is different from that of the other retail outlets. Implications for consumers, retailers, and public policy makers are discussed.

INTRODUCTION

In 1997 grocery sales in the U.S. market totaled \$517 billion, nearly a 5% increase from the prior year. However, most of the growth was generated by non-traditional channels such as supercenters and warehouse clubs (Food Institute, September 14, 1998). This reflects an on-going trend in U.S. food retailing in which an increasingly diverse array of retail formats is available to consumers. Channel proliferation may be contributing to what some call the "overstoring" of America. Bernard Brennen, in his 1996 opening address to the National Retail Federation, stated that the pace of change in the U.S. retail industry has become startling, with new retail square footage outpacing population growth ten to one (Tosh, 1996). Today, there is

19 square feet of retail space for each person in the U.S., a dramatic increase from just 5.3 square feet per capita in 1964 (Silverman, 1997). The emergence of new retail formats has been an important contributor to the growth in retail square footage. In this three-part study, we examine how these changes have impacted consumers.

_____According to Kinsey and Senauer (1996) the entire food system is in a dynamic period of change. They attribute these changes in part to fundamental shifts in consumer wants and needs and increased availability of information technology. Kinsey and Senauer believe the food system in the U.S. market has shifted from a producer-driven focus to one that is consumer-driven. They describe a shift in power from the manufacturer to the retailer because retailers are now the first to receive information about consumers' preferences.

After reviewing ten years of data on consumers' food shopping and consumption patterns Jones (1996) concludes that consumers have changed and that the most notable change is in their patronage of food retail outlets other than supermarkets. To get a more complete picture of consumers' food shopping, Jones suggests looking outside the supermarket arena and studying how consumers use various food retail outlets to satisfy their needs. Binkley and Connor (1998) argue that the changing retail food landscape, in which grocery-product competition is no longer confined to supermarkets, is strongly shaped by the emergence of new retail formats.

Kinsey and Senauer (1996) believe traditional supermarkets will face serious competitive challenges from supercenters, which combine food and general merchandise categories. There are approximately 866 supercenters in the U.S. with projections that the number of stores will nearly double to 1,700 by the year 2001 (Food Institute, 1997). Discounters such as Wal-Mart extend their knowledge of procurement efficiencies and large-scale buying power to the food arena through their operation of supercenters (Kaufman, 1996). Wal-Mart is the market share leader in the supercenter format holding 58% of the business, followed by Meijer (19%), and Super Kmart (10%). In 1990 Wal-Mart operated only four supercenters. Today, Wal-Mart operates 565 supercenters with a sales volume of \$33 billion (Food Institute, June 15, 1998). Food accounts for approximately one-half of the sales volume in supercenters.

Consumers appear to like the supercenter format with the amount spent at supermarkets rising only 3% in 1997 compared to gains of 15.6% for supercenters (Weinstein, 1998). In addition, 31% of consumers in a national study conducted in 1997 reported they are shopping more often at supercenters for their food purchases than in the previous year (Liebmann, 1998).

Supermarkets also face competition from warehouse clubs which increased in sales and number of units by more than 50% between 1991 and 1996 (Chanel, 1996). Consumers spent 19.7% more at warehouse clubs in 1997 compared to 1996 (Weinstein, 1998). In a 1997 survey, 28% of respondents said they shopped more often at warehouse clubs for food in 1997 than in 1996 (Liebmann, 1998). There are approximately 850 warehouse clubs in operation in the U.S. market and the number of warehouse clubs is projected to increase to 1050 by the year 2002 (Food Institute, July 13, 1998). Warehouse clubs generate \$54 billion in sales per year and food products account for approximately 44% of this volume. Wal-Mart is number one in the warehouse club format through its operation of 487 Sam's Clubs. Although it operates fewer stores (299), Washington-based Costco is the market share leader in sales volume with a 49% market share in the warehouse club business compared to Sam's 45%. BJ's is a distant third-place contender in the warehouse club category with 94 stores and a 7% market share (Food Institute, July 13, 1998).

Gains made by convenience store formats are also outpacing those of traditional supermarkets. Consumer expenditures at convenience stores increased 8.5% in 1997 compared to 3% for supermarkets (Weinstein, 1998) and convenience stores are expanding their customer base as well. In 1997, 49% of consumers reported shopping at convenience stores for food (Weinstein, 1998) compared to 40% in 1996 (Mathews, 1997). Currently, there are approximately 83,000 convenience stores in operation in the U.S. market (Food Institute, September 14, 1998).

Terbeek (1996) suggests that the future of the food retail industry is not about incremental supply chain improvements, but rather "redistributing rewards and profits along the consumer's value chain according to value created" (p.93). Kinsey and Senauer (1996) think

that retailers have the potential to “create value” along two dimensions of convenience. That is, the retailer might improve convenience by enabling the consumer to 1) increase the number of tasks that can be accomplished during a single visit to the grocery store or 2) reduce the amount of time required to complete the shopping task. Retailers that expand their product assortments and add a variety of services to the offering (banks, floral, video rental, dry cleaning) focus on adding value along the first dimension (completion of multiple tasks). Those who add express checkout lanes and offer drive-up services are adding value on the second dimension.

According to Kinsey and Senauer (1996), the ultimate timesaving convenience is home shopping. While sales via non-store interactive channels (e.g., the Internet) are not yet a significant proportion of total food sales, some retailers do offer consumers that choice. In Spring 1998, the authors identified 12 on-line retailers offering a full line of products similar to those found in a typical supermarket. An estimated 90,000 consumers bought groceries on-line in 1998 but the number is expected to grow to 7 million by 2002 (Belsie, 1998).

Kaufman (1996) suggests that as more non-traditional retailers sell grocery products, the industry supply curve shifts outward while consumer demand for retail grocery products remains basically unchanged. The result is a new equilibrium where total quantity increases but average price falls. Thus, increased retail options may ultimately benefit consumers. However, Liebmann (1998) observes that while consumers are shopping more, at more outlets, and more often, “... these same consumers repeatedly tell us they are time-pressed and want more convenience-oriented and added value services that will save them time” (p.25).

Thus, this paper explores the impact of food retailing changes, especially in relation to consumer welfare, by addressing the following objectives:

- 1) to analyze consumer cross patronage between supermarkets and non-traditional food retail outlets;
- 2) to explore how and why consumers choose to patronize multiple food retail channels when buying food; and
- 3) to make a preliminary assessment of consumer response to on-line food shopping,

a newly emerging food retail format.

BACKGROUND LITERATURE

How do consumers choose among different retail food formats? In this section, previous work that analyzes the behavior of consumers utilizing one or more retail food outlets is reviewed.

Consumer Choice of Food Retail Outlets

Recent work by Ho, Tang, and Bell (in press) indicates that consumers' store choices as well as shopping behaviors may be influenced by a retailer's price format. That is, shoppers visit a store less frequently and buy larger quantities per visit at stores offering every day low prices (EDLP). In contrast, consumers visit a store more frequently and buy smaller quantities per visit at stores offering HILO prices (high/low pricing where temporary discounts are taken in a smaller number of categories). Kaufman (1996) suggests that the adoption of ECR (Efficient Consumer Response) principles may contribute to more EDLP pricing on the part of retailers as the importance of promotions and deal purchasing between suppliers and retailers diminishes. However, Liebmann (1998) found food shoppers mentioned "convenience" more often than either "selection" or "price" as the primary motivation for choosing a particular food retail outlet.

Bell, Ho, and Tang (1998) criticize the conventional retail view that location explains most of the variance in food retail store choice. In their study of 520 households, they show that the average number of trips to a particular food store by a given segment is not necessarily correlated to distance. They believe store choice is explained better by analyzing consumer response to shopping costs, in which locational differences are captured as part of the fixed cost. Their basic premise is that each shopper is more likely to visit the store that imposes the lowest *total* shopping cost for each trip. They conclude that a store that reduces fixed costs (through improved service, better parking, higher quality, and so forth) will increase patronage from consumers who currently shop at competitors' stores, at no revenue loss from current customers. However, a reduction in variable costs (through lower prices, reward programs, and so forth) will increase patronage at the expense of a revenue loss from current customers (who now pay lower

prices).

