AN EVALUATION OF CONSUMER SEGMENTS FOR FARMERS' MARKET CONSUMERS IN INDIANA AND ILLINOIS

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Abstract

In Spring 2005 and Fall 2009 consumer surveys were collected in several Metropolitan cities in Indiana and Illinois to explore differences based on psychographic and behavioral characteristics of farmers' market consumers. Consumer intercept surveys were conducted in: South Bend, IN; Bloomington, IN; Springfield, IL and Peoria, IL. Likert scale questions were analyzed using factor and hierarchical cluster analysis to identify clusters of consumers based on several farmers' market characteristics. Survey results show that of the 164 Metropolitan surveys analyzed, 85.3% of respondents were Caucasian, 71.9% were between the ages of 35 and 64 and 78% were female. Data analysis showed that four clusters were formed: Recreational (42%), Minimalists (27%), Enthusiasts (23%) and Time-challenged (8%). Each cluster had a unique set of preferences based on farmers' market attributes ranging from overall convenience of the shopping trip to the presence of nearby stores. Differences in consumer segments suggest that farmers' market managers can develop specific marketing messages toward each segment.

Keywords: cluster analysis, consumers, farmers' market, primary data, surveys

Executive Summary

A factor and hierarchical cluster analysis showed four clusters existed based on farmers' market characteristics. *Recreational* shoppers were the largest segment of consumers (42%) and had a low average expenditure per visit, a high average distance traveled (Table 7) and a high average of visits to the survey market per season showing they were likely to travel and visit often but were not as likely to spend large amounts of money. *Minimalists* had the highest percentage of primary shoppers of any other segment (81.8%). *Minimalists* had a high average expenditure per visit, a low average distance traveled (Table 7) and a low average of visits to the survey market per season. *Time-challenged* shoppers valued the presence of nearby stores. *Time-challenged* shoppers had a low average expenditure per visit, a low average distance traveled (Table 7) and a high average of visits to the survey market per season. *Enthusiasts* were dedicated shoppers that enjoyed all aspects of the farmers' market shopping experience but did not place much importance on variety. *Enthusiasts* had a high average expenditure per visit, a high average distance traveled (Table 7) and a high average of visits to the survey market per season. *Enthusiasts* spent the most ($19), traveled the farthest (12.4 miles), and visited the market more than any other segment (8.7 times).

1. Introduction

Farmers' markets have experienced brisk growth in recent years; however, slowly rising sales question the sustainability of the industry. From 2000 to 2005, the number of famers' markets in the United States (U.S.) grew 43%. However, sales lagged, growing at 2.5% each year (Ragland and Tropp, 2009). In 2005, annual sales for farmers' markets in the United States were $242,500 (Ragland and Tropp, 2009). Farmers' markets that took the initiative to learn more about customers reported higher sales than markets that did not. However, only 27.6% of farmers' market managers conducted surveys to learn the needs and preferences of their consumers (Ragland and Tropp, 2009).

Farmers' market managers are seeking ways to learn about their customers and how to effectively promote to their target markets. Consumer segmentation is a technique commonly used by traditional retail mangers to classify customers based on needs, preferences, behaviors, and demographics (Reynolds et al., 2002). Consumer segmentation is vital to the farmers' market industry to take steps toward overcoming challenges, increasing profitability and sustainability. Therefore, the objective of this study is to identify preference based segments in farmers' market consumers using self-reported psychographic, behavioral, and demographic characteristics of Metropolitan consumers in Indiana and Illinois and to evaluate their differences.

Consumer Segmentation

Consumer segmentation is a technique used to classify consumers into groups based on factors such as consumption trends, behaviors, and preferences. Consumer segmentation has been used in previous research to better understand customers and to build a foundation for better promotion and marketing (Elepu, 2005; Coca-Cola Retailing Research Foundation, 2004; Reynolds et al., 2002). Past research has focused on consumers of retail shopping outlets such as

malls or grocery stores (Coca-Cola Retailing Research Foundation, 2004; Reynolds et al., 2002). Elepu (2005), to date, is the only study to segment farmers' market consumers. These studies are examined in detail below.

