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Growing Pains or Opportunities? A Customer Survey of Three Farmers' Markets in One Rural Community

Abstract

The continued growth of farmers' markets is presenting new challenges to Extension. As the number of markets expands, how can Extension help those in the same community work together for mutual benefit? The study reported here examined similarities and differences among customers attending three different farmers' markets within a single locality in Gettysburg, Pennsylvania. Based on 370 customer surveys, study results underscore the diversity of markets operating within the same community and provide insights into ways Extension might assist markets to work together to expand their shared customer base, increase revenues, and better serve local residents.

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Introduction

Over the past decade, the growth of farmers' markets in the United States has continued steadily. From 2000 to 2013, the USDA reports the number of markets expanded from 2,863 to 8,144. Between 2010 and 2013, the number grew by 32.8% (AMS, 2013). The expansion of farmers' markets brings many benefits, including increased economic opportunities for local food producers (Feenstra, 2007), improved access to fresh, nutritious food for consumers, and chances to cultivate cross-community relations (Hinrichs & Lyson, 2007).

But growth can also present new challenges, especially when multiple markets appear within a single community. Will markets and vendors work at cross purposes, competing with one another over limited customers and resources? Or will they find opportunities for cooperation in areas such as advertising, scheduling, and product diversification? Given that Extension officials can play a critical role in the development of successful direct marketing initiatives (Abel, Thomson, & Maretzki, 1999; Civittolo, 2012), how can they best ensure that multiple markets work together to discover opportunities for mutual benefit?

There is a large and growing body of research that has characterized farmers' market customers in various locations across the United States (Govindasamy & Nayga, 1996; Eastwood, Brooker, & Gray, 1999; Govindasamy, Italia, & Adelaja, 2002; Baker, Hamshaw, &Kolodinsky, 2009; Gwin & Lev, 2011; Byker, Shanks, Misyak, & Serrano, 2012; Chamberlain, Kelley, & Hide, 2013). However, less attention has been paid to the similarities and distinctions *between* markets and customers within the same locality. The study reported here was designed to address these issues through a comparative analysis of customers in three farmers' markets in Gettysburg, Pennsylvania. The intent is to provide empirical data that local Extension professionals may use to positively influence the growth of farmers' markets in Gettysburg and, in so doing, present a model of research that may be useful in other communities experiencing similar growth.

Background

Gettysburg, Pennsylvania lies in Adams County, a region with a long-standing agricultural tradition. The Borough's oldest existing market is the Gettysburg Farmers Market (GFM). Established in 1991, the market is held on Saturdays in the central location of Lincoln Square in downtown Gettysburg (GFM, 2012). For 17 years, the market on the Square served as the primary source for local produce. Then, in 2008, the Adams County Farmers Market Association (ACFM) was created. Closely associated with the Adams County Food Policy Council, which emphasizes food security issues, the ACFM established two additional markets in Gettysburg. One is held on Wednesday afternoons at the Gettysburg Recreation Park, located near downtown; and the other takes place on Fridays and Saturdays at the Outlet Shoppes at Gettysburg, located approximately 2 miles from the city center (ACFM, 2012). All markets operate from early April until mid-October. With the emergence of three farmers' markets in a single locality, the question arose as to how the markets might work together to improve efficiencies and enhance market outcomes for both vendors and patrons.

Methods

Data collection consisted of face-to-face, survey-based interviews with a total of 370 customers participating in the local farmers' markets. The survey instrument was developed and validated via iterative consultations with members of Penn State Cooperative Extension, market managers and vendors from all three markets, and faculty from Gettysburg College. The instrument was pre-tested with a sub-sample of the target customer population (N=25).

Survey data was analyzed with Excel and SAS statistical software (version 9.3). Bivariate statistical analysis was applied to key variables using Pearson's Chi Square Test. In cases where individual cell values fell below analytical requirements for Chi Square, Fisher's Exact Test was employed. All tests were two-tailed. For the purposes of this article, statistical significance is reported at the $p \leq .05$ level.

The study was conducted over a 2-week period in early September 2012. Each of the three markets was surveyed twice during this period. The survey consisted of 22 multiple-choice questions and took approximately 10 minutes to complete. Survey participants represent at least one adult member of each household or "shopping group" present at each market during open hours. Total customer counts were taken using Rapid Market Assessment methods (Lev, Brewer, & Stephenson, 2008). Adjusting for repeat visitors during the study period, approximately 22.6% of all customers were interviewed.

Results & Discussion

Customer Demographic Profiles

According to demographic survey results (Table 1), all three Gettysburg farmers' markets are visited most frequently by white residents over the age of 40 years, with some amount of post-secondary education, and annual incomes above $50,000. This characterization is in keeping with the findings of many other studies of farmers' market customers in the United States (Eastwood et al., 1999; Byker et al., 2012).

Table 1.