Bell, Ho, and Tang (1998) also relate the concept of “basket size” (number of items purchased per visit) to shopping costs and a consumer’s choice of a food retail outlet. Retailers may offer small basket shoppers the lowest fixed shopping costs but higher variable costs; they may offer large basket shoppers the lowest variable costs but higher fixed costs. For example, a convenience store may charge high prices but have parking spaces close to the door and no wait at the checkout. In contrast, a warehouse club’s prices may be lower but located on the outskirts of the city. A retailer might serve a mix of basket sizes, serving large basket sizes in some segments of the market and small basket sizes in others. Bell, Ho, and Tang believe the advantage of serving a mix of basket sizes is the retailer’s ability to change the offering in response to changes in consumer purchasing habits. For example, if consumers choose to shop less often but buy bigger baskets due to increased demands on their time, the retailer can adapt more quickly.

Consumer Behavior Patterns in Retail Food Shopping

Consumer researchers have tended to give more attention to the strategies consumers use when grocery shopping than to their decision to patronize multiple stores.¹

Some have, however, included store selection among the consumer behaviors investigated. Herrmann and Warland (1990) categorized grocery shoppers based on their use of nine recommended food buying practices. The practices included shopping several stores to get the best values as well as looking for bargains and specials in the store, reading food ads, and making a list before shopping. One-fifth of the 458 respondents were actively involved and used

¹While the focus of this paper is food shopping, consumer shopping in food retail outlets typically also results in the purchase of non-food items. Thus, the term “grocery shopping” is used in this paper as interchangeable with food shopping.

all of the nine recommended practices. The largest proportion (32%) were highly involved in all of the practices *except* shopping several stores to get the best values.

Avery (1996) also included store selection in her examination of food shopping strategies. She modeled search in the grocery market as a two-stage process. According to Avery, in the pre-store search phase, consumers select stores, read advertisements, clip coupons, and refine shopping lists. In the in-store search phase, consumers compare products and prices and search for specific items.

Avery's analysis of survey data from 600 respondents provided support for her assertion that pre- and in-store search are separate but related stages. She found that pre-store search activity was a complement to rather than a substitute for in-store search activity. Consumers who gathered information prior to going to the store were also more likely to be active searchers in the store.

Avery also hypothesized that both pre- and in-store search activity are influenced by three underlying factors:

- the cost of search, including time, money, and transportation;
- perceived benefits of search, including potential money savings; and
- level of the individual's involvement in the grocery shopping activity.

Her results suggested that pre-store search was motivated by cost-benefit reasoning. Consumers weighed perceived benefits of search, such as reduced price and/or higher quality, against possible costs, such as time, money, and mobility constraints, to determine the optimal pre-store search time. However, none of the perceived costs or benefits in Avery's model was found to be significantly related to in-store search. That finding is contrary to the result of Putrevu and Ratchford (1997) who found that in-store search for groceries was generally responsive to economic incentives.

While Avery identified only a weak relationship between involvement in grocery shopping and pre-store search, Kolodinsky (1990) found that enjoyment of searching, a psychological variable, was significant in explaining variation in the time spent searching for

price information. Consumers who enjoyed shopping spent more time shopping in stores other than the one in which the major shopping was done, reading ads for groceries, and clipping coupons. Individuals who perceived their lives as rushed and pressured were significantly less likely to spend time on in-store searching. Perceived constraints on the individual's energy level, health, and ability to get around were found to significantly increase in-store search activity while decreasing pre-store activities.

_____ Thus, academic research tells us that some portion of consumers shop at multiple stores and use cost-benefit reasoning to determine what mix of stores to shop. However, researchers have largely assumed that consumers shop for food primarily at supermarkets or the generic "grocery store" without learning which type of retail food outlet the consumer patronized. For example, Kim and Park (1997) examined data from over 1000 households and found that 68% of food shoppers were random shoppers, shopping at irregular rather than fixed intervals. The researchers did not, however, examine the store choices of the respondents.

Another implicit assumption made by academic researchers is that consumers who grocery shop at multiple stores do so on each shopping trip. Crowell and Bowers (1977) collected data from 16 supermarkets to calculate the cost, including time and transportation, of a 95-item market basket. While shopping at four stores produced the lowest total dollar cost for grocery items, adding time and transportation costs reduced the ideal number of stores to two. However, the researchers assumed that the sole purpose of the trips was to grocery shop and that consumers-who visited multiple stores would do so on a single shopping trip. While Carsky, Dickinson, and Smith (1995) proposed a shopping model in which consumers incorporate shopping at multiple stores into routine travel patterns, they did not test the model empirically. The researchers noted that little is known about consumer travel patterns as they relate to search behaviors.

A notable void exists in the literature concerning how and why consumers select between traditional and non-traditional food retail outlets. Therefore, in this paper a multi-method approach is used to analyze cross patronage between traditional and non-traditional outlets,

examine the reasons behind this cross patronage, and make a preliminary assessment of consumer response to on-line food shopping. Three studies were used to accomplish these objectives. In study one, 300 telephone interviews were conducted in a medium-size market. In study two, focus groups were used in two major metropolitan markets and one medium-size market. The third study consisted of survey responses from 243 on-line food shoppers in six different markets.

STUDY ONE: TELEPHONE SURVEY

Three hundred individuals were surveyed to assess their choice patterns across five different types of food retail outlets. Data were also collected to learn why consumers make the patronage choices they do and to identify key characteristics of different patronage segments. The sample included all households with working numbers listed in the telephone directory of a mid-sized U.S. city located in the Midwest. The individual interviewed in each household was the one who had primary responsibility for household grocery purchases. A total of 447 consumers was contacted, yielding a response rate of 67%. The mean age of the respondents was 38 years, average household income was \$32,405, and 59% of the respondents were female.

The market in which the telephone survey was conducted had a variety of traditional and non-traditional food retail outlets available to consumers. These included 11 supermarkets, two supercenters (Meijer and Super Kmart), one warehouse club (Sam's Club), 11 convenience stores (Colonial Pantry and Big Foot), and two limited-line discount stores (Aldi and Save-A-Lot).

Cross Patronage Between Food Retail Outlets

To assess the degree to which consumers patronize both supermarkets and non-traditional food retail outlets, five different formats were studied: conventional supermarkets, supercenters, warehouse clubs, convenience stores, and limited-line discount stores. To give clarification to the meaning of each retail type, questions included illustrations of the category (e.g., "supercenters *like* Meijer or Super Kmart").

Results from the survey indicate that supermarkets have the largest number of patrons

(97% of the sample), followed by supercenters (60%), warehouse clubs (30%), convenience stores (18%), and limited-line discount stores (16%). Seventy-five percent of the sample shop more than one outlet type for groceries. These figures are fairly comparable to national data reported by *Progressive Grocer* (Weinstein, 1998) indicating that 99% of consumers patronize supermarkets, 77% supercenters, and 27% warehouse clubs.

Survey results were used to create Figure 1, which graphs the extent of cross patronage between traditional and non-traditional food retail outlets. Each bar represents the percentage of customers for a particular food retail outlet *shared* with each of the other retail outlet types. For example, 59% of supermarket shoppers (solid black bar) also shop at supercenters, 30% at warehouse clubs, 18% at convenience stores, and 16% at limited-line food stores.

Supermarkets share the largest proportion of their customer base with supercenters. This suggests that supercenters have emerged as a direct competitor for supermarkets in a relatively short period of time. The first supercenter opened in 1995 in the market in which this survey was conducted. Although there has been a warehouse club in this market since 1993, supermarkets share only 30% of their customer base with warehouse clubs, just one-half the customer base supermarkets share with supercenters.