Reynolds et al., (2002), focused on developing retail shopper types and determining the difference between the attitudes and preferences of traditional versus factory outlet mall shoppers. Shoppers at traditional and outlet malls participated in an intercept survey and ranked market attributes such as cleanliness, number of stores and safety as "not important" (1) to "extremely important" (7). From the cluster analysis, six shopper types were identified: Basic, Apathetic, Destination, Enthusiasts, Serious, and Brand Seekers. All shopper type descriptions were similar for traditional and factory outlet malls except for the Brand Seekers segment, which did not exist for traditional mall shoppers and was exclusive to the factory outlet mall shopper group. "Brand Seekers" were most concerned with brand name merchandise above all other factors and enjoyed the shopping experience.

According to the Coca-Cola Retailing Research Council of North America (2004), consumers were categorized into different segments based on their need states or purpose for shopping. Shoppers were surveyed and interviewed in online panels and week-long focus groups. Based on ratings from store attributes and attitudes towards grocery shopping, consumers shopped for different reasons each time; therefore they were categorized based upon reasons called "need states". Need states refer to specific needs a shopper brings to a shopping trip, which may strongly influence their purchasing decisions and can change from one occasion to the next. The nine segments of consumers in this study were: Care For Family, Smart Budget Shopping, Discovery, Efficient Stock-Up, Specific Item, Bargain-Hunting Among Stores, Reluctance, Small Basket Grab and Go and Immediate Consumption (Coca-Cola Retailing

Research Council, 2004). This study helped retailers, specifically the Coca-Cola Company, make a beneficial connection with consumers.

Elepu (2005) used the two previous studies (Reynolds et al., 2002 and The Coca Cola Research Foundation, 2004) to examine whether differences existed in urban farmers' market consumers. An intercept survey was conducted at six urban and suburban farmers' markets in Illinois. Five segments existed including: Basic, Serious, Enthusiast, Recreational and Low-involved. Overall, consumers were Caucasian, female, between the ages of 35 and 44, primary shoppers of food, college graduates, working professionals, with an annual income of $100,000 or greater, living in two person households (Elepu, 2005).Based on these studies, hypothesis one was formed.

H_1: Preference based segments exist for farmers' market consumers in Metropolitan areas in Indiana and Illinois.

2. Methodology

In the spring 2005 and fall 2009, consumer intercept surveys were conducted at Illinois and Indiana farmers' markets, respectively, to evaluate consumer preferences for farmers' market attributes. Data were collected using a written survey administered face-to-face to farmers' market consumers. Indiana farmers' markets were selected from the Indiana AgroTourism Directory published by the Indiana State Department of Agriculture. Illinois markets were selected to include a stratified sample of urban and suburban markets from the USDA National Directory of Farmers' Markets. Using census data on population categories, markets categorized as Metropolitan cities (cities with 50,000 residents or more) were selected (OMB, 2008). Using a random number generator, Indiana markets were selected using the same selection method as Elepu (2005). The cities surveyed in Indiana were South Bend and Bloomington. The cities

surveyed in Illinois were Springfield, and Peoria. Farmers' market managers were contacted to obtain permission to conduct intercept surveys taking place at their market. Upon approval from each market, dates were scheduled and surveys were collected. Surveys were completed on a voluntary, anonymous basis by consumers present at each market.

The survey focused on demographics, importance of market attributes and behavioral trends at the market. In total, 165 of the 196 Metropolitan surveys were usable. One hundred and five surveys were collected in Indiana, 78 of which were fully completed by respondents and used in this study. One hundred and forty-eight metropolitan surveys were collected in Illinois, 87 of which were fully completed and used in this study.

