

Build, Grow and Sustain Your Farmers' Market

Indiana Cooperative Development Center of Indianapolis, IN received \$56,680 to conduct seminars for market vendors, focused on business planning, record keeping, demographic trends and consumer purchasing patterns, food safety and handling, and WIC and EBT payments. Additionally, a Market Master Boot Camp was offered to educate farmers market managers in market rules, strategies, and guidelines

Final Report

Indiana Cooperative Development Center
IN-048-2008-G-0704
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Final Report

Issue or Problem Being Examined

The overall goal of our project was to develop and deliver farmers' market education programs for producers and farmers' market management, taking into account the particular needs of beginning markets. We had received requests from producers and market managers to plan and deliver workshops that could provide ongoing education on how to increase sales as well as to provide a forum for networking.

Description of how Issue or Problem Was Addressed

We developed a workshop specifically geared to producers that covered: MarketMaker update; update from IN State Dept. of Agriculture; What other states are doing for local branding; Selling to Institutional Buyers; Consumer and Demographic Trends of Farmers Markets.

We then developed a "boot camp" for market managers that gave them access to new information and also access to what others were doing. We made it a practice to use as speakers current market managers and vendors who could share tips and tricks and "lessons learned".

We were approached by the Indiana State Dept. of Health to convene a panel of market masters to provide input on new field regulations. We followed this up with additional boot camps that provided a forum for county health inspectors and vendors and market masters to participate in a facilitated discussion about regulations in general as well as new legislation (HEA 1309) that allows vendors to sell baked goods at the market that were not produced in an inspected kitchen. This legislation had been the cause of much confusion among vendors and markets as to what is allowable under the law. Our boot camps provided the perfect opportunity for those involved in enforcing the law to interact with those expected to adhere to the law to come together in a non-threatening environment.

Specific Contribution of Project Partners

Our partners included: Purdue University, Indiana Farm Bureau, Indiana State Board of Animal Health, Indiana State Dept. of Health, Indiana Dept. of Agriculture, state office of USDA-RD.

Purdue was an integral part of the planning and delivery of this project. Dr. Jennifer Dennis provided assistance with the development and delivery of workshops and identification of speakers.

Administrative staff assisted with marketing and advertising, development of marketing materials and registration.

Indiana Farm Bureau was also a crucial partner. They assisted with program development, marketing and advertising, identification of speakers, and registration.

Indiana State Board of Animal Health provided speakers.

Indiana State Dept. of Health provided speakers and also promoted the boot camps among county health inspector staff.

Indiana Dept. of Agriculture provided speakers and also promoted the programs.

State Office of USDA-RD provided speakers and also helped promote and market the programs.

Results, Conclusions & Lessons Learned

The project was a huge success. We held one (1) workshop and twelve (12) boot camps with 610 attendees. There is a very real need among vendors and market masters for ongoing education and the opportunity to network with their peers. We heard over and over how thankful the participants were that the workshops were available. We are now being asked about programming for next year. In our earlier boot camps we talked about the need for a farmers' market association and had a lukewarm reception to the idea. By the end of our project, we've had people asking for the establishment of an association that could be a voice for the farmers markets.

We've learned that other states are incredibly willing to share their expertise and knowledge on farmers markets and their "lessons learned". We've also learned that the "personal" invitation from our partners, especially, extension educators helps to increase attendance.

Current or Future Benefits to be Derived from this Project

Through their partnership on this project, the ICDC and its partners have enhanced their working relationships and have identified new people with whom to partner in the future. Vendors, market managers, and farmers markets have benefited from an enhanced public awareness and profile that these workshops and boot camps have generated.

Dr. Jennifer Dennis and I have visited farmers' markets this season and have seen many of the ideas offered in our boot camps put into practice. Market Masters look forward to our visits and are eager to share new things that are happening in their markets.

Additional Information Available

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Description of People, Organizations, etc. that have Benefited from the Project's Accomplishments

Indiana's vendors have benefited from the information we've provided to them. Many of the ideas presented in the boot camps has been enacted and have helped to increase traffic at vendors' booths which has, in part, helped to increase sales. Market Managers have benefited from the opportunity to network with others doing similar things. They have learned from their peers about ways to increase traffic at their markets and how to involve the community in their markets. The Indiana State Dept. of Health (ISDH) benefited from the experience and expertise of market managers through their input on new regulations that were enacted by the state legislature. The Indiana Board of Animal Health also benefited from input from participants on the state's proposed decrease in the number of inspectors

available across Indiana. Overall, there is an increased awareness of local foods and the farmers' markets due in part to our efforts with this project.

**PURDUE UNIVERSITY
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Thesis/Dissertation Acceptance**

This is to certify that the thesis/dissertation prepared

By Kendra Meicole Arrington

Entitled An Evaluation of Consumer Segments for Farmers' Markets in Indiana and Illinois

For the degree of Master of Science

Is approved by the final examining committee:

Jennifer H. Dennis

Chair

Janet S. Ayres

Frank J. Dooley

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Approved by Major Professor(s): Jennifer H. Dennis

Approved by: Kenneth A. Foster

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

A Thesis

Submitted to the Faculty

of

Purdue University

by

Kendra Meicole Arrington

In Partial Fulfillment of the
Requirements for the Degree

of

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I would like to thank my major professor, Dr. Jennifer Dennis for believing in me when I doubted myself and encouraging me to always strive for the best. Your continuous support and guidance has been a tremendous help during my matriculation here at Purdue. I would like to thank my committee members Dr. Janet Ayres and Dr. Frank Dooley. I appreciate the time you put into helping develop the survey, data analysis and reaching my overall goals. I would also like to thank Dr. Michael Mazzocco for taking interest in my research, providing data and helping with the data analysis. Thank you to everyone else that has impacted my life while at Purdue and made this time memorable.

To my parents Lorrin and Steve Savage, my sources of strength, thank you for your unconditional love, and support. Your encouragement kept me going! Also, to my family and friends who have been supportive in my efforts and offered a listening ear my time of need, you are greatly appreciated.

Last but certainly not least, I would like to thank God for everything because without Him none of this would have been possible.

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ABSTRACT

Arrington, Kendra M. M.S., Purdue University, May 2010. An Evaluation of Consumer Segments for Farmers' Markets in Indiana and Illinois. Major Professor: Jennifer Dennis.

In 2009, the United States Department of Agriculture (USDA), Agricultural Market Service (AMS), reported the number of U.S. farmers' markets grew 43% from 2000 to 2005 (Ragland and Tropp, 2009). Although the number of markets has rapidly increased within this five year period, sales have increased by only 2.5% each year. The low percentage in sales suggests a maturing industry. Understanding consumer segments is imperative. Farmers' markets that take the initiative to learn the needs and preferences of their consumers have higher sales than markets of the same size that do not.

Therefore, the objective of this study is to segment consumers using psychographic and behavioral characteristics of shopping attributes at farmers' markets in order to increase farmers' market manager's knowledge about their customers and enable them to increase profits in the future. Intercept studies were conducted in Indiana and Illinois to determine preferences of farmers' market consumers. Nine farmers' markets from the Indiana AgroTourism directory and the USDA National Directory Farmers' Market Directory were selected at random. Selected cities were identified based on census identification of more than 50,000 residents. Four cities were chosen out of the

Metropolitan category and were used in this study: South Bend, IN; Bloomington, IN; Springfield, IL and Peoria, IL. Likert scale questions were analyzed using factor analysis and cluster analysis to identify clusters of consumers.