Customer Demographic Profiles by Market Location in Percent Response

		Outlets	Rec Park	Square
Age Range	17 to 22	3.3	10.7	18.8
	23 to 29	10.6	3.6	5.0
	30 to 39	12.6	10.7	8.8
	40 to 49	13.3	7.1	15.0
	50 to 59	14.6	14.3	20.6
	60 to 69	28.5	21.4	23.1
	70 to 79	10.6	17.9	5.6
	80+	6.6	14.3	3.1
Employment Status	Full Time	33.5	36.4	51.2
	Part Time	12.6	6.1	8.8
	Homemaker	5.4	0.0	2.9
	Retired	40.7	42.4	19.4
	Student	3.6	15.2	15.9
	Unemployed	1.8	0.0	1.9

	Other	2.4	0.0	0.6
Level of Education	Advanced/Professional Degree	26.4	36.7	30.8
	Bachelor's Degree	29.3	20.0	26.0
	Some College	19.2	26.7	26.6
	High School Graduate	19.7	16.7	15.4
	Some High school	1.8	0.0	0.6
	Other	3.6	0.0	0.6
Racial Identity	White/Caucasian	93.3	100.0	92.4
	Black/African American	1.8	0.0	1.8
	Asian or Pacific Islander or PI-American	1.8	0.0	2.4
	Native American	0.0	0.0	0.0
	Bi Racial/Mixed Heritage	1.2	0.0	0.0
	Other	1.8	0.0	3.5
Income	No answer	31.7	16.7	17.8
	under $25,000	9.0	6.7	17.8
	$25,001 - 35,000	7.2	3.3	3.6
	$35,001 - 50,000	9.0	23.3	8.9
	$50,001 - 75,000	15.6	13.3	12.4
	$75,001 - 150,000	13.2	13.3	16.6
	$150,000+	14.4	23.3	23.1

However, a closer look at the data suggests certain distinctions among the three markets. Consider customer age. There are no statistically significant differences among customer responses at the three markets for age categories ranging from 30 to 69 years. However, the Square market is significantly different from the other two markets in terms of its lack of elderly customers (aged 70 years and over) and its abundance of young shoppers (aged 17 to 22 years). The latter point suggests the effects of location in so far as the Square lies only 2 blocks from Gettysburg College, allowing the market to benefit from college student patrons more than the other two markets.

Employment data also revealed market distinctions. Chi square analyses revealed significant differences between the Square and the other two markets regarding the number of customers who are retired and the number of customers with full time employment. The employment differential may be explained by the higher number of tourists who frequent the market on the Square. The market's central location is near a number of hotels and restaurants that cater to tourists visiting

Gettysburg National Military Park. These tourists may boost the full-time employment responses for the Square. In contrast, customers of the Outlet and Rec Park markets tend to be local residents, and the markets are frequented more often by retired citizens who may wish to avoid the hustle and bustle of downtown. Finally, although customers identifying as students represent similar percentages of the clientele for the Rec Park and the Square, the raw numbers are quite disparate between the two locations, suggesting that only a handful of students actually attend the Rec Park market.

Differences among the three markets are further underscored by the income data. As might be expected, for all three markets, a majority of their customers making more than $35,000 annually. Moreover, the fewest number of customers for all markets lie in the $25,000 to $35,000 category. If we look closely at the market on the Square, we find that the highest percentage of customers fall in the "over $150,000" category, as expected given the heavy presence of tourists in the vicinity. However, the second largest category of customers (17.8%) falls in the "under $25,000" category. This bimodal distribution presents another statistically significant difference between the market on the Square and the other two markets. It also reflects locational effects associated with proximity to the college insofar as most of those identifying in this category were students. Interestingly, there are no statistically significant differences among the three markets in terms of racial identity, gender, or level of education among customers.

Customer Behavior and Preferences

In addition to demographic data, we also collected information on topics including shopping frequency and purchasing behaviors, distance traveled, exposure to advertising and reasons for shopping at the markets. Selected results are listed in Table 2.

Table 2.

Customer Behaviors and Preferences by Market Location in Percent Response

		Outlets	**Rec Park**	**Square**
Attendance	Weekly	42.9	56.7	47.6
	Monthly	18.8	16.7	16.5
	Rarely	15.3	6.7	10.6
	First Visit	22.9	20.0	25.3
Advertisement	Poster	19.0	9.1	2.3
	Brochure	1.5	9.1	5.3
	Newspaper	11.8	18.2	6.4
	Social Media	1.0	0.0	2.3
	Website	4.1	3.0	1.8