The penetration ratio for supermarkets is exceedingly high (97% of all those interviewed said they shop at supermarkets) and therefore all of the other alternative formats, including supercenters, share almost all of their customers with supermarkets. About a third (34%) of supercenter customers also shop for groceries at warehouse clubs, 17% also patronize convenience stores, and 20% also patronize limited-line discount stores.

Seventy percent of warehouse club customers also shop for groceries at supercenters while less than 20% also shop at convenience stores or limited-line discount stores. Fifty-seven percent of convenience store customers also patronize supercenters, 30% patronize warehouse clubs, and 19% patronize limited-line discount stores. Seventy-seven percent of limited-line patrons also shop at supercenters, 36% at warehouse clubs, and 21% at convenience stores.

Why Do Consumers Choose an Alternative Food Retail Outlet?

Why do a majority of consumers patronize one or more alternative food retail outlets in addition to traditional supermarkets? Perhaps they believe they can enhance their overall “shopping basket” by shopping multiple formats. Desirability ratings for eight factors that may influence consumers’ choice of food retail outlets are presented by outlet type in Table 1. Supermarkets clearly emerge as higher-end retailers with most means in the 7 to 8 range (10 = excellent). All but one of the ratings for supercenters and warehouse clubs are between 5 and 8. Consumers give four of the factors for convenience stores lower ratings of 3 to 4 but rate limited-line stores between 5 and 6 on most items.

Supermarkets receive significantly higher ratings than warehouse clubs on all dimensions except value. Interestingly, the respondents perceive warehouse clubs as presenting a mixed offering to the consumer, lining up at the higher end on certain dimensions (quality, value, price), at the lower end on one factor (promotion), and as a “middle” player on location, convenience, selection, and service. Means for supercenters are most different from those of supermarkets on location (supermarkets = 8.4; supercenters = 4.9) and convenience (supermarkets = 8.0; supercenters = 6.0). Supermarket scores were significantly different and higher than those of convenience stores on all dimensions except location and convenience. Similarly, supermarket scores are significantly different and higher than scores for limited-line stores on all dimensions except price.

Dollar share by retail type (number of patrons x number of visits x dollars spent per visit) indicates supermarkets account for 71% of the total dollars spent by respondents in this study, supercenters 19%, warehouse clubs 5%, convenience stores 2%, and limited-line discount stores 2%. Whether one considers the supercenters’ share of 19% large or small depends on one’s interpretation of what is happening in this changing retail environment. Nineteen percent may indicate substantial inroads into the supermarket business since the supercenter is a relatively new format.

Who Is Most Likely To Shop at an Alternative Food Retail Outlet?

Demographic profiles of consumers by the type of food retail outlet they patronize are presented in Tables 2-5. In general, retirees and individuals employed full-time are less likely to be supercenter patrons (Table 2). Females, married individuals, and those with incomes above \$60,000 are most likely to grocery shop at warehouse clubs while those with incomes between \$30,000 and \$60,000 are least likely to (Table 3). In contrast, males, unmarried individuals, and respondents in the lowest income group are more likely than their counterparts to patronize convenience stores for grocery purchases (Table 4). Older consumers (>55 years) tend to show a preference for shopping at limited-line discount stores (Table 5).

In summary, results from the telephone survey confirm a fairly high level of cross patronage between traditional and non-traditional food retail outlets. This is especially true for traditional supermarkets and supercenters where 59% of the supermarket customer base is shared with supercenters. While there is a tendency for some consumer segments to show a preference for certain retail outlets (e.g., females and married individuals at warehouse clubs), all formats share some portion of their customer base with all of the other outlet types. Thus, we conclude that for three out of every four participants in this study, there is some degree of cross patronage behavior between traditional and non-traditional retail outlets. We now move on to Study Two where we address the broader question of *how* consumers incorporate non-traditional retail formats into their grocery shopping habits.

STUDY TWO: FOCUS GROUP INTERVIEWS

Focus groups were conducted in March 1998 with consumers in three different markets: Chicago, Illinois; St. Louis, Missouri; and Champaign-Urbana, Illinois. Each market offers a variety of food retail formats to consumers.

Jewel (36% market share, 158 stores) and Dominick's (26% market share, 100 stores) are the dominant supermarket chains in the greater Chicago market (population 8 million). There are six supercenters in this market, five operated by Super Kmart (2% market share) and one by Michigan-based Meijer. Limited-line stores include Aldi (2% market share, 44 stores) and Cub Foods (4% market share, 13 stores). Peapod also offers on-line grocery shopping through Jewel

in many areas of the Chicago market.

Four supermarket chains dominate the St. Louis market (population 3 million). Schnucks is the market share leader (42%) with 72 stores. Shop-n-Save (18% market share, 29 stores), Dierbergs (16% market share, 16 stores), and National (4% market share, 18 stores) are the other major players in this market. There are ten supercenters, seven Wal-Mart Supercenters (market share 6%) and three Super Kmart's, as well as two warehouse clubs (both Sam's). Schnucks also offers on-line grocery shopping in the St. Louis market.

The third market, Champaign-Urbana¹, is smaller (100,000) but offers a wide variety of retail options. At the time of data collection, there were 11 supermarkets representing four different retailers (Schnucks, Jewel, IGA, and County Market), two supercenters (Meijer and Super Kmart), two limited-line discount stores (Aldi and Save-A-Lot), and one warehouse club (Sam's). Shortly after the focus groups were conducted, Schnucks began to offer on-line grocery shopping in the Champaign-Urbana market.

Consumers selected to participate in a focus group were those who indicated in prescreening that they do their grocery shopping at supermarkets and at least one other format (e.g., supercenters or warehouse clubs). A paid facilitator made initial contacts with individuals based on the above criteria and then, using the snowball technique, asked those contacts for the names and telephone numbers of others who fit the criteria. The participants were chosen to provide a mix of men and women, a range of ages from young adults through retirement age, individuals representing racial and ethnic minorities, and different family types, including singles and couples with and without children.

The paid facilitator conducted the focus group interviews in hotel conference rooms in

¹Market share data for Champaign-Urbana is usually grouped with the larger Springfield/Decatur market and therefore is not reported here.

the evening. Participants received \$25 each at the end of the session. Focus group discussions were recorded and later transcribed in their entirety so the researchers could work from both text and audio versions of the sessions as they analyzed the content of the discussions and identified relevant themes embedded within the content of the discussions.

The 31 individuals who participated in the focus groups completed a brief survey at the end of each session. The demographics of the participants, presented in Table 6, indicated that there was diversity among the individuals in age, income, and employment. However, the majority (61%) of the participants were college graduates and all but five were female. All of the participants shopped at traditional supermarkets for their grocery purchases. Two-thirds said they also shop for groceries at warehouse clubs, 58% at limited-line discount stores, and 55% at supercenters.

Cross Patronage Between Food Retail Channels

Although the specific options that focus group participants mentioned varied among markets, the majority said they do shop a variety of different types of formats. Food retail options mentioned in addition to supermarkets, supercenters, limited-line discount stores, and warehouse clubs included ethnic markets, speciality stores, drug stores, farmers' markets, fundraisers such as Market Days, home delivered food shopping services such as Schwann's, and mail order meats.

A primary objective of the focus group interviews was to learn how consumers incorporate non-traditional retail formats into their grocery shopping. Focus group participants indicated that as new retail options have become available, they have added these formats to the existing mix of stores from which they shop. As noted earlier, all of the participants still shop at supermarkets. Many said they shop at a mix of stores because they can't find everything they want under one roof. For example, one participant in the Chicago focus group said,

"I have to go to different stores because they don't all carry the same thing."