The first section of the survey, questions one through eleven, asked respondents about their motivations for shopping, consumption trends, frequency of visits to the market, market location, frequency of visits to other markets and attitudes towards farmers' markets. Section two, questions twelve through fourteen, focused on consumer's attitudes toward farmers' markets and farmers' market attributes. Question twelve was a seven-point Likert scale that asked respondents to indicate the level of importance they attached to the 23 market attributes listed, where one meant "not at all important" and seven meant "very important" (Figure 1.1). Section three, questions fifteen through twenty-two, asked for demographic information such as gender, age, number of individuals living in the household, zip code, primary shopper status, education level, ethnicity, and income level. Demographic characteristics were categorized as: age, gender, education, ethnicity, household size, primary shopper, and income.

A multi-step cluster analysis was used to segment consumers. Multi-step cluster analysis has been used in previous consumer segmentation studies (Elepu, 2005; Reynolds et al., 2002; Bloch et al., 1994; and Darden and Ashton, 1974). Multi-step cluster analysis uses factor analysis,

Ward's clustering method and K-means clustering. A factor analysis was conducted in SPSS (The Statistical Package for Social Scientists) for data reduction of the Likert scale variables (Table 1) (SPPS 17.0, 2010). Component factors were then used to form consumer segments with Ward's hierarchical clustering method. Cluster centers were identified by performing the k-means analysis method (Table 2). An Analysis of Variance (ANOVA) test was used along with k-means analysis to identify statistical significance of component factors. Factor analysis was used to reduce the number of market attributes into component factors. There were 23 market attributes used in the survey. The component factors identified accounted for 64.2% of the variance. Six component factors were named: trip experience, adjunct products, nearby stores, superior produce, organic produce and variety (Table 1). These factors were then used to identify consumer segments.

Consumer Segmentation

The Ward's cluster method, a hierarchical clustering technique, was used to identify outliers to establish the number of clusters. One outlier was identified and eliminated leaving 164 observations to be further analyzed. Output from the hierarchical cluster analysis gave the option of three, four or five clusters. The four cluster option was distinct and the dendogram showed four clusters as the optimal solution (data not shown). To determine the number of the clusters, points where the distance agglomeration coefficients changed drastically were also identified. In this case, the increase was at observation 160 which was subtracted from the number of observations (164) for a total of four clusters. The initial conclusion of four distinct clusters was further validated by examining the dendogram and using the agglomeration coefficients technique.

The initial cluster seeds derived from the Ward's method were used in the k-means method

to obtain final clusters of consumers. Clusters were named based on their preferences for component factors (Table 2) and were given the following names: *Recreational Shoppers, Minimalists, Time-challenged Shoppers, and Enthusiasts.* ANOVA results indicated that each component factor was statistically significant (Table 3).

3. Results

Overall Demographics of Sample

The highest percentage of respondents were Caucasian (85.3%), female (78%), between the ages of 55 and 64 (27%), primary shoppers of food (73%), in a two-person household (44%), with a post graduate degree (36.2%), and annual income between $50,000 and $74,999 (29.6%), (Table 4). These findings were consistent with previous literature that found farmers' market consumers were typically Caucasian, female, middle aged, middle class, primary shoppers, with some form of college degree (Kezis et al., 1998; Govindasamy et al., 1996; Govindasamy et al., 1998; Otto and Varner 2005; Onianwa, Mojica and Wheelock, 2006; Rainey and Vetter, 2009; Zepeda and Li, 2006; Bond, Thilmany and Bond, 2009). Thus data are presumed to be representative of farmers' market consumers.

Recreational Shoppers were the largest consumer segment, accounting for 42% of the total sample. This segment traveled an average of 10 miles to the market, visited the market an average of 2.5 times during the season, visited other markets an average one time per season and spent an average of $16 per trip (Table 5). Demographically, the highest percentage of *Recreational Shoppers* were (75.4%), mostly between the ages of 45-54 (29.4%), Caucasian (85.3%), primary shoppers of food (72.1%) of a two person household (42.6%) with annual income of $50,000 to $74,999 (32.3%) (Table 6). This segment also had the highest percentage of respondents that identified themselves as "post-graduates" at 42.6 % (Table 6). *Recreational*

Shoppers placed value on nearby stores, superior products, organic products and variety based on positive standardized factor scores (Table 2). *Recreational Shoppers* were most likely attending the market to enjoy the atmosphere and browsing, but were not interested in any extra amenities the market had to offer.