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, 78% were female, 65.4% have a college or post-graduate degree, 55% have an annual income between \$20,000 and 74,999, 44% reported living in a two-person household and 73% identified themselves as being the primary shopper of their household. Data analysis showed that four clusters were formed: *Recreational* (42%), *Minimalists* (27%), *Enthusiasts* (23%) and *Time-challenged* (8%). Each cluster has a unique set of preferences based on farmers' market attributes ranging from overall convenience to the presence of nearby stores. This information can be used to the benefit of market managers to increase profitability.

CHAPTER ONE INTRODUCTION

A farmers' market is defined as a common facility or area where several farmers/growers gather on a regular, recurring basis to sell a variety of fresh fruits and vegetables and other farm products directly to consumers (Burns and Johnson, 1996). Farmers' markets allow farmers to gain access to customers and generate revenue that may be the sole source of income for small and medium sized farmers. In recent years, there has been tremendous growth (Ragland and Tropp, 2009) in farmers' markets in the United States (U.S.) as well as several challenges (Oberholtzer and Grow, 2003). In Chapter One the latest study on the farmers' market industry is reviewed as well as challenges affecting profitability.

Overview of the Farmers' Market Industry

In 2009 the United States Department of Agriculture (USDA), Agricultural Marketing Service (AMS) published a report detailing the state of farmers' markets across the nation. The study was conducted to provide a benchmark on the growth of the farmers' market industry. A web-based survey was sent to farmers' market managers in May 2006 to obtain information on their market for the previous year, 2005. This study served as a follow up to the first national survey of farmers' markets conducted in 2000

(Payne, 2002). Approximately 1,292 farmers' market managers responded for a 34.5% response rate (Ragland and Tropp, 2009). Due to the extensive nationwide response of market managers, the USDA study represents the most recent, thorough and accurate information on farmers' markets.

In 2009, there were 5,274 registered farmers' markets in the United States (Ragland and Tropp, 2009). The number of U.S. farmers' markets grew 43% from 2000 to 2005. However, sales increased by 2.5% each year, showing the farmers' market industry is maturing (Ragland and Tropp, 2009). Markets were grouped into seven regions: Far West, Rocky Mountain, Southwest, North Central¹, Southeast, Mid-Atlantic, and Northeast. Reported sales varied across regions depending on factors such as size, location, and age of the market. In 2005, total annual sales for farmers' markets in the United States were \$1 billion and average annual sales were approximately \$242,500 (Ragland and Tropp, 2009). The North Central Region, which includes Indiana and Illinois, had average annual sales of \$155,000 (Ragland and Tropp, 2009).

Just under half (40%) of farmers' markets in the United States were established from 2000 to 2005 due to the widespread growth and popularity of farmers' markets (Ragland and Tropp, 2009). In the North Central Region, almost a quarter (24.6%) of markets were less than five years old and over a quarter (27.3%) were 20 years or older (Ragland and Tropp, 2009). Markets less than five years old were reported as having lower sales while markets between five and nine years of age saw an increase in sales.

¹ The North Central Region includes Indiana, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

Markets between 10 to 19 years of age saw a lag in sales while markets over 20 years of age saw sales increase (Ragland and Tropp, 2009).

Challenges Affecting Profitability

Without the direct access to consumers provided by farmers' markets, the revenue of many small and medium-size farmers would be threatened (Payne, 2002). Over 25% of farmers' market vendors depend on sales at a farmers' market as their sole source of income (Ragland and Tropp, 2009). Although the number of farmers' markets has grown, several issues still plague the industry and have been found to limit profitability. Some key limitations include poor locations, space requirements, number of customers, parking, market visibility, promotion and item availability (Oberholtzer and Grow, 2003). These limitations raise the question of how farmers' market managers can improve to increase profitability.

Consumer segmentation is a technique commonly used by traditional retail managers to classify customers based on needs, preferences, behaviors, and demographics. Consumer segmentation is important in overcoming challenges and developing new business strategies (Reynolds et al., 2002). Most research on farmers' market consumers has focused on demographics and behavioral characteristics (See Appendix A). Considering the state of the farmers' market industry, understanding consumer motivations for shopping at farmers' markets can provide useful information for market managers striving to establish successful markets or increase profits (Elepu, 2005). Ragland and Tropp (2009) found farmers' markets that took the time to understand their customers had higher sales than those that did not.

Therefore, the problem facing farmers' markets is the lack of information about consumer preferences. 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.

The remaining part of this thesis is organized into two distinct chapters, chapters two and three, followed by Appendices A through E. In chapter two, an evaluation of farmers' market consumer segments for Metropolitan cities in Indiana and Illinois is reviewed including a literature review, objectives, methodology, results, and discussion. In chapter three, results, discussion and implications of the study are reviewed. Appendix A is an extensive review of relevant literature. First, literature on farmers' market consumer behaviors, attitudes, willingness to pay, and demographics is summarized. Second, literature on previous consumer segmentation studies is summarized. In Appendix B, demographic and behavioral characteristics of farmers' market consumers in Micropolitan and Rural cities in Indiana and Illinois are reviewed and compared. In Appendix, C previous literature on consumer means-end decision making processes is examined. Appendix D is the consumer intercept survey used in the study (Chapter Two). Appendix E is the exemption letter from the Institutional Review Board approving the survey found in Appendix D.

CHAPTER TWO-ARTICLE ONE: AN EVALUATION OF CONSUMER SEGMENTS
FOR FARMERS' MARKET CONSUMERS IN INDIANA AND ILLINOIS

Abstract

In Spring 2005 and Fall 2009 consumer surveys were collected in Metropolitan cities in Indiana and Illinois to explore differences based on psychographic and behavioral characteristics of farmers' market consumers. This information is vital to market managers understanding of their customer base as a means to increase profits. 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. 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, 78% were female, 65.4% have a college or post-graduate degree, 55% have an annual income between \$20,000 and 74,999, 44% reported living in a two-person household and 73% identified themselves as being the primary shopper of their household. Data analysis showed that four clusters were formed: Recreational (42%), Minimalists (27%), Enthusiasts (23%) and Time-challenged (8%). Each cluster has 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 techniques toward each segment.

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 farmers' 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). Over 25% of farmers' market vendors depend on sales at a farmers' market as their sole source of income (Ragland and Tropp, 2009). Farmers' markets that take 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).

Although the number of farmers' markets is growing across the U.S., several issues have been found to limit profitability. Some limitations include poor location, lack of space, number of customers, parking, visibility of the market, promotion and items available at the market (Oberholtzer and Grow, 2003). These limitations have had a negative impact on profits which raises the question of how farmers' markets managers can address these factors that may limit profitability. Most research on farmers' market consumers has solely focused on demographics and behavioral characteristics. 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 managers 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.

Review of Literature

Consumer segmentation has been used in previous literature to help managers better understand their target markets. Most of these studies have focused on traditional retail stores such as malls and grocery stores (See Appendix A). Studies on farmers' market consumers have mostly focused on demographics and behaviors (See Appendix A) and little has been done on the segmentation of farmers' market consumers. In this section, previous literature is reviewed on farmers' market consumer demographics, retail consumer segmentation and farmers' market consumer segmentation.