For some, their selection was based on the availability of a single item. That item was often meat or produce but others mentioned availability of a specific brand of cereal, sales on

soft drinks, or the price of diapers as the deciding factor. Another influence appeared to be price and/or sales. For example, one participant said,

“(The number of times I grocery shop each week) is totally related to the number of stores that have a special deal. If it’s just one store, then it’s once. If it’s four stores, it’s four times.” (Champaign-Urbana)

Store loyalty appeared not to be a significant deterrent for most of the focus group participants when deciding whether to add a new retail format to their shopping mix. Sample comments that illustrate this view are:

“They’re not loyal to us, so we don’t have to be loyal to them.” (Chicago)

“It’s hard to have loyalty because you never know who you’re going to get to check you out from one minute to the next.” (St. Louis)¹

How Do Consumers Manage Their Patronage of Multiple Retail Formats?

Despite the increased number of types of food retail outlets they patronize, most focus group participants said they don’t feel they spend more time in grocery shopping now than before. Perhaps that perception is related to their grocery shopping patterns. Many indicated they do not go to each type of format that is part of their shopping mix each time they shop for groceries. For

¹Participants in the St. Louis group appeared to communicate a higher level of loyalty to supermarkets than participants in the other groups. Perhaps that is because the St. Louis market has long been served by several supermarkets known for customer service. Compared to the relative stability of the St. Louis market, the Champaign-Urbana market has seen a nearly complete turnover in supermarket retailers in the past eight years plus the addition of two supercenters, one warehouse club, and two limited-line discount stores.

example, participants said,

"I won't hit all the stores on the same day so I don't think I'm spending any more time." (Champaign-Urbana)

"I very rarely, (I) don't go to two on the same trip." (St. Louis)

Many said they incorporate grocery shopping with other trips such as going to and from work or shopping for other products. For example, participants said,

"Sometimes on the way to work, I would pick up things that could stay in my car all day." (Champaign-Urbana)

"Now (the supercenter) is on my husband's way home (from work), so I'll send him there (if I think of it) for the food section basically." (Chicago)

"I think I do my shopping most between doing other errands, so if I happen to be going down the street and am passing Sam's, I'll run in . . . " (Chicago)

"I look at the ads every week . . . and then just kind of as I'm out (I shop) at whatever store I happen to drive by." (St. Louis)

"Usually it's shopping on the way here or the way there." (St. Louis)

However, for the most part, participants described grocery shopping trips as purposeful, not impulsive. For example, participants said,

"I make a list and then I separate it into stores and my coupons and match those with the flyers . . . So I go to all of my different stores with my coupons . . . I probably spend two and a half to three hours." (Champaign-Urbana)

"Then (my husband) will have it written down by stores and what the price is."
(Champaign-Urbana)

Focus group participants also seemed very conscious of the time spent in a store. They recognized that shopping at an unfamiliar store requires more time until one learns the layout. Participants said,

"I've got to know my store in order to know where I'm going." (Chicago)

"It took a while to know where things were (in a supercenter), so that I can (shop)

fairly quickly.” (Champaign-Urbana)

Perhaps their time-consciousness explains why participants in each of the three focus groups complained about store personnel relocating items in the store. In each of the groups, participants also indicated they still valued having the option to shop a store format that involved low time costs, usually defined as a store that doesn’t require “too” long a wait in the checkout line, and/or isn’t “too” large, “too” distant, or in a location with “too” much traffic.

Two participants’ comments are illustrative:

“I think it’s important to plan though because time is money. If I’m going to a store that’s far away, I need to get several items or I’m losing money by just getting one item on sale.” (Chicago)

“If it (the supercenter) were closer by home, I probably would shop it regularly.”
(Chicago)

Patronage of Supercenters for Grocery Shopping

In each of the focus groups, grocery shopping at supercenters generated a fair amount of discussion. The participants who patronized supercenters seemed to do so for the convenience. As one said,

“It (grocery shopping at a supercenter) seems to save me a trip or two . . . It seems like your life gets busier and you don’t have time to spend at the grocery store . . . ” (Champaign-Urbana)

In each of the focus groups, participants commented on the size of supercenters. Typical comments from those who patronized supercenters were,

“...I don’t really like big, big stores. But now that I know it really well, then it’s okay.” (Champaign-Urbana)

“You get used to (the bigger supercenter).” (St. Louis)

“The square footage of a store doesn’t matter if I know where things are.”
(Champaign-Urbana)

Consumers who patronized supercenters also indicated they now have a different

perception of that format. As one said,

“I think of (Super Kmart) now as a grocery store and a regular store.”

(Champaign-Urbana)

In contrast, consumers who were not grocery shopping at supercenters often saw the size of the store as a deterrent. Participants said,

“Meijers for me, too big. The first time I was in there I thought I was going to the produce and ended up in the car battery section . . . I was having problems finding the front door.” (Champaign-Urbana)

“I find Super Kmart very confusing, very large, very . . . I’m sorry, I don’t even try.” (Chicago)

Some participants also complained of longer waits in supercenters:

“I have never seen all (of the checkout lanes in a supercenter) open, so why did they build that many?” (Champaign-Urbana)

Others mentioned as deterrents to supercenter patronage the greater temptation to make impulse buys, the more limited product knowledge of the employees, and the likelihood they will spend more per trip than in a supermarket. Some also were reluctant to buy food and non-food items on the same shopping trip. Illustrative comments were,

“I just couldn’t make myself buy food there (at a supercenter) . . . I just felt really funny about buying food with my other items.” (Champaign-Urbana)

“I like the idea that I go to a grocery store to get groceries.” (St. Louis)

In summary, the focus group interviews indicated that, with the introduction of non-traditional food retail format, the way consumers shop for groceries has changed rather dramatically. Instead of replacing the supermarket with a newer format, consumers are increasing the number of retail channels they shop but leaving the supermarket in the mix. Grocery shoppers who patronize multiple formats appear not to make the once-a-week major shopping trip that we think of as traditional. Instead, they fit grocery shopping in among other errands, reducing time and transportation costs.

STUDY THREE: ON-LINE FOOD SHOPPING

Although the earliest grocers offered home delivery services, supermarket shopping via the computer dates only to the late 1980s. Several factors explain the demand for more convenient ways to buy groceries, including greater labor force participation by women (who have traditionally been the primary food shoppers), a greater number of dual-income and thus higher-income households, and a greater number of single-parent and elderly households with time and other resource constraints (Park et al., 1996). The greater number of consumers with personal computers, modems, and subscriptions to on-line services in their homes makes ordering groceries over the Internet a realistic option for an increasing number of households.

An on-line search for Internet grocery services operating in Spring 1998 identified two basic types: on-line retailers and shopping services. On-line retailers are virtual supermarkets, existing only on-line. They fill orders from merchandise stored in a warehouse. Examples include NetGrocer (www3.netgrocer.com) and Streamline (www.streamline.com). All except one of the on-line retailers delivers only in the Boston area; the exception is NetGrocer which delivers non-perishables nationally via UPS.

The second basic type of Internet grocery service is store-based shopping services. These offer to fill a consumer's order at a local supermarket; the order can either be picked up at the store or delivered to the consumer's home or place of business. While some (e.g., Schnucks; www.schnucks.com) fill orders from their own stores, at least one (PC Foods; www.pcfoods.com) shops at one or more stores chosen by the consumer. One of the most publicized services, Peapod Foods (www.peapod.co), contracts with a supermarket in each market in which it offers the service and fills orders in that supermarket.

Costs of the services identified in Spring 1998 vary considerably. On-line retailers typically charge a service fee of \$20 to \$25 a month and some add a delivery charge. Store-based services usually charge around \$10 to \$15 per order although some add other fees depending on the service, the market, whether groceries were delivered or picked up, and sometimes the amount of the order.