Minimalists were the second largest segment group, consisting of 27% of the total sample. On average, *Minimalists* shoppers traveled approximately four miles to the market, visited the market one time during the season and spent $17 per trip (Table 5). Demographically, *Minimalists* were female (86.4%), mostly between the ages of 45-64 (27.3%), post graduates (36.4%), living in a two person household (47.7%), with an annual income between $20,000 and $49,000 (34.3%) (Table 6). These shoppers placed value on trip experience and superior products based on positive standardized factor scores (Table 2).

Enthusiasts accounted for 23% of the total sample. *Enthusiasts* were predominately Caucasian, (80.6%), female (77.8%), primary shoppers of food (69.4%), mostly between the ages of 55 and 64 (50%), living in a two-person household (42.9%), with an annual income between $50,000 and $74,999 (29.4%), and had completed "some college" (41.7%) (Table 6). Enthusiasts had a preference for trip experience, adjunct products, nearby stores, superior products, and organic products based on positive standardized factors (Table 2). *Enthusiasts* were generally very dedicated and loyal to the market and loved every aspect of shopping. *Enthusiasts* traveled an average of 12 miles to the market, visited the market an average of nine times per season and spent an average of $19 per trip (Table 5).

Time-challenged Shoppers accounted for 8% of the total sample, ranking fourth in size of the consumer segments. This segment reported traveling an average of three miles to the market, visiting five times during the season, visiting other markets once per season and spending $14

per trip (Table 5). *Time-challenged Shoppers* were mostly female (53.8%), between the ages of 25-34 and 45-54 (23.1 %) respectively, college graduates (46.2%), Caucasian (84.6%), living in a household with one to three individuals (69.3%), primary shoppers (53.8%), with an annual income between $75,000 and $99,000 (38.5%) (Table 6). Nearby stores was the only component factor that was of importance to these shoppers based on positive standardized factor scores (Table 2). The presence of nearby stores was important because *Time-challenged Shoppers* most likely planned to visit a grocery or other retail outlet in conjunction with their farmers' market trip. These shoppers are most likely to only buy a few items from the farmers' market and then complete the remainder of their shopping at other stores.

A chi-square test was run to determine statistical significance in behavioral characteristics amongst clusters. Consumer segments were significantly different in average amount spent per visits, frequency of visits to the survey market per season, frequency of visits to other markets per season, and distance traveled to the market per trip (Table 8). Therefore, hypothesis one is supported.

4. Summary, Conclusion, and Implications

This study showed differences existed in preferences for farmers' market consumers in Metropolitan areas in Indiana and Illinois. Four preference based segments for Metropolitan farmers' market consumers in Indiana and Illinois were identified and further distinguished by behavioral and demographic characteristics.

There are differences in preferences, behavioral characteristics and demographics among segments. Farmers' market consumers shop based on preferences for market attributes. Thus, it is beneficial for market managers to take these factors into consideration when evaluating their target market. This information can be used to the benefit of farmers' markets across the U.S. as

219 it provides a basis for the development of promotional and marketing techniques. For instance,
220 since nearby stores was an important factor for three of the four segments (*Enthusiasts*,
221 *Recreational*, and *Time-challenged*) a new market manager may find it beneficial to consider
222 proximity of the market to nearby stores when planning to start a market. An existing market
223 manager may try to develop promotional strategies to attract consumers that visit the least, in this
224 case *Minimalists*.

Literature Cited

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

Bond, J. K., Thilmany, D., & Bond, C. (2009). What Influences Consumer Choice of Fresh Produce Purchase Location? *Journal of Agricultural and Applied Economics*, *41*(01).

Coca-Cola Retailing Research Council. (2004) "The World According to Shoppers: Different Days, Different Needs." Study Conducted by TNS NFO, 41 Pp

Darden, W. R., & Ashton, D. (1974). Psychographic profiles of patronage preference groups. *Journal of Retailing*, *50*(4), 99–112.