Demographics of Farmers' Market Consumers

Disparities and similarities exist among studies on demographics of farmers' market consumers. Eight studies agreed that the typical farmers' market consumer is a middle aged, Caucasian female, living in a two person household with some form of post high school education (Kezis et al., 1998; Govindasamy et al., 1996; Govindasamy et al., 1998; Otto and Varner 2005; Onianwa et al., 2006; Zepeda and Li, 2006; Rainey and Vetter, 2009; Bond et al., 2009). In contrast, Adams and Adams (2008) reported



respondents were mostly female and had some form of post high school education, but were mostly under the age of 25. This disparity in age of the typical farmers' market consumer can most likely be attributed to the differences in city, state and or region in which data were collected.

Behavioral Characteristics of Farmers' Market Consumers

Four studies identified factors that influence farmers' market consumer patronage. The top four reasons consumers chose to shop at farmers' markets were: freshness, value, quality, and support of local farmers (Wolf et al., 2005; Kezis et al., 1998; Kirby, 2007; Rainey and Vetter, 2009). Other reasons for patronage included: availability of organic produce, price, entertainment, special events, economics benefits, market atmosphere, environmental benefits, and to shop at area stores (Wolf et al., 2005; Kezis et al., 1998; Kirby, 2007; Rainey and Vetter, 2009). Bond, Thilmany and Bond (2009) determined consumers whom were motivated to shop at farmers' markets because of quality products and to support local businesses shopped more frequently while consumers that only stated support of local businesses as a motivational factor were occasional shoppers.

Wolf et al., (2005) gathered data on the reasons consumers did not shop at farmers' markets and found that distance (14%) and inconvenient hours of operation (29%) were major deterrents to consumers. Similarly, Andreatta and Wickliffe (2002) found consumers believed distance (23%) and hours of operation (12%) were the top two disadvantages of farmers' markets. This information was consistent with Bukenya et al., (2007) where 56% of respondents said that location was an important influential factor on

deciding to visit and those who lived more than 30 minutes away from the market were less frequent shoppers than those who lived no more than five minutes away.

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, were the only study to segment farmers' market consumers. Five preference based segments were found for farmers' market consumers in urban areas in Illinois: Basic, Enthusiasts, Serious, Recreational and Low-involved (Elepu, 2005). 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 mall shoppers 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 a cluster analysis, six shopper types were identified: Basic, Apathetic, Destination, Enthusiasts, Serious, and Brand Seekers. "Basic Shoppers" placed the highest value on mall essentials and convenience and spent the least money. "Apathetic Shoppers" were

reluctant shoppers and did not enjoy any aspect of the shopping experience. “Destination Shoppers” spent the most money and time of all shopper types and were concerned with mall essentials and brand names. “Enthusiasts” were very involved shoppers and had the second highest amount of dollars and time spent. “Serious Shoppers” had a high preference for brand names and convenience and did not care about entertainment or events. 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 importance of store attributes and attitudes towards grocery shopping, consumers shopped for different reasons each time they shopped; therefore they could be categorized based upon reasons called “need states”. The term “need states” referred to the needs a shopper brings to a specific shopping trip which strongly influence purchasing decisions and 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). “Care for Family Shoppers” usually bought a wide variety of foods and were most likely to purchase

processed frozen or ready-made foods. “Smart Budget Shoppers” stuck to their budget and tried to get the most value for their money. “Discovery Shoppers” liked to browse, and try new things. “Efficient Stock-Up Shoppers” shopped for a large family and bought in bulk. “Specific Item Shoppers” shopped with the intent of looking for a certain item to satisfy an immediate need. “Bargain Hunting Among Stores Shoppers” went to various stores to get the lowest prices possible. “Reluctance Shoppers” were very apathetic towards the entire shopping experience and shopped out of necessity. “Small Basket Grab and Go Shoppers” shopped for specific items in between their normal shopping trip. “Immediate Consumption Shoppers” bought ready-to-eat and or processed foods to consume right away. This study helped retailers, specifically the Coca-Cola Company, make a beneficial connection with consumers.

Elepu (2005) used findings from the 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 based on cluster analysis including: Basic, Serious, Enthusiast, Recreational and Low-involved. Basic Shoppers valued convenience, friendly employees and clean atmosphere. “Serious Shoppers” placed importance on quality, availability of assorted produce, and convenience. “Enthusiasts” preferred quality produce, assorted products, organic products, events, and the shopping experience as whole (price not a factor). “Recreational Shoppers” placed importance on entertainment, events, browsing, and availability of nearby stores. “Low-involved Shoppers” were disinterested in all aspects of the shopping experience and usually came to the market with someone, but liked organic products and convenience.

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).

Reynolds et al., (2002) and Elepu (2005) both found preference based segments for consumers and had four segments in common: Basic, Apathetic, Enthusiasts, Serious and Low-involved (Apathetic). “Low-involved Shoppers”, called “Apathetic Shoppers” by Reynolds et al., (2002) were disinterested in all aspects of shopping and were not primary shoppers of food or non-food products in their household. “Enthusiasts” preferred amenities at the farmers’ market (Elepu, 2005). Similarly, Reynolds et al., (2002) found that “Enthusiasts” preferred auxiliary services and amenities provided at shopping malls. “Serious Shoppers” in both studies (Reynolds et al., 2002; Elepu, 2005) had no interest in entertainment and were more concerned about distance and available products. “Basic Shoppers” in both studies were not concerned with variety or auxiliary services (Reynolds et al., 2002; Elepu, 2005).

The study by The Coca-Cola Retailing Research Foundation (2004) was different from the previous studies (Reynolds, et al., 2002; Elepu, 2005) because it did not place consumers into concrete segments, rather, it found that consumers often are categorized based on immediate needs that are brought to each shopping trip. These needs called “need states” (Coca-Cola Retailing Research Foundation, 2004) changed with time and circumstance. The differences in consumer segmentation between all three studies can be attributed to different attributes available at the shopping outlet. In each study, consumer segmentation proved to be beneficial and provided managers an understanding of consumers. Based on these past studies, hypothesis one was formed.

H₁: Preference based segments exist for farmers' market consumers in Metropolitan areas in Indiana and Illinois.

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 (Appendix D). The survey was approved by the Institutional Review Board (IRB) (Appendix E). In Indiana, farmers' markets were selected from the Indiana AgroTourism Directory published by the Indiana State Department of Agriculture. The 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 to follow the selection method of a similar study examining consumer preferences for farmers' markets (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. The researcher visited each market from open to close of the market depending on hours of operation that varied by market.

Consumers were intercepted and asked to complete a survey (Appendix D). Surveys were completed on a voluntary, anonymous basis by farmers' market consumers present at each market who were willing to participate.

Thirteen of the survey questions for Indiana were extracted from a previous study (Elepu, 2005) on farmers' markets. 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 where the survey took place (survey market), 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 question 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). Question thirteen asked if the respondent spent more than intended or less than intended on the shopping trip. Question fourteen asked the likelihood of the respondent returning to the farmers market on a scale of one to five, where one meant "highly unlikely" and five meant "highly likely". Section three included questions fifteen through twenty-two and 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 (under 25, 25-34, 35-44, 45-54, 55-64, 65 and over); gender (male and female); education (some high school, high school graduate, some college, college graduate, post-graduate); ethnicity (Black; Caucasian; Asian; Hispanic; Native Hawaiian and Pacific Islander; American Indian and Other); household (number of individuals living in household); primary shopper (whether respondent is the primary shopper of food in their household or not) and income (less than \$20,000; \$20,000-49,999; \$50,000-74,999; \$75,000-99,999; over \$100,000). Nine survey questions were not homogeneous between the survey administered in 2005 and the survey administered in 2009 therefore they were not used for the purposes of this study. These questions include questions one, five, seven through eleven, thirteen and fourteen (Appendix D).