Method for On-line Data Collection

Data were collected in April, May, June, and July 1998 from consumers who purchased groceries from Schnucks Express Connection, the Internet shopping service of Schnucks Markets, a St. Louis-based chain of stores in Illinois, Missouri, and Indiana. Schnucks offers the service in five Missouri markets, three in Illinois, and one in Indiana.

Schnucks Express Connection shoppers can choose to either pick up their order or have it delivered. The costs are about \$13 for same-day delivery, \$10 for next-day delivery, and \$6 if the consumer picks up the order. A minimum order of \$10 is required.

During the survey period, a shopper who completed an order at the Schnucks Web site was invited to click on a link to the researchers' site to answer questions about on-line grocery shopping. Once at the site, consumers were asked to respond to eight closed-end questions and eight open-end questions. The closed-end questions asked consumers:

- length of time they had used the Internet to buy groceries,
- whether they usually have groceries delivered or pick them up,
- if they still buy groceries at stores,
- age,
- education,
- household composition,
- gender,
- income, and
- zip code.

One advantage of conducting surveys on-line is that respondents can easily provide extensive responses to open-end questions if they choose. This feature is particularly valuable in emerging areas of consumer research such as on-line shopping where consumers can describe their experiences with this new retail channel. The eight open-end questions asked consumers:

- the most important reason for using the Internet to buy groceries;
- what grocery items, if any, they wouldn't order via the Internet;

- how using the Internet has affected grocery shopping time;
- how grocery shopping at supermarkets is different since they started ordering groceries via the Internet;
- how grocery shopping at supercenters is different since they started ordering groceries via the Internet;
- how grocery shopping at warehouse clubs is different since they started ordering groceries via the Internet;
- how grocery shopping at limited-line discount stores is different since they started ordering groceries via the Internet;
- any other comments.

Questions mentioning a retail type included an illustration appropriate to each market (e.g., warehouse clubs like Sam's Club). Responses were automatically sent to researchers in the form of e-mail messages.

Patronage of On-line Shopping Service

A demographic profile of the on-line survey participants is provided in Table 7. The majority of respondents were younger than 55 years of age, female, and well-educated; 50% reported an annual income of \$70,000 or more.

Fourteen percent of the on-line survey respondents had used the Internet to buy their groceries for more than six months, 35% between one and six months, and 51% had used the Internet to buy groceries for less than one month. Three-quarters of the respondents said they usually have their groceries delivered (rather than picking them up at the store) when they buy groceries on-line.

_____Somewhat surprisingly, nearly 20% of the on-line shoppers said they *only* buy groceries on-line. This is an interesting consumer segment since they are using this new retail format exclusively. These "on-line only" consumers are also profiled in Table 7 and are fairly similar to the larger group on most demographic variables (age, gender, income). However, there are a few notable differences between those that only shop on-line for groceries and those still shop other

formats. The on-line only group included a smaller proportion of college graduates than those using multiple outlets. Those who only shop on-line showed a greater willingness to purchase meats and produce on-line and were more likely to say there was “nothing” they would *not* buy on-line (Chi-Square = 7.8, $p < .05$; data not reported in tables). In addition, they were more likely to agree they were now spending *a lot less* time grocery shopping due to the availability of on-line grocery shopping (Chi-Square = 7.0; $p < .05$).

Responses to the open-end questions were independently categorized by each of the senior researchers and then cross checked for consistency of categorization. Since on-line shopping for food is still a fairly new phenomena, respondents were asked their most important reasons for using the Internet to buy groceries. Convenience was the primary reason with 73% of the respondents mentioning factors related to convenience and time. For example, respondents said:

“Saves me time. The time I took to grocery shop I use for other things now.”

“Convenience, don’t have to deal with crowds, takes less time.”

“Saves me time, gas, and aggravation.”

“Convenience. I work on the web. I can shop all week, my list is stored, and I can send it off when I’m ready for delivery.”

A significant segment (15%) mentioned physical and/or constraint issues making it difficult for them to shop at grocery stores. These factors included physical disabilities as well as difficulty driving, lifting groceries, and the presence of small children in the household.

Illustrative comments include:

“I’m disabled and can’t get out much. So I use my computer to shop from home.”

“I don’t drive so it’s a major pain for me to make a trip to the grocery store.”

“Delivery to my kitchen is most important since carrying heavy items is getting more and more difficult.”

A number of respondents mentioned the presence of children in the household as a constraining factor -- both in terms of being able to get out of the house but also not wanting to

take children with them to the grocery store. For example, respondents said,

“It can be difficult to take three small, tired children to the store at the end of the day.”

“I am a single parent and this allows me to shop without taking the kids to the store.”

“I don’t want the hassle of taking (my three children under 4 years), paying for a sitter, or inconveniencing my husband in the evenings.”

A small but interesting segment (5%) mentioned the primary reason for using the Internet to shop for food was because they hate to shop and hate grocery stores.

In summary, the on-line survey indicates that although well-educated and higher-income consumers are shopping on-line as one might expect, primarily for the time savings and convenience, other consumers are using the service as well. A surprising number of shoppers mentioned physical and/or transportation constraints as their reason for on-line shopping. This population is often characterized as low-income and would typically not be considered likely to patronize a service that increases their money costs. Equally surprising was the number of shoppers who said they bought groceries exclusively on-line.

DISCUSSION

How has an increased variety of non-traditional food retail channels impacted consumer welfare? A complete answer to that question is beyond the scope of this paper and would require assessing all of the costs and benefits consumers face with the advent of increased choice in the marketplace. While economic theory would suggest that increased competition leads to market conditions resulting in lower food prices and/or higher quality products, we did not attempt to assess the situation from this perspective. Rather, the focus of this paper is on the experiences of consumers in the marketplace and their evaluations of the costs and benefits of food shopping in a market where multiple retail channels are available.

Previous research (Putrevu & Ratchford, 1997; Avery 1996) suggests consumers make decisions about the optimal amount of search, including which stores and how many stores to

shop, based on their perceptions of economic costs and benefits. Thus, the fact that 75% of the respondents in our telephone survey shopped at least one non-traditional format indicates that these consumers see shopping alternative formats as a choice that results in net benefits. The consumers in our survey especially seemed to view the supercenter format as an attractive addition to their grocery store choices. Perhaps that is because they tended to rate the supercenter as not significantly different from a supermarket on important store characteristics such as quality, selection, and price. They did, however, consider supercenters to be less convenient than supermarkets and to offer less service. The larger building and parking lots at supercenters no doubt contribute to consumer perceptions of reduced convenience. In addition, some supercenter operators have found it difficult to obtain the land needed to build such large stores. As a result, stores are built where land and real estate is available -- often on the perimeter of a community. This likely accounts for the lower ratings that supercenters receive on location and convenience.

It is also interesting that 30% of the respondents said they shopped warehouse clubs despite their perception that, compared to supermarkets, warehouse clubs offer a more limited selection and are less convenient. In fact, the only dimension on which warehouse clubs outpaced supermarkets was price.

Perhaps this is evidence that, as Ackerman (1989) and Urbany, Dickson, and Kalapurakal (1996) suggest, consumers find the cost of obtaining complete item price information in the food retail market to be so high that they select a store by forming a general impression of the retailer as either high- or low-priced. Warehouse clubs have created a strong identity that is based on lower prices and thus attract price-conscious consumers. The time-conscious consumer may also, however, shop warehouse clubs if s/he finds the opportunity to substitute a store's lower-price image for price search sufficient compensation for other costs such as increased travel time and fewer in-store choices.

The focus group interviews provide support for Bell, Ho, and Tang's (1998) contention that when consumers select a store they consider the fixed cost of shopping (costs such as travel

time that are independent of the specific items being purchased). In fact, in each of the three focus groups, consumers mentioned fixed costs as frequently as variable costs (the cost of the items purchased) when discussing their decisions about which type of store format to shop.