Elepu, G. (2005). Urban and suburban farmers markets in Illinois: a comparative analysis of consumer segmentation using demographics, preferences and behaviors. PhD Thesis, University of Illinois at Urbana Champaign, Urbana.

Govindasamy, R., & Nayga Jr, R. M. (1996). Characteristics of farmer-to-consumer direct market customers: an overview. *Journal of Extension*, *34*(4).

Govindasamy, R., Zurbriggen, M., Italia, J., Adelaya, A., Nitzsche, P., & VanVranken, R. (1998). *Farmers Markets: Consumer Trends, Preferences and Characteristics, New Jersey Agricultural Experiment Station*.

Kezis, A., Gwebu, T., Peavey, S., & Cheng, H. T. (1998). A study of consumers at a small farmers' market in Maine: results from a 1995 survey. *Journal of Food Distribution Research*, *29*, 91–99.

Oberholtzer, L., & Grow, S. (2003). *Producer-Only Farmers' Markets in the Mid-Atlantic Region*. Arlington va: Henry A. Wallace Center for Agricultural and Environmental Policy at Winrock International.

OMB. (2008, November 20). *Update of statistical area definitions and guidance on their uses*. Retrieved from http://www.whitehouse.gov/omb/bulletins/fy2007/b0701.pdf

Onianwa, O., Mojica, M., & Wheelock, G. (2006). Consumer Characteristics and Views Regarding Farmers Markets: An Examination of On-Site Survey Data of Alabama Consumers. *Journal of Food Distribution Research*, *37*(1), 119.

Otto, D., & Varner, T. (2005). Consumers, Vendors, and the Economic Importance of Iowa Farmers' Markets: An Economic Impact Survey Analysis. *Iowa State University, Leopold Center for Sustainable Agriculture. March*.

Ragland , E, & Tropp, D. (2009, May). *Usda national farmers' market manager survey*. Retrieved from http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5077203

Rainey, R, & Vetter, A. (2009). *Understanding direct markets: characteristics of the farmers' market consumer*. Retrieved from http://www.uark.edu/afma/Meetings/2009%20AFMA%20Survey%20Handout.pd f

Reynolds, K. E., Ganesh, J., & Luckett, M. (2002). Traditional malls vs. factory outlets: comparing shopper typologies and implications for retail strategy. *Journal of Business Research*, *55*(9), 687–696.

SPSS for Windows, Release 17.0. 2010. Chicago: SPSS, Inc.

Zepeda, L., & Li, J. (2006). Who Buys Local Food? *Journal of Food Distribution Research*, *37*(3), 1.

Table 1: Factor Loadings of Market Attributes

	Component					
Attribute	Trip experience	Adjunct products	Nearby stores	Superior products	Organic products	Variety
FRESHN	.106	-.050	-.031	.865	.104	.046
QUALITY	.157	-.090	.011	.841	-.123	.072
SAFETY	.520	.015	.120	.257	.483	-.247
LOCALLY	-.171	.221	.075	.165	.296	.625
VARIETY	.269	.047	.047	.015	-.060	.811
PRICE	.281	-.090	.533	.020	.239	.100
CRAFTS	.051	.873	.024	.065	-.045	-.020
FLOWERS	.077	.754	.025	.058	.136	-.079
PFOOD	.074	.737	.116	-.081	.098	-.018
MEAT	-.081	.645	.034	-.099	.425	.134
SNACKS	.162	.760	.072	-.171	-.079	.201
EVENTS	.119	.641	.106	-.034	.069	.149
ORGANIC	.041	.247	-.063	-.058	.752	.131
SERVICE	.736	.199	-.014	.115	.169	.017
ACCESS	.757	.096	.036	-.052	-.149	.056
PARKING	.678	-.118	.227	.163	.050	.059
DISTANCE	.458	-.104	.517	.127	.087	.165
CLEANLINESS	.844	.029	.091	.107	.069	-.070
TIME	.709	.157	.146	.143	-.037	.072
APPEARANCE	.788	.126	.207	-.054	-.053	.047
PAYMENT	.609	.110	.383	-.060	.122	.087
GROCERY	.136	.215	.830	-.087	-.116	-.025
NGROCERY	.154	.288	.800	.008	-.124	-.016