A multi-step cluster analysis method 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 consists of factor analysis, Ward's clustering method and K-means clustering. Factor analysis is a data reduction method that reduces the number of variables based on correlations among the 23 market attribute variables (Hair et al., 1998). A factor analysis was conducted in SPSS (The Statistical Package for Social Scientists) for data reduction of the Likert scale variables (SPSS 17.0, 2010). Component factors were then used to form consumer segments with Ward's hierarchical clustering method. The Ward's method forms initial clusters and minimizes variance within the clusters (Hair et al., 1998). Cluster centers were identified by performing the k-means

analysis method (Table 1.4). An Analysis of Variance (ANOVA) test was used along with k-means analysis to identify statistical significance of component factors.

Results

Overall Demographics of Sample

Table 1.1 shows the demographics of the total sample. Overall, 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 1.1). These findings were in accord 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.

Factor Analysis

Factor analysis was used to reduce the number of market attributes into component factors. There were 23 market attributes used in the survey (Appendix D). The component factors identified accounted for 64.2% of the variance (Table 1.2). Six component factors were named: trip experience, adjunct products, nearby stores, superior

produce, organic produce and variety (Table 1.3). 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. For three and five clusters, preferences for component factors were not distinct. In contrast, four clusters were distinct. Also, from the dendrogram, four clusters appeared to be the optimal solution (data not shown). Another technique used was to identify the number of clusters by identifying the point where the distance agglomeration coefficients changed drastically. 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 dendrogram 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 1.4). The clusters were given the following names: *Recreational Shoppers*, *Minimalists*, *Time-challenged Shoppers*, and *Enthusiasts*. ANOVA results indicated that each component factor was statistically significant (Table 1.5).

Recreational Shoppers were the largest consumer segment, accounting for 42 percent 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 1.6).

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 1.13). This segment also had the highest percentage of respondents that identified themselves as “post-graduates” at 42.6 % (Table 1.13). *Recreational Shoppers* placed value on nearby stores, superior products, organic products and variety based on positive standardized factor scores (Table 1.4). *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 four miles to the market, visited the market one time during the season, visited other markets less than once per season and spent \$17 per trip (Table 1.6). 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 1.13). These shoppers placed value on trip experience and superior products based on positive standardized factor scores (Table 1.4).

Enthusiasts accounted for 23 percent 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 1.13). Enthusiasts had a preference for trip experience, adjunct products, nearby stores, superior products, and organic products based on positive standardized factors (Table 1.4). Variety was not of importance to *Enthusiasts* (Table 1.4). *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 1.6).

Time-challenged Shoppers accounted for eight percent 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 1.6). *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 1.13). Nearby stores was the only component factor that was of importance to these shoppers based on positive standardized factor scores (Table 1.4). 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 only buy a few things from the farmers market and then complete the remainder of their shopping at other stores.

The chi-square test is a nonparametric test traditionally used to assess difference between samples (Hair et al., 1998). Chi-square tests were done to determine if consumer segments were distinguishable by demographics and behavioral characteristics.

Behavioral chi-square results indicate that 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 1.9).

Demographic chi-square results indicate that consumer segments were significantly different in age, education, household size, primary shopper status, income and ethnicity. Gender was the only demographic characteristic that was not statistically significant (Table 1.10).

Discussion

Hypothesis one was supported showing there were differences 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:

Recreational, Minimalists, Enthusiasts, and Time-challenged shoppers.

Recreational shoppers were the largest segment of consumers (42%).

Recreational consumers had a low average expenditure per visit, a high average distance traveled (Table 1.7), high average of visits to the survey market per season and a low average of visits to other markets per season (Table 1.8) 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. *Minimalists* had a high average expenditure per visit, a low average distance traveled (Table 1.7), low average of visits to the survey market per season and a low average of visits to other markets per season (Table 1.8). *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 1.7), high average of visits to the survey market per season and a high average of visits to other markets per season (Table 1.8). *Enthusiasts* were dedicated shoppers that enjoyed all aspects of the farmers' market shopping experience except variety. *Enthusiasts* had a high average expenditure per visit, a high average distance traveled (Table 1.7), high average of visits to the survey market per season and a low average of visits to other markets per season (Table 1.8). *Enthusiasts* spent the most, traveled the farthest, and visited the market more than any other segment.

Implications

Findings from this study will contribute to the existing literature on farmers' market consumers. Three conclusions can be drawn from this study. First, six constructs that can be used to measure why consumers decide to shop at farmers' markets have been identified: trip experience, nearby stores, adjunct products, superior products, organic products and variety. These constructs can be used in future research to measure why consumers decide to shop at farmers' markets. Second, four preference-based segments exists for Metropolitan farmers' market consumers in Indiana and Illinois: *Recreational*, *Minimalists*, *Enthusiasts*, and *Time-challenged*. Third, 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 it provides a basis for the development of promotional and marketing techniques. For instance, since nearby stores was an important factor for three of the four segments (*Enthusiasts, Recreational, and Time-challenged*) a new market manager may find it beneficial to consider proximity of the market to nearby stores when planning to start a market. An existing market manager may try to develop promotional strategies to attract consumers that visit the least, in this case *Minimalists*.

Table 1.1: 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 1.2: Total Variance Explained by Component Factors

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.889	25.603	25.603	5.889	25.603	25.603	4.582	19.924	19.924
2	3.51	15.259	40.862	3.51	15.259	40.862	3.666	15.94	35.863
3	1.773	7.707	48.569	1.773	7.707	48.569	2.212	9.619	45.483
4	1.393	6.057	54.627	1.393	6.057	54.627	1.712	7.443	52.925
5	1.155	5.024	59.65	1.155	5.024	59.65	1.309	5.69	58.616
6	1.049	4.56	64.21	1.049	4.56	64.21	1.287	5.595	64.21
7	0.953	4.141	68.352						
8	0.848	3.688	72.04						
9	0.824	3.585	75.625						
10	0.67	2.911	78.536						
11	0.629	2.735	81.27						
12	0.571	2.484	83.754						
13	0.516	2.246	86						
14	0.471	2.047	88.047						
15	0.452	1.965	90.012						
16	0.427	1.857	91.869						
17	0.358	1.557	93.426						
18	0.33	1.433	94.86						
19	0.304	1.322	96.181						
20	0.266	1.158	97.339						
21	0.23	1.001	98.34						
22	0.217	0.944	99.284						
23	0.165	0.716	100						

Extraction Method: Principal Component Analysis.