Progressive Grocer's (Weinstein, 1998) annual survey of shoppers provides additional support for the idea that consumers consider variable costs in selecting a store. Of the top 20 criteria shoppers consider when choosing a supermarket, at least 11 relate to factors that influence shoppers' travel time to the store or time spent in the store, regardless of what items are purchased.

One of the most interesting findings from the focus group interviews is the participants' perception that although they have increased the number of food retail formats they patronize, their total shopping time has not increased. While we can't know if their perceptions are accurate, they may relate to a societal shift in the way we view time. Combining several tasks and/or errands as our shoppers reported they did is not an uncommon practice for consumers in either their personal or professional lives (Kaufman, Lane, & Lindquist, 1991). Robinson and Godbey (1997) refer to this phenomenon as "time deepening." As they explain the concept, increased productivity in the workplace causes consumers to seek to balance work and non-work time by becoming more productive in their non-work hours. They identify four ways in which Americans might choose to do this:

- speeding up a given activity,
- substituting an activity that can be done more quickly for one that takes longer,
- doing more than one activity at once, and
- undertaking an activity with more precise regard for time.

Focus group participants mentioned each of these strategies in relation to grocery shopping. Several mentioned they speed up their shopping by going to a smaller store or one with which they are more familiar. While some shoppers buy items in bulk and repackage them individually at home, others have given up that activity and now buy smaller quantities. Shoppers often referred to doing more than one activity at once; many combined food and non-

food purchases in the same trip. Several participants mentioned shopping when their time was constrained or that they have expectations about the maximum amount of time they should spend in a store.

Respondents in *Progressive Grocer's* (Weinstein, 1998) annual survey ranked "being able to do all shopping in one store" 21st in importance. Our research confirms that consumers are willing to grocery shop across multiple formats. Many consumers in our focus groups described store choice decisions that reflect the view expressed in a report from WSL Strategic Retail: (Liebmann, 1998) "In the 1990s, *loyalty has become a function of efficiency*. Consumers streamline their shopping by returning to an outlet that carries the products they purchase most often, that are consistently in stock, and are priced at a fair value" (p. 23).

For the consumers in our on-line survey, shopping on-line appears to be the ultimate in streamlining their shopping. The majority mentioned factors related to convenience and/or time as their primary motivation for buying groceries on-line. The relatively high incomes of the respondents suggest these are consumers with above-average opportunity costs who see shopping on-line as a way to minimize those costs. Just over one-half had used the Internet less than a month and 11% of those users commented that while shopping on-line was not yet less time-consuming than shopping in the store, they expected it would be as they gained more experience. Their continued patronage of the on-line service is likely to depend on the realization of these expectations.

Another significant segment is the 15% who used on-line shopping as a way to reduce fixed costs associated with physical and/or caregiving constraints. While they are not a majority of the sample, they are important in that the physical disabled are often overlooked when Web-based services are designed.

Six percent of the sample mentioned what Aylott and Mitchell (1988) refer to as grocery shopper stressors as their primary motivation for on-line shopping; another 5% described it as a secondary motivation. Consumers who shop on-line can avoid problems such as crowding and standing in line. Retailers must, however, be careful that in-store stressors are not replaced with

parallel on-line stressors such as being unable to access the Web site and long delays in completing on-line orders.

Our research suggests that on-line grocery shoppers are more upscale demographically than the average grocery shopper. With one important exception, their characteristics were, however, not unlike the demographics typically reported for Internet users -- younger with higher educations and incomes than the general population (Graphics, Visualization and Utilization Center, 1998). The one important exception here is that a majority of our on-line sample were women. That's typical of grocery shoppers (71% are women; Weinstein, 1998) but not of on-line shoppers (71% are men; McPhee, 1998). Perhaps on-line grocery shopping services have the potential to close the gender gap that researchers have observed in on-line usage.

IMPLICATIONS

There are implications from this study for consumers, retailers, and public policy makers. Through the telephone survey, we were able to identify what appeared to be a rather complex pattern of grocery shopping behaviors involving multiple retail channels. We were uncertain, however, how this observed behavior affects consumer welfare. Therefore, focus groups were conducted to address (from an experiential perspective) what consumers do in the marketplace, and more importantly *why* they do what they do. The picture that emerges from the transcripts of the focus groups is one that is clearly welfare enhancing. Participants in the focus groups were positive about the expanded choice set of food retail outlets that is now available to them.

While they admitted they are likely to *add* a new retail outlet to their existing choice set, they did not perceive this as being more time-consuming or negative in other ways. Participants communicated success in managing the task of incorporating a growing set of retail options into their grocery shopping habits. They were clearly pleased with their ability to take what the market offers and make it work for them in a way that appeared to be personally satisfying. They were positive about the variety of choices available to them and communicated satisfaction with themselves in their ability to navigate these choices. Some even seemed to express a sense of "gratitude" for the choices available to them. One participant in the St. Louis focus group

aptly put it this way, “I really do think we’re very fortunate here in St. Louis with the stores we have and the prices.”

A similar tone of satisfaction, pleasure, and welfare enhancement emerged in the open-end responses to the on-line survey. One respondent succinctly expressed her feelings about on-line grocery shopping by saying, “This is the greatest idea since sliced bread!” However, some unique dimensions of welfare enhancement emerged in relation to on-line food shopping. Mothers with young children in the household were especially positive about on-line food shopping. On-line shopping allows them access to a grocery store without having to take young children along or find someone to care for them. In addition, those with physical disabilities were also very positive about the availability of on-line shopping. This was somewhat surprising given this market segment is often characterized as unable or unwilling to pay for optional services. However, more surprising was the number of respondents who reported *minor* physical ailments that significantly limited their ability to complete the grocery shopping task. Examples included difficulty lifting groceries, carrying groceries, and taking groceries up a few stairs from the garage to inside the house. It is important to remember that with an increasingly aging population such minor “ailments” will likely increase and perhaps add to the demand for home shopping and delivery services. Some respondents even mentioned services such as having the groceries delivered directly to the top of kitchen counter as being very important to them due to lifting problems. Minor disabilities can present major concerns for grocery shopping since food and grocery items tend to be more frequently purchased than many other product categories. Finally, the fact that our on-line grocery shoppers were disproportionately female may suggest a new approach to those seeking to close the observed gender gap in Internet use.

Implications for public policy makers based on findings from this study are fairly straightforward. Consumers seemed to overwhelmingly like non-traditional food retail outlets and to benefit in a wide variety of ways from their availability. Therefore, if consumer welfare is the goal, public policy makers should work *toward* encouraging the development of non-traditional food retail outlets and work *against* restrictions that retard their development. This is

especially true in the case of on-line food shopping where the needs of certain consumer segments (e.g., mothers with young children, the physically challenged, the elderly) may be particularly well-served by the availability of on-line food shopping.

The public policy issues surrounding the expansion of non-traditional food retail outlets involve a wide range of concerns including (but not limited to) land use issues, zoning, collection of sales tax, and the meaning of a “use” tax when the retailer does not have a physical presence in the community or state (as may be the case with an on-line retailer). Zoning restrictions can be used to limit the expansion of store-based retailers to certain locations and/or perimeter areas of a community. While some public policy makers would argue they are only protecting their constituents from “unsightly retail sprawl” consumers may be disadvantaged in other ways by having to drive longer distances to stores in less convenient locations. In contrast, tax incentives can be used to encourage retail development in a way that is well-suited to community needs considering both the costs and benefits of such development.

For many years, catalog retailers have argued that they should not be required to collect taxes on mail order sales in states or communities where they have customers but no physical presence. This debate has emerged once again as an important public policy issue for on-line shopping and electronic commerce in general. How should the collection of sales taxes be handled when an on-line retailer does not have a physical presence in the community and/or state? Certainly, from the consumer’s perspective having the opportunity to purchase certain products without paying sales taxes should be seen as a benefit. From the perspective of the on-line retailer, they also are likely to see this as a benefit both in terms of bookkeeping and possibly competitive advantage.