Table 2: Final Cluster Centers Based on Standardized Factor Scores

	Recreational	Minimalists	Enthusiasts	Time-challenged
Trip Experience	-.28628	.39514	.23248	-.49749
Adjunct Products	-.35555	-.57278	1.39178	-.24252
Nearby Stores	.07500	-.34285	.18895	.21004
Superior Products	.14091	.29147	.22346	-2.38762
Organic	.46565	-.80579	.12754	-.11700
Variety	.53875	-.40109	-.31881	-.57008
Total	69	44	38	13

Table 3: ANOVA of Component Factors

	Cluster		Error			
Component	Mean Square	df	Mean Square	df	F	Sig.
Trip Experience	5.932	3	.908	160	6.537	.000
Adjunct Products	32.510	3	.409	160	79.450	.000
Nearby Stores	2.497	3	.972	160	2.569	.056
Superior Produce	27.038	3	.512	160	52.832	.000
Organic Products	14.776	3	.742	160	19.921	.000
Variety	11.731	3	.799	160	14.686	.000

Table 4: Metropolitan Consumer Demographic Characteristics

Characteristic		Percentage
Gender	Male	22.0%
	Female	78.0%
Age	Under 25	6.5%
	25-34	8.6%
	35-44	20.5%
	45-54	24.4%
	55-64	27.0%
	65 and over	13.0%
Education	Some high school	1.1%
	High school graduate	8.1%
	Some college	25.4%
	College graduate	29.2%
	Post-graduate	36.2%
Ethnicity	Black	7.7%
	Caucasian	85.3%
	Asian	2.2%
	Hispanic	1.1%
	Native Hawaiian Pacific Islander	1.6%
	American Indian	0.5%
	Other	1.6%
Household	1	19.6%
	2	44.0%
	3	14.1%
	4	14.7%
	5	4.9%
	6	2.7%
Primary Shopper	Yes	73.0%
	No	27.0%
Income	Less than $20,000	14.2%
	$20,000-49,000	25.4%
	$50,000-74,999	29.6%
	$75,000-99,999	16.0%
	$100,000 and over	14.8%

Table 5: Behavioral Characteristics by Segment

Characteristic	*Recreational*	*Minimalists*	*Enthusiasts*	*Time-challenged*
Average Money Spent (Dollars)	$16	$17	$19	$14
Average Number of Visits to Market	2.5	1	8.7	5.0
Number of other FMs visited	1.2	.4	.5	1.2
Average Distance Traveled (Miles)	10.3	4.3	12.4	3.3