Table 1.3: Factor Loadings of Market Attributes

Attribute	Component					
	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
CLEANLINES S	.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 1.4: 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 1.5: ANOVA of Component Factors

Component	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
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 1.6: Behavioral Characteristics by Segment

Characteristic	<i>Recreational</i>	<i>Minimalists</i>	<i>Enthusiasts</i>	<i>Time-challenged</i>
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 1.7: Consumer Behavior Matrix-Average Spent and Distance Traveled

		Average Distance Traveled	
		<i>Low</i>	<i>High</i>
Average \$ Spent	<i>Low</i>	Time-challenged	Recreational
	<i>High</i>	Minimalists	Enthusiasts

Table 1.8: Consumer Behavior Matrix-Average Visits per Market

		Average Visits to Survey Market	
		<i>Low</i>	<i>High</i>
Average Visits to Other Markets	<i>Low</i>	Minimalists	Enthusiasts
	<i>High</i>	Recreational	Time-challenged

Table 1.9: 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%	
	\$21-40	17.40%	20.90%	23.70%	0.00%	83.00**
	\$>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

Table 1.10: Cross tabulation of Demographic Characteristics by Segment

Characteristic	Recreational			Minimalists	Enthusiasts	Time-challenged	Chi-square
	Male	Female	Under 25				
Gender	24.6%	13.6%	22.2%	46.2%	6.259		
	75.4%	86.4%	77.8%	53.8%			
Age	5.9%	2.3%	13.9%	15.4%			
	10.3%	6.8%	5.6%	23.1%			
	25.0%	18.2%	16.7%	15.4%	28.184*		
	29.4%	27.3%	2.8%	23.1%			
	20.6%	27.3%	50.0%	15.4%			
	8.8%	18.2%	11.1%	7.7%			
Education	0%	0%	6%	0%			
	5.9%	15.9%	8.3%	0%			
	22.1%	18.2%	41.7%	23.1%	21.136*		
	29.4%	29.5%	16.7%	46.2%			
	42.6%	36.4%	27.8%	30.8%			
	7.4%	9.3%	8.3%	7.7%			
Ethnicity	85.3%	83.7%	80.6%	84.6%			
	1%	5%	3%	0%			
	0%	0%	2.8%	7.7%	14.43**		
	3%	2%	0%	0%			
	1.5%	0%	0%	0%			
	1.5%	0%	5.6%	0%			
	25.0%	20.5%	8.6%	23.1%			
	42.6%	47.7%	42.9%	23.1%			
	13.2%	9.1%	20.0%	23.1%	18.754*		
	4.4%	6.8%	5.7%	15.4%			
1.5%	0%	2.9%	0%				
Primary Shopper	72.1%	81.8%	69.4%	53.8%	4.375*		
	27.9%	18.2%	30.6%	46.2%			
Income	9.2%	8.6%	23.3%	30.8%			
	29.2%	34.3%	17.6%	7.7%			
	32.3%	25.7%	29.4%	23.1%	21.756*		
	16.9%	8.6%	8.8%	38.5%			
	12.3%	22.9%	20.6%	0%			

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

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 | — Presence of flowers/shrubs/herbs |
| — Loud Music | — Presence of meat and poultry |
| — Quality | — Presence of processed food products (i.e., cheese, jellies, jam, etc.) |
| — Food safety | — Presence of food for on-site consumption |
| — Presence of locally grown produce | — Social events/entertainment |
| — Product variety | — Presence of organic produce |
| — Price of products | — Physical appearance of market |
| — Customer service | — Method of payment at market |
| — Accessibility of market | — Presence of nearby grocery stores |
| — Availability of parking space | — Presence of nearby non-grocery stores |
| — Distance to market | — Other (please specify) |
| — Non-local products | _____ |
| — Cleanliness of market | |
| — Hours of operation of market | |
| — Presence of crafts | |

Figure 1.1: Likert Scale Question from Survey

CHAPTER THREE: DISCUSSIONS AND IMPLCATIONS

Preference based consumer segments exist for farmers' market consumers in Metropolitan cities in Indiana and Illinois. The segments found were *Recreational*, *Minimalists*, *Enthusiasts* and *Time-challenged*. Dividing consumers into segments based on preferences is efficient for market managers because it gives them further insight into the needs and expectations of their consumers that can lead to the formation of specific marketing strategies and increased profitability. In Chapter four, a summary of the study, results, weakness and implications for further research will be reviewed.

The objective of this research was to identify preference based segments in farmers' market consumers using self-reported psychographic, behavioral, and demographic characteristics of Metropolitan consumers in Indiana and Illinois.

Overall, respondent demographics showed consumers were Caucasian females, living in a two person household with some form of post high school education which was in accord with previous literature (Kezis et al., 1998; Govindasamy et al., 1996; Govindasamy et al., 1998; Otto and Varner 2005; Onianwa et al., 2006; Rainey and Vetter, 2009; Zepeda and Li, 2006; Bond et al., 2009).

Factor analysis is a data reduction method that reduces the amount of variables based on correlations between variables (Hair et al., 1998). Factor analysis was used to

reduce the number of market attributes. Factor loadings of 0.7 or higher were considered to represent high level of correlation between the variable and the component. Based on factor loadings, six components were named accounting for 64 percent of the total variance (Table 1.2): Trip Experience, Adjunct Products, Nearby Stores, Superior Produce, Organic Produce and Variety (Table 1.3). Explanation of the components is as follows:

Trip Experience. Five market attributes loaded highly on this component factor. These include service, access, cleanliness, hours of operation and appearance.

Adjunct Products. This component factor was characterized by four market attributes, crafts, flowers, processed food, and snacks.

Nearby Stores. Two market attributes comprise this component factor, nearby grocery store and nearby non-grocery stores.

Superior Produce. This component factor was also comprised of two market attributes, which are freshness and quality.

Organic Products. Organic was the only market attribute that loaded highly on this component factor.

Variety. Variety was the only market attribute that loaded highly on this component factor.

ANOVA F-tests for each component indicate how well the component helps to discriminate between clusters. An Analysis of Variance (ANOVA) showed that each component was statistically significant (Table 1.5).

The Ward's cluster analysis method, a hierarchical clustering technique, can be used to identify outliers establish the number of clusters (Hair et al., 1998). One outlier

was identified by the Ward's method 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 number of clusters was chosen by identifying the point where the distance between agglomeration coefficients changed drastically. In this case, it was at observation 160 which was subtracted from the number of observations (164) for a total of four clusters.

Final cluster centers were obtained by the use of k-means analysis. The four clusters were named based on mean component values and behavioral characteristics. The clusters were named: *Recreational* (42%), *Minimalists* (27%), *Enthusiasts* (23%) and *Time-challenged* (8%).

Recreational Shoppers were the largest consumer segment, accounting for 42 percent of the total sample. This segment traveled an average of 10 miles to the market, visited the market an average of three times during the season, visited other markets an average one time per season and spent an average of \$16 per trip (Table 1.6).

Recreational Shoppers placed value on nearby stores, superior produce, organic products, and variety. *Recreational Shoppers* went the market to enjoy the atmosphere of the market and browsing, but not interested in any extra amenities the market had to offer such as events. *Recreational Shoppers* were similar to "Discovery Shoppers" (Coca-Cola Retailing Research Council, 2004) and "Recreational Shoppers" (Elepu, 2005).

"Discovery Shoppers" typically browsed supermarkets for new products (Coca-Cola Retailing Research Foundation, 2004). "Recreational Shoppers" were like *Recreational Shoppers* in that they preferred the presence of nearby stores and were not time pressed (Elepu, 2005).