It seems appropriate to point out here that what benefits the consumer may not necessarily benefit the retailer. Binkley and Connor (1998) argue that rivalry among supermarkets is no longer the major competitive force shaping supermarket pricing decisions instead, it is the emergence of new grocery formats. They suggest that new retail formats contribute to increased promotional activity which leads to lowered retail prices, a heightened

level of retail competition overall, and ultimately thinner profit margins. The relationship between the growth of new retail formats and heightened levels of competition can be illustrated on a broader scale by making a brief comparison between food retailing in the U.S. and U.K. markets. Public policy makers in the U.K. have taken an active role in limiting the development of alternative retail formats (primarily through zoning restrictions and requirements that stores be built closer to town centers). Consumer prices are high and food retailers' profits high, relative to U.S. food retailing. Of course, this is an overly simplistic presentation of the actual situation. Nonetheless, it serves to illustrate the point that public policy makers hear from, listen to, and respond to a variety of arguments from various audiences. These arguments may or may not include the voice of the consumer. In this paper we have attempted to use the voice of the consumer to speak to the question of how consumer welfare is influenced by the expansion of non-traditional food retail outlets. It isn't the only voice that should be heard from by public policy makers, but it is a voice that should be given a hearing in the broader scheme of things.

REFERENCES

- Ackerman, N. M. (1989). Money resources, time demands, and situational factors as predictors of shopping time. *Journal of Consumer Studies and Home Economics*, 13, 1-19.
- Avery, R. J. (1996). Determinants of search for nondurable goods: An empirical assessment of the economics of information theory. *The Journal of Consumer Affairs*, 30(2), 390-420.
- Aylott, R., & Mitchell, V. (1998). An exploratory study of grocery shopper stressors. *International Journal of Retail and Distribution Management*, 26(9), 362-373.
- Bell, D. R., Ho, T., & Tang, C. S. (1998). Determining where to shop: Fixed and variable costs of shopping. *Journal of Marketing Research*, 35(August), 352-369.
- Belsie, L. (1998, September 8). A mouse in the bakery aisle. *The Christian Science Monitor*. [Online]. Available: <http://www.csmonitor.com>.
- Binkley, J. K., & Connor, J. M. (1998). Grocery market pricing and the new competitive environment. *Journal of Retailing*, 74(2), 273-294.
- Carsky, M. L., Dickinson, R., & Smith, M. F. (1995). Toward consumer efficiency: A model for improved buymanship. *The Journal of Consumer Affairs*, 9(2), 442-459.
- Chanel, D. (1996, June). The true look of the discount industry. *Discount Merchandiser*, pp. 25-62.
- Crowell, P. M., & Bowers, J. S. (1977). Impacts of time and transportation costs on food shopping. *The Journal of Consumer Affairs*, 11(1), 102-109.
- Food Institute. (1997, June 9). Supercenters, a \$35 billion industry. *Food Institute Report*, p. 3.
- Food Institute. (1998, June 15). Wal-Mart going after bigger share of grocery industry. *Food Institute Report*, p. 1.
- Food Institute. (1998, July 13). Growth continues at membership clubs. *Food Institute Report*, p.5.
- Food Institute. (1998, September 14). The changing face of grocery retailing, *Food Institute Report*, p. 3
- Graphics, Visualization, and Utilization Center (1998). *GVU's 9th WWW user survey: General demographics summary*. [On-line]. Available: <http://www.gvu.gatech.edu>.
- Hermann, R. O., & Warland, R. H. (1990). Consumers' use of recommended food buying practices. *The Journal of Consumer Affairs*, 24(2), 307-324.
- Ho, T., Tang, C. S., & Bell, D. R. (in press). Rational shopping behavior and the option value of

variable pricing, *Management Science*.

Jones, B. (1996, September). Today's changing supermarket consumer -- or are they? *Progressive Grocer*, p. 103.

Kaufman, C. F., Lane, P. M., & Lindquist, J. D. (1991). Exploring more than 24 hours a day: A preliminary investigation of polychronic time use. *Journal of Consumer Research*, 18(December), 392-401.

Kaufman, P. R. (1996). What's driving food distribution -- forces for change. *Journal of Food Distribution Research*, 27(1), 25-29.

Kim, B., & Park, K. (1977). Studying patterns of consumer's grocery shopping trip. *Journal of Retailing*, 60(4), 91-104.

Kinsey, J., & Senauer, B. (1996). Consumer trends and changing food retailing formats. *American Journal of Agricultural Economics*, 78(5), 1187-1191.

Kolodinsky, J. (1990). Time as a direct source of utility: The case of price information search for groceries. *The Journal of Consumer Affairs*, 24(1), 89-109.

Liebmann, W. (1998). *The consumer paradox*. New York: WSL Strategic Retail.

Mathews, R. (1997, April). Are supermarkets missing the boat? *Progressive Grocer*, pp. 39-46.

McPhee, L. (1998, August 24). Number of Internet users and shoppers surges in United States and Canada. [On-line]. Available: <http://www.commerce.net>.

Park, K., Perosio, D., German, G.A., & McLaughlin, E.W. (1998). *What's In Store for Home Shopping?* Ithaca, NY: Cornell University Food Industry Management Program.

Putrevu, S., & Ratchford, B. T. (1997). A model of search behavior with an application to grocery shopping. *Journal of Retailing*, 7(4), 463-486.

Robinson, J. P., & Godbey, G. (1997). *Time for life: The surprising ways Americans use their time*. University Park, PA: The Pennsylvania State University Press.

Silverman, D. (1997, October 30). Has expansion boom finally brought retail to saturation point? *WWD*, p. 1-10.

Terbeek, G.A. (1996, December). 1996 and beyond: The value of value. *Progressive Grocer*, pp. 91-95.

Tosh, M. (1996, January 16). NRF poll: No big rebound expected in '96. *WWD*, p. 24.

Urbany J., Dickson, R., & Kalapurakal, R. (1996). Price search in the retail grocery market. *Journal of Retailing*, 60(4), 91-104.

Weinstein, S. (1998, April). Changing channels. *Progressive Grocer*, pp. 39-44.

Figure 1

Cross Patronage Between Traditional and Non-Traditional Food Retail Outlets

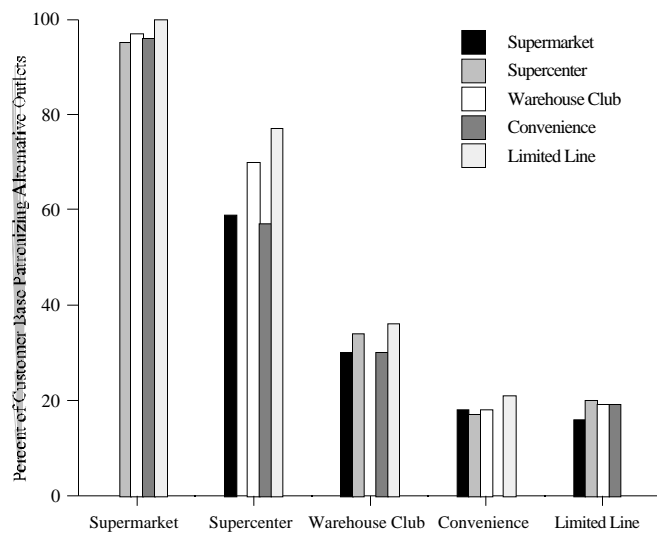


Table 1

Desirability Ratings by Food Retail Outlet

Variable	Super-market	Super-center	Warehouse Club	Con-venience	Limited Line
Location	8.4	4.9*	5.1*	7.9	5.8*
Quality	8.0	7.9	7.7*	5.8*	6.1*
Convenience	8.0	6.0*	5.5*	7.7	5.2*
Selection	7.9	8.1	6.6*	4.3*	5.4*
Service	7.6	6.8*	6.0*	5.2*	4.7*
Value	7.6	7.2	7.1	4.3*	6.8*
Price	7.1	7.3	7.4*	3.3*	7.5
Promotion	6.7	6.2*	3.8*	3.5*	3.8*