Table 6: Cross tabulation of Demographic Characteristics by Segment

Characteristic		*Recreational*	*Minimalists*	*Enthusiasts*	*Time-challenged*	Chi-square
Gender	Male	24.6%	13.6%	22.2%	46.2%	6.259
	Female	75.4%	86.4%	77.8%	53.8%	
Age	Under 25	5.9%	2.3%	13.9%	15.4%	
	25-34	10.3%	6.8%	5.6%	23.1%	
	35-44	25.0%	18.2%	16.7%	15.4%	28.184 *
	45-54	29.4%	27.3%	2.8%	23.1%	
	55-64	20.6%	27.3%	50.0%	15.4%	
	65 and over	8.8%	18.2%	11.1%	7.7%	
Education	Some high school	0%	0%	6%	0%	
	High school graduate	5.9%	15.9%	8.3%	.0%	21.136 *
	Some college	22.1%	18.2%	41.7%	23.1%	
	College graduate	29.4%	29.5%	16.7%	46.2%	
	Post-graduate	42.6%	36.4%	27.8%	30.8%	
Ethnicity	Black	7.4%	9.3%	8.3%	7.7%	
	Caucasian	85.3%	83.7%	80.6%	84.6%	
	Asian	1%	5%	3%	0%	
	Hispanic	.0%	.0%	2.8%	7.7%	14.43**
	Native Hawaiian Pacific Islander	3%	2%	0%	0%	
	American Indian	1.5%	.0%	.0%	.0%	
	Other	1.5%	.0%	5.6%	.0%	
Household	1	25.0%	20.5%	8.6%	23.1%	
	2	42.6%	47.7%	42.9%	23.1%	
	3	13.2%	9.1%	20.0%	23.1%	18.754 *
	4	13.2%	15.9%	20.0%	15.4%	
	5	4.4%	6.8%	5.7%	.0%	
	6	1.5%	.0%	2.9%	15.4%	
Primary Shopper	Yes	72.1%	81.8%	69.4%	53.8%	4.375*
	No	27.9%	18.2%	30.6%	46.2%	
Income	Less than $20,000	9.2%	8.6%	23.5%	30.8%	
	$20,000-49,000	29.2%	34.3%	17.6%	7.7%	21.756 *
	$50,000-74,999	32.3%	25.7%	29.4%	23.1%	
	$75,000-99,999	16.9%	8.6%	8.8%	38.5%	
	$100,000 and over	12.3%	22.9%	20.6%	.0%	

(1) * indicates significant at p= 0.05, ** indicates significant at p= 0.10.

Table 7: Consumer Behavior Matrix-Average Spent and Distance Traveled

		Average Distance Traveled	
		Low	*High*
Average $ Spent	*Low*	**Time-challenged**	**Recreational**
	High	**Minimalists**	**Enthusiasts**

Table 8: Cross tabulation of Behavioral Characteristics by Segment

Characteristic		*Recreational*	*Minimalists*	*Enthusiasts*	*Time-challenged*	Chi-square
Frequency of Visits to Survey Market	0-10	94.10%	97.70%	80.00%	92.30%	
	11-20	2.90%	2.30%	5.70%	0.00%	62.27**
	>20	2.90%	0.00%	14.30%	7.70%	
Frequency of Visits to Other Markets	0	33.30%	59.10%	52.80%	46.20%	
	1	63.80%	38.60%	41.70%	30.80%	
	2	0.00%	2.30%	5.60%	7.70%	39.85*
	>3	2.90%	0.00%	0.00%	15.40%	
Average Money Spent per Visit	$0-10	43.50%	41.90%	28.90%	53.80%	
	$11-20	37.70%	34.90%	42.10%	38.50%	83.00**
	$21-40	17.40%	20.90%	23.70%	0.00%	
	$>40	1.40%	2.30%	5.30%	7.70%	
Average Distance Traveled per Visit	0-10	76.80%	93.00%	75.70%	92.30%	
	11-20	17.40%	7.00%	16.20%	7.70%	108.12**
	>20	5.80%	0.00%	8.10%	0.00%	

(1) * indicates significant at p=0.01, ** indicates significant at p=0.10

Figure 1.1: Likert Scale Question from Survey

Please indicate the level of importance you attach to each of the following market attributes when deciding to come to shop at this farmers' market. Please rate ***each*** item on a scale of 1 to 7***(1 = not at all important and 7 = extremely important).*** Please attach a rating of 1-7 to ***each*** item depending on its level of importance to you.

— Freshness

— Loud Music

— Quality

— Food safety

— Presence of locally grown produce

— Product variety

— Price of products

— Customer service

— Accessibility of market

— Availability of parking space

— Distance to market

— Non-local products

— Cleanliness of market

— Hours of operation of market

— Presence of crafts

— Presence of flowers/shrubs/herbs

— Presence of meat and poultry

— Presence of processed food products (i.e., cheese, jellies, jam, etc.)

— Presence of food for on-site consumption

— Social events/entertainment

— Presence of organic produce

— Physical appearance of market

— Method of payment at market

— Presence of nearby grocery stores

— Presence of nearby non-grocery stores

— Other (please specify) _____