Minimalists were the second largest segment group, consisting of 27% of the total sample. On average, *Minimalists Shoppers* traveled four miles to the market, visited the market one time during the season, visited other markets less than once per season and spent \$17 per trip (Table 1.6). 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 1.13). This segment also had the lowest percentage of males (13.6%) and the highest percentage of primary shoppers (81.8%) of any other segment (Table 1.13). These shoppers placed value on trip experience and superior produce (Table 1.4). *Minimalists* were most like “Basic Shoppers” (Reynolds, et al., 2002; Elepu, 2005). Both *Minimalists* and “Basic Shoppers” had a high preference for superior produce, convenience or overall trip experience and had no preference for variety, or nearby stores (Reynolds, et al., 2002; Elepu, 2005).

Time-challenged Shoppers accounted for eight percent 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 1.6). *Time-challenged Shoppers* were mostly female (53.8%), between the ages of 25-43 and 45-54 (23.1 %), 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 \$20,000 and \$49,000 (34.6%) (Table 1.13). In this segment, the percentage of primary shoppers (53.85) matched the percentage of females, likewise, the percentage of non-primary shoppers (46.2%) matched the percentage of males (Table 1.13). Nearby stores was the

only component factor that was of importance to these shoppers (Table 1.4). The presence of nearby stores is 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 only buy a few items from the farmers market and then continue shopping at other nearby stores. *Time-challenged Shoppers* are comparable to "Serious Shoppers" (Reynolds, et al., 2002; Elepu, 2005). "Serious Shoppers" did not place any value on any auxiliary services at the shopping mall or farmers' market and were often time pressed because of busy schedules (Reynolds, et al., 2002; Elepu, 2005).

Enthusiasts accounted for 23 percent 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 (47.3%), with an annual income between \$50,000 and \$74,999 (29.4%), and had completed "some college" (41.7%) (Table 1.13). *Enthusiasts* had a preference for trip experience, adjunct products, nearby stores, superior products, and organic products (Table 1.4). Variety was not of importance to *Enthusiasts* (Table 1.4). *Enthusiasts* were generally very dedicated and loyal to the market and love 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 (1.6). *Enthusiasts* are analogous with "Enthusiasts" (Reynolds et al., 2002; Elepu, 2005). Reynolds et al., (2002) and Elepu (2005) identified "Enthusiasts" as high and frequent spenders, who preferred auxiliary services offered by the mall and farmers' market, respectively.

Chi-square tests were done to distinguish segments by demographic and behavioral characteristics. The Chi-square test results indicate that consumer segments

were significantly different in age, education, household size, primary shopper status, income (at $p=.05$) and ethnicity (at $p=.10$) (Table 1.13). Gender was the only demographic characteristic that was not statistically significant (Table 1.13). Behavioral chi-square results indicate that consumer segments differed in average amount spent per visits (Table 1.9), frequency of visits to the survey market per season (Table 1.10), frequency of visits to other markets per season (Table 1.11), and distance traveled to the market per trip (Table 1.12).

Three conclusions can be drawn from this study. First, six constructs that can be used to measure why consumers decide to shop at farmers' markets have been identified: trip experience, nearby stores, adjunct products, superior products, organic products and variety. These constructs can be used for further research in the segmentation of farmers' market consumers. Second, four preference-based segments exist for Metropolitan farmers' market consumers in Indiana and Illinois: *Recreational*, *Minimalists*, *Enthusiasts*, and *Time-challenged*. Third, there are differences in preferences, behavioral characteristics and demographics between segments. Farmers' market managers, specifically in Metropolitan cities in Indiana in Illinois or any city with comparable demographics, can use this information about farmers' market consumers to their advantage. This information can be used to establish effective new markets or marketing strategies can be developed for existing markets based on each segment's preferences, behavioral trends and or demographics.

It is important to note that there were several limitations to the study. Limitations were mostly associated with the seasonality of farmers' markets, hours of operation, length of survey and weather. First, outdoor markets were subject to inclement weather

and hindered the intercept survey process. Of the nine markets used in this study, two were indoor markets. Second, since the majority of farmers' markets are not year-round, data collection was time sensitive. Most markets close for the season in October and since the Indiana cities were visited toward the end of the season, meeting each scheduled market visit was imperative. Third, markets visited on a weekday afternoon resulted in fewer surveys because of the low numbers of patrons and the fact that most patrons were stopping at the market on the way home from work and were in a hurry. Length of the survey also acted as a deterrent for those respondents that were in a hurry. Many respondents left questions on the survey blank and consequently, their surveys had to be discarded. The number of discarded surveys had a negative effect on the total sample size.

The study had two weaknesses. First, the study only captured the responses of those who were at the market when the intercept study took place and therefore did not capture other potential customers. Second, insufficient surveys were collected in Rural and Micropolitan cities therefore segments were not formed (see Appendix B). Capturing a larger sample on farmers' market consumers could be more representative of consumers living in respective cities.

Future research should focus on the differences in consumer segments between Rural, Micropolitan and Metropolitan farmers' markets in order to assess the differences in consumer segments depending on population category. Research should also focus on the means-end decision making process of farmers' markets consumers (See Appendix C). Understanding the means-end decision making process would facilitate a deeper understanding of farmers' market consumers by focusing on the values, and goal oriented

behavior that explain patronage and consumption trends from motivation to action.

Further research in these areas will hopefully serve as means for continuous growth and sustainability of the farmers' market industry in the U.S.

LIST OF REFERENCES

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- Adams, D. C., & Adams, A. E. (2008). Availability, Attitudes and Willingness to Pay for Local Foods: Results of a Preliminary Survey. In *2008 Annual Meeting, July 27-29, 2008, Orlando, Florida*.
- Andreatta, S., & Wickliffe, W. (2002). Managing farmer and consumer expectations: A study of a North Carolina farmers market. *Human Organization, 61*(2), 167–176.
- Bagozzi, R. P., & Dholakia, U. (1999). Goal setting and goal striving in consumer behavior. *The Journal of Marketing, 19*–32.
- 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).
- Botschen, G., Thelen, E. M., & Pieters, R. (1999). Using means-end structures for benefit segmentation. *European Journal of Marketing, 33*(1/2), 38–58.
- Brunso, K., Scholderer, J., & Grunert, K. G. (2004). Closing the gap between values and behavior—a means–end theory of lifestyle. *Journal of Business Research, 57*(6), 665–670.
- Bukenya, J. O., Mukiibi, M. L., Molnar, J. J., & Siaway, A. T. (2007). Consumer purchasing behaviors and attitudes toward shopping at public markets. *Journal of Food Distribution Research, 38*(2).
- Burns, A., & Johnson, D. N. (1996). Farmers' Market Survey Report. *US Department of Agriculture, Agricultural Marketing Service, Transportation and Marketing Division, Wholesale and Alternative Markets Program*.
- Claeys, C., Swinnen, A., & Vanden Abeele, P. (1995). Consumer's means-end chains for. *International Journal of Research in Marketing, 12*(3), 193–208.
- Coca-Cola Retailing Research Council. (2004) "The World According to Shoppers: Different Days, Different Needs." Study Conducted by TNS NFO, 41 Pp.