* Mean is significantly different ($p \leq 0.05$) from supermarket rating based on paired t-test.
Mean of 10 = Excellent, 1 = Poor

Table 2

Demographic Differences Between Supercenter Shoppers and Non-shoppers

Variable	Total Sample (n=300)	Shoppers (n=181)	Non-Shoppers (n=119)	Chi-Square
Age				
< 35 Years	53.7%	58.6%	46.2%	
35-55 Years	22.0%	21.5%	22.7%	
> 55 Years	24.3%	19.9%	31.1%	5.785
Gender				
Male	41.1%	43.1%	38.1%	
Female	58.9%	56.9%	61.9%	0.723
Marital Status				
Married	39.2%	42.0%	37.0%	
Not Married	60.8%	58.0%	63.0%	0.752
Income Level				
< \$30,000	31.3%	35.9%	24.4%	
\$30,000 - \$60,000	21.7%	21.5%	21.8%	
> \$60,000	47.0%	42.5%	53.8%	4.985
Employment Status				
Full-time	37.3%	35.4%	40.3%	
Part-time	24.0%	24.9%	22.7%	
Retired	13.3%	9.4%	19.3%	
Homemaker or Not Employed	25.3%	30.4%	17.6%	10.533*
Education Level				
< 16 Years	53.1%	53.4%	52.6%	
16 Years	21.9%	22.2%	21.6%	
> 16 Years	25.0%	24.4%	25.9%	0.078

* Significant at _ 0.05 level.

Table 3

Demographic Differences Between Warehouse Club Shoppers and Non-shoppers

Variable	Total Sample (n=300)	Shoppers (n=89)	Non-Shoppers (n=211)	Chi-Square
Age				
< 35 Years	53.7%	49.4%	55.5%	
35-55 Years	22.0%	29.2%	19.0%	
> 55 Years	24.3%	21.3%	25.6%	3.878
Gender				
Male	41.1%	30.3%	45.7%	
Female	58.9%	69.7%	54.3%	6.084*
Marital Status				
Married	39.2%	52.8%	34.6%	
Not Married	60.8%	47.2%	65.4%	8.651*
Income Level				
< \$30,000	31.3%	21.3%	35.5%	
\$30,000 - \$60,000	21.7%	28.1%	19.0%	
> \$60,000	47.0%	50.6%	47.0%	6.778*
Employment Status				
Full-time	37.3%	43.8%	34.6%	
Part-time	24.0%	16.9%	27.0%	
Retired	13.3%	10.1%	14.7%	
Homemaker or Not Employed	25.3%	29.2%	23.7%	5.855
Education Level				
< 16 Years	53.1%	55.7%	52.00%	
16 Years	21.9%	25.0%	20.60%	
> 16 Years	25.0%	19.3%	27.50%	2.333

* Significant at _ 0.05 level.

Table 4

Demographic Differences Between Convenience Store Shoppers and Non-shoppers

Variable	Total Sample (n=300)	Shoppers (n=181)	Non-Shoppers (n=119)	Chi-Square
Age				
< 35 Years	53.7%	55.6%	53.3%	
35-55 Years	22.0%	25.9%	21.1%	
> 55 Years	24.3%	18.5%	25.6%	1.420
Gender				
Male	41.1%	59.3%	37.1%	
Female	58.9%	40.7%	62.9%	8.908*
Marital Status				
Married	39.2%	27.8%	42.7%	
Not Married	60.8%	72.2%	57.3%	4.099*
Income Level				
< \$30,000	31.3%	46.3%	28.0%	
\$30,000 - \$60,000	21.7%	24.1%	21.1%	
> \$60,000	47.0%	29.6%	50.8%	9.109*
Employment Status				
Full-time	37.3%	50.0%	34.6%	
Part-time	24.0%	14.8%	26.0%	
Retired	13.3%	11.1%	13.8%	
Homemaker or Not Employed	25.3%	24.1%	25.6%	5.430
Education Level				
< 16 Years	53.1%	50.9%	53.6%	
16 Years	21.9%	13.2%	23.8%	
> 16 Years	25.0%	35.8%	22.6%	5.346

* Significant at _ 0.05 level.

Table 5

Demographic Differences Between Limited-line Discount Store Shoppers and Non-shoppers

Variable	Total Sample (n=300)	Shoppers (n=181)	Non-Shoppers (n=119)	Chi-Square
Age				
< 35 Years	53.7%	36.2%	56.9%	
35-55 Years	22.0%	21.3%	22.1%	
> 55 Years	24.3%	42.6%	20.9%	10.795*
Gender				
Male	41.1%	38.3%	41.7%	
Female	58.9%	61.7%	58.3%	0.185
Marital Status				
Married	39.2%	50.0%	37.2%	
Not Married	60.8%	50.0%	62.8%	2.671
Income Level				
< \$30,000	31.3%	27.2%	32.0%	
\$30,000 - \$60,000	21.7%	21.3%	21.7%	
> \$60,000	47.0%	51.1%	46.2%	0.440
Employment Status				
Full-time	37.3%	29.8%	38.7%	
Part-time	24.0%	25.5%	23.7%	
Retired	13.3%	25.5%	11.1%	
Homemaker or Not Employed	25.3%	19.1%	26.5%	7.966*
Education Level				
< 16 Years	53.1%	55.6%	52.6%	
16 Years	21.9%	24.4%	21.5%	
> 16 Years	25.0%	20.0%	25.9%	0.748

* Significant at _ 0.05 level.

Table 6

Profile of Focus Group Participants (N=31)

Demographic Variables	%
Age	
< 35 Years	26%
35-55 Years	45%
> 55 Years	29%
Gender	
Male	16%
Female	84%
Income Level	
< \$30,000	23%
\$30,000 - \$49,999	19%
\$50,000 - \$69,999	29%
_ \$70,000	29%
Employment Status	
Full-time	42%
Part-time	23%
Retired	23%
Homemaker or Not Employed	13%
Education Level	
_ High school	10%
Some College	29%
College Graduate	61%

Table 7

Profile of On-Line Survey Participants and Differences Between On-Line Only Segment and Multiple Outlet Shoppers

Variable	Total Sample (n=243)	On-Line Only (n=46)	Multiple Outlet (n=197)	Chi-Square
Age				
< 35 Years	33.8%	41.3%	32.3%	
35-55 Years	57.1%	47.8%	60.3%	
> 55 Years	9.2%	10.9%	7.4%	2.432
Gender				
Male	17.7%	16.3%	18.4%	
Female	82.3%	83.7%	81.6%	0.104
Income Level				
< \$30,000	11.8%	14.6%	10.9%	
\$30,000 - \$49,999	14.1%	12.2%	14.3%	
\$50,000 - \$69,999	23.6%	19.5%	24.6%	
_ \$70,000	50.5%	53.7%	50.3%	0.948
Education Level				
_ High School	7.9%	13.3%	6.3%	
Some College	34.3%	53.3%	29.1%	
College Graduate	57.7%	33.3%	64.6%	14.676*
Household Composition (#Adults)				
1 Adult	19.6%	20.0%	18.7%	
2 Adults	63.5%	57.8%	65.4%	
> 2 Adults	17.0%	22.2%	15.9%	1.190
Household Composition (# Children < 18 years)				
0 Children	16.9%	20.0%	16.4%	
1 Child	27.3%	28.0%	26.6%	
2 Children	35.7%	32.0%	36.7%	
> 2 Children	20.1%	20.0%	20.3%	0.306

* Significant at _ 0.05 level.