	Participating Vendor	1.0	6.1	3.5
	Passing By	42.6	24.2	54.4
	Word of Mouth	19.0	30.3	24.0
Products Purchased	Baked Goods	13.1	9.1	27.5
	Cheese	3.3	6.1	2.0
	Cut Flowers	4.7	9.1	4.9
	Fruits & Vegetables	58.9	42.4	39.4
	Honey/Jams/Jellies/Sauces	6.5	7.6	8.7
	Meat/Poultry	4.7	7.6	4.3
	Prepared Foods & Beverages	1.8	7.6	4.3
	Plants	6.2	6.1	4.3
	Other	0.7	4.5	4.3
Reason to Shop	Buy Direct	36.6	34.2	32.0
	Quality	37.2	28.8	34.0
	Prices	12.3	13.7	8.5
	Experience	8.2	17.8	17.8
	Rare Products	5.7	5.5	7.6
Money spent per visit	Less than $6	6.5	6.9	8.3
	$6-10	22.6	41.4	17.8
	$11-15	23.2	20.7	17.2
	$16-20	24.4	6.9	32.0
	$21-30	15.5	13.8	17.8
	Over $30	7.7	10.3	7.1
Percent of food budget	0-10%	60.4	61.5	67.1
	11-25%	26.8	26.8	23.6
	26-50%	8.5	11.5	7.5
	51-75%	2.4	0.0	1.9
	76-100%	1.8	0.0	0.0
SNAP/EBT*	Yes	7.1	3.3	41.4

	No	92.9	96.7	58.6
FMNP/SFMNP**	Yes	4.7	3.3	36.0
	No	95.3	96.7	64.0
*Supplemental Nutrition Assistance Program-Electronic Benefit Transfer program. **Farmers Market Nutrition Program and Senior Farmer Market Nutrition Program.				

All three markets exhibit similar results with regards to frequency of attendance. Close to half of all customers attended weekly. An additional 20% shopped on a monthly basis. The Square market experienced a higher number of first-time visitors, perhaps due to tourist traffic, but this difference was not statistically significant.

Customers identified a wide range of ways in which they learned about the Gettysburg markets. For all three markets, patrons most commonly discovered them by passing by the market location or via word of mouth. However, customers to the Outlets and Rec Park both noted the effectiveness of posters and newspapers. This was a significant difference from the market on the Square, which relies more heavily on its central location to attract customers rather than printed advertisements. Consequently, these findings suggest the Square market may benefit from increased use of poster and newspaper advertising.

The issue of how much money customers spend per visit provides another potential growth opportunity for all three markets. Survey results show that customers typically spend between $6 and $30 per visit. Patrons at the Rec Park spend less on average per visit than customers at the Square and the Outlets. Moreover, across all markets, data showed that an overwhelming majority of customers spend less than 10% of their weekly food budget at the famers markets, while approximately one quarter of customers spend between 11 and 25%.

In order to encourage patrons to spend more of their food budget in community farmers' markets and to address issues of food security, the Outlets and Rec Park markets accept federal food assistance vouchers (FMNP/SFNMP and SNAP-EBT). However, survey results indicate that most customers do not use food vouchers at the markets. Surprisingly, over one third of the participants at the Square answered that they do use vouchers even though they are not accepted at this market, suggesting the vouchers are used in other food outlets such as grocery stores.

Finally, customers identified the availability of high-quality foods and the opportunity to buy directly from the grower as the greatest motivations for shopping at the markets. Additionally, customers were motivated to shop at the markets because they enjoyed the experience and felt that prices were more reasonable than at supermarkets. The Square had slightly fewer customers motivated by price than the other two markets, but this was not statistically significant. However, it did produced slightly higher customer satisfaction in terms of market atmosphere and the rarity of the products offered.

Across all three markets, fruits and vegetables represented the most popular items purchased. While baked goods also sold well, customers expressed less interest in specialty items, such as cheese, meats, other prepared foods, and cut flowers. Interestingly, a higher percentage of customers at the Rec Park reported buying these specialty items than at the other two markets. Finally, for all markets the majority of respondents were satisfied with the length of the market season (generally late-April to mid-October) and business hours (7:00am to noon at the Square, 2:30pm to 7:00pm at Rec Park, and 9:30am to 3:00pm at the Outlets).

Conclusion and Recommendations

The findings from the study reported here provide a valuable comparison of customer characteristics at the three Gettysburg farmers' markets. They underscore the micro-scale differences and similarities among the three markets serving the same local community and offer potential strategies for Extension personnel to encourage market vendors to work together to improve market performance. In particular, the survey results suggest the following.

- The markets are not necessarily competing for the same customers. The emphasis on out-of-town tourists, visitors, and college students make the Market on the Square unique. This contrasts with the Rec Park and Outlet markets, which depend more heavily on full-time residents. The customer populations differ in terms of age, income levels, and employment. They also maintain distinctions in terms of product preferences, suggesting markets pursue a greater degree of product specialization.

- Nonetheless, all markets share certain challenges. There are opportunities for all markets to capture a much greater percentage of household food budgets regularly spent at the markets and the amount of money spent during each visit and to increase the number of weekly customers.

- Working together to coordinate advertising campaigns—including posters, newspaper advertisements, and social media—may be of mutual benefit by increasing overall market awareness and broadening the local customer base.

- Results also suggest that adopting food assistance vouchers at the Gettysburg Market on the Square may improve market performance while simultaneously providing underrepresented demographic groups access to healthy, local foods.

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