- Darby, K., Batte, M. T., Ernst, S., & Roe, B. (2006). Willingness to pay for locally produced foods: A customer intercept study of direct market and grocery store shoppers. *American Agricultural Economics Association*, 1–31.
- 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., Zurbruggen, M., Italia, J., Adelaya, A., Nitzsche, P., & VanVranken, R. (1998). *Farmers Markets: Consumer Trends, Preferences and Characteristics*, New Jersey Agricultural Experiment Station.
- Gutman, J. (1982). A means-end chain model based on consumer categorization processes. *The Journal of Marketing*, 46(2), 60–72.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (n.d.). Multivariate data analysis. 1998. *Upper Saddle River*.
- Jekanowski, M. D., Williams, D. R., & Schiek, W. A. (2000). Consumers' willingness to purchase locally produced agricultural products: an analysis of an Indiana survey. *Agricultural and Resource Economics Review*, 29(1), 43–53.
- 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.
- Kirby, L. (2007). A Survey of shoppers at the western north carolina farmers' market. *Appalachian Sustainable Agriculture Project*, 1-6.
- 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/b07-01.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.*
- Payne, T. (2002). US Farmers' Markets 2000: A Study of Emerging Trends. *Journal of Food Distribution Research*, 33(1), 173–175.
- Pieters, R., Baumgartner, H., & Allen, D. (1995). A means-end chain approach to consumer goal structures. *International Journal of Research in Marketing*, 12(3), 227–244.
- Pitts, R. E., & Woodside, A. G. (1984). *Personal values and consumer psychology*. Lexington Books Lexington, MA.
- 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.pdf>
- Rewerts, A., & Hanf, J. H. (2009). Values as driving forces of culture-specific consumption patterns—an empirical investigation of wine consumers.
- Reynolds, K. E., Ganesh, J., & Lockett, M. (2002). Traditional malls vs. factory outlets: comparing shopper typologies and implications for retail strategy. *Journal of Business Research*, 55(9), 687–696.
- Reynolds, T. J., & Perkins, W. S. (1987). Cognitive differentiation analysis: a new methodology for assessing the validity of means-end hierarchies. *Advances in Consumer Research*, 14(1), 109–113.
- Rokeach, M. (1979). From individual to institutional values: With special reference to the values of science. *Understanding human values: Individual and societal*, 47–70.
- SPSS for Windows, Release 17.0. 2010. Chicago: SPSS, Inc.
- Valette-Florence, P., & Jolibert, A. (1990). Social values, AIO, and consumption patterns: Exploratory findings. *Journal of Business Research*, 20(2), 109–122.

- Varian, H. R. "*Microeconomic Analysis*." 3rd edition. New York: W. W. Norton & Company, Inc., 1992.
- Vinson, D. E., Scott, J. E., & Lamont, L. M. (1977). The role of personal values in marketing and consumer behavior. *The Journal of Marketing*, 41(2), 44–50.
- Walker Jerry, C., & Olson, A. (1991). Means-end chains: Connecting products with self. *Journal of Business Research*, 22(2), 111–118.
- Wolf, M. M., Spittler, A., & Ahern, J. (2005). A Profile of Farmers' Market Consumers and the Perceived Advantages of Produce Sold at Farmers' Markets. *Journal of Food Distribution Research*, 36(01).
- Zepeda, L., & Li, J. (2006). Who Buys Local Food? *Journal of Food Distribution Research*, 37(3), 1.

APPENDICES

Appendix A. Extensive Literature Review

Farmers' markets serve as an opportunity for producers to increase profits by selling directly to consumers, while consumers benefit by having the opportunity to purchase quality goods at a low price. Understanding patronage behavior is one of the keys to success for today's managers to better develop marketing strategies (Reynolds et al., 2002). This section reviews previous studies on consumer behaviors, attitudes, willingness to pay, demographics, consumer segmentation and means-end relationships.

Farmers' Market Consumer Behavior Patterns

Gaining insight into farmers' market consumer behavior is vital for the economic sustainability of farmers' markets (Govindasamy et al., 1998). Eight studies have examined farmers' market consumer behavior patterns such as repeat patronage, consumption trends, and preference for market attributes.

There is a trend of repeat patronage among farmers' market consumers. Two studies examined frequency of visits at farmers' markets. One study focused on the correlation between frequency of visits and the amount spent each visit and found 45 percent of consumers in New Jersey visited a farmers' market at least once a week and 46 percent of said their patronage has increased over time (Govindasamy et al., 1998).

At an Iowa farmers' market, consumers shopped an average of 13 times per season which was attributed to consumers being satisfied with their shopping experience (Otto and Varner, 2005).

Consumer purchases at farmers markets tend to weigh more heavily towards fruits and vegetables than any other products sold at farmers markets (Adams and Adams, 2008; Otto and Varner, 2005). Two studies focused on buying trends at farmers' markets. Otto and Varner (2005) found over 80 percent of consumers purchased fruits and vegetables. Adams and Adams (2008) concluded 62 percent of consumers purchased fruits and vegetables when shopping at a farmers' market and the fruits and vegetables most frequently bought were peaches, apples, melons, blueberries, strawberries, watermelon, tomatoes, peppers, snap beans, broccoli vegetables and carrots.

Andreatta and Wickliffe (2002) concluded that consumers do not engage in "one-stop shopping" at farmers' markets, rather they buy from more than one vendor at the market. Eighty-nine percent of consumers surveyed purchased items from three to five vendors per visit and 38% purchased items from more than five vendors per visit. These findings indicated that variation in purchasing between vendors is important to farmers' market consumers (Andreatta and Wickliffe, 2002).

Wolf et al., (2005) compared farmers' market shoppers and non- farmers' market shoppers purchasing behaviors. Results showed consumers that shop at farmers' markets and consumers that shop at supermarkets both spent an average of \$25 per visit and shopped approximately six times per month. This study also assessed whether farmers' market shoppers purchased produce from supermarkets on occasion. Ninety-six percent of the farmers' market shoppers revealed they purchased produce from a supermarket within the last year and 94% stated that they purchased produce from a supermarket in the last month (Wolf et al., 2005). These results are in accord with a study that showed

farmers' market consumers spend 87% of their food budget at venues other than farmers' markets (Kirby, 2007).

Motivations

Four studies focused on the reasons consumers choose to shop at farmers' markets and agreed the top four reasons were: freshness, value, quality, and support of local farmers (Wolf et al., 2005; Kezis et al., 1998; Kirby, 2007; Rainey and Vetter, 2009). Other reasons included: availability of organic produce, price, entertainment, special events, economics benefits, market atmosphere, environmental benefits, and to shop at area stores (Wolf et al., 2005; Kezis et al., 1998; Kirby, 2007; Rainey and Vetter, 2009). Bond et al., (2009) conducted a study to determine the difference in motivations for consumers who always shopped at direct markets versus those who shopped at direct markets occasionally and found consumers whom stated quality of products and support of local businesses as motivations to shop frequent shoppers, while consumers that only stated support of local businesses as a motivational factor were occasional shoppers.

On the other hand, Wolf et al., (2005) gathered data on the reasons consumers do not shop at farmers' markets and found that distance (14%) and inconvenient hours of operation (29%) were major deterrents to consumers. Similarly, Andreatta and Wickliffe (2002) found that consumers believed distance (23%) and hours of operation (12%) were the top two disadvantages of farmers' markets. This information is consistent with the findings of Bukenya et al., (2007) where 56% of respondents said that location was an important influential factor on deciding to visit and those who lived more than 30 minutes

away from the market were less frequent shoppers than those who lived no more than 5 minutes away.

Motivations and deterrents for farmers' market consumers appear to be homogenous based on previous studies. Thus, it would be beneficial for market managers to take these factors into consideration when evaluating their target market.

Willingness to Pay

Four studies focused on farmers' market consumer willingness to pay and found consumers were willing to pay more for local food. Adams and Adams (2008) conducted an intercept survey of farmers' market customers in Gainesville, Florida to identify willingness to pay for local foods. Thirty-one percent of respondents stated they would be willing to pay up to 1/3 to 2/3 more than \$1.00 for local food, 25.81% of respondents were willing to pay between 2/3 and 1 times more than \$1.00, and 10.75% of respondents were willing to pay over two times as much for local food at farmers' markets.

Similarly 80% of consumers at a North Carolina farmers' market indicated they would be willing to pay \$1.00 or more for a product at a farmers' market that costs \$1.00 at a supermarket (Andreatta and Wickliffe, 2002). Darby et al., (2006) conducted a willingness to pay intercept study of direct market consumers. Respondents were willing to pay an average of \$1.17 more if the term "harvested yesterday" was displayed on a packaging label. Consumers were also willing to pay up to \$.80 more for local berries.

Kezis et al., (1995) conducted a study of Maine farmers' market consumers and found 72% of consumers were willing to pay up to 17% more for produce found at the

farmers' market than produce found at a supermarket. These findings indicate that price is not a determining factor to most consumers deciding to shop at farmers' markets and most farmers' market consumers in this study were not bargain shoppers (Kezis et al., 1995).

Demographics

Disparities and similarities exist between studies on demographics of farmers' market consumers. Nine studies focused on age, income, and length of residency as influential factors in farmers' market patronage. These studies agreed the typical farmers' market consumer is a middle aged, Caucasian female, living in a two person household with some form of post high school education (Kezis et al., 1998; Govindasamy et al., 1996; Govindasamy et al., 1998; Otto and Varner 2005; Onianwa et al., 2006; Rainey and Vetter, 2009; Zepeda and Li, 2006; Bond et al., 2009). In contrast, Adams and Adams (2008) reported respondents were also mostly female and had some form of post high school education, but were mostly under the age of 25. This disparity in the age of typical farmers' market consumers can most likely be attributed to the differences in city, state and or region in which data was collected. Employed farmers' market consumers tend to consistently represent over half of the sample. Kezis et al., (1998) analyzed employment levels of farmers' market consumers in Maine and found 64% of female respondents were employed, 14% were retired, 13% were students, and 9% were unemployed. Of the males surveyed, 59% were employed, 14% were unemployed, 27% were students, and none were unemployed. Likewise, over half of farmers' market consumers in California

were employed full time (59%), 17% were employed part-time and 24% were unemployed (Wolf et al., 2005).

Jekanowski et al., (2000) surveyed 320 Indiana farmers' market customers to identify demographic characteristics that lead customers to prefer locally produced foods. Household income and length of residency in Indiana were influential demographic factors. The average household income was between \$25,000 and \$45,000 and the average length of residency was between 11 and 20 years. Zepeda and Li (2006) found households that had one or more adult significantly increased the probability of buying food at local farmers' markets by 5%.

Consumer Segmentation

For the purpose of this study, consumer segmentation is a technique used to put consumers into groups based on factors such as consumption trends, behaviors, or preferences. Consumer segmentation has been used in three studies by dividing consumers into groups based on behaviors and preferences (Elepu, 2005; The Coca-Cola Retailing Research Foundation, 2004; Reynolds et al., 2002). Two studies focused on consumers of retail shopping outlets (The Coca-Cola Retailing Research Foundation, 2004; Reynolds et al., 2002). One study that focused on farmers' market consumer segmentation was based on the consumer segmentation studies of retail shopping outlets (Elepu, 2005). Findings from three these studies are detailed below.

Reynolds et al., (2002), focused on developing retail shopper types and determining the difference between the attitudes and preferences of traditional mall shoppers versus factory outlet mall shoppers. Six shopper types were identified: Basic,

Apathetic, Destination, Enthusiasts, Serious, and Brand Seekers. *Basic* shoppers placed the highest value on mall essentials and convenience and spent the least money.

Apathetic shoppers are reluctant and do not enjoy shopping. Destination shoppers spent the most money and time of all shopper types and were concerned with mall essentials and brand names. Enthusiasts are very involved shoppers and had the second highest amount of dollars and time spent. Serious shoppers had a high preference for brand names and convenience and did not care about entertainment or events. All shopper type descriptions were similar for traditional mall and factory outlet malls except for the Brand Seekers category 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 enjoy the shopping experience.

According to the Coca-Cola Retailing Research Council of North America (2004), consumers can be categorized into different segments based on their need states or purpose for shopping. Consumers shop for different reasons each time they shop and can be categorized based upon these reasons as “need states”. There were nine consumer segments in this study: 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). The Care for Family Shoppers segment usually buys a wide variety of foods and are most likely to purchase processed, frozen, or ready-made foods because those with large families tend to look for convenient and easy to make meals. Smart Budget Shoppers stick to their budget and try to get the most value for their money. Discovery Shoppers like to browse, and try new things. Efficient Stock-Up Shoppers buy for a large family

and buy in bulk. Specific Item Shoppers tend to go into a store looking for a certain item to satisfy an immediate need. Bargain Hunting Among Stores Shoppers go to various stores to get the lowest prices possible. Reluctance Shoppers are very apathetic towards the entire shopping experience and shop out of necessity. Small Basket Grab and Go Shoppers are usually shopping for specific items in between their normal shopping trip. Immediate Consumption Shoppers buy ready-to-eat and or processed foods to consume right away.

The most recent study (Elepu, 2005) used the consumer segmentation concept from the two previous studies to identify segments for farmers' market consumers in Chicago, Illinois suburbs. Elepu (2005) identified five consumer segments of farmers' market consumers in Illinois. The segments were: Basic, Serious, Enthusiast, Recreational and Low-involved. Basic Shoppers valued convenience, friendly employees and a clean atmosphere. Serious Shoppers placed importance on quality, availability of assorted produce, and convenience. Enthusiasts preferred quality produce, assorted products, organic products, events, and the shopping experience as a whole. Recreational shoppers placed importance on entertainment, events, browsing, and availability of nearby stores. Apathetic shoppers were disinterested in all aspects of the shopping experience and usually came to the market with someone, but liked organic products and convenience. Overall, consumers were Caucasian, female, mostly 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 household (Elepu, 2005).

Conclusion

Previous literature has focused on behavior patterns, consumption trends, attitudes and demographics of farmers' market consumers. Literature suggests that farmers' markets are growing in popularity and in number across the United States and the typical farmers' market consumer is an educated Caucasian female living in a two person household. The top reasons consumers shop at farmers' markets are: freshness, value, quality, and support of local farmers (Wolf et al., 2005; Kezis et al., 1998; Kirby, 2007; Rainey and Vetter, 2009). However, few studies have focused on consumer motivations for shopping farmers' markets or lifestyle and shopping needs, which differ among consumer groups (Darden and Ashton, 1974).

Appendix B. An Evaluation and Comparison of Rural and Micropolitan Consumers' Demographic and Behavioral Characteristics

Introduction

Due to an insufficient number of surveys collected in the Rural and Micropolitan cities, distinct clusters could not be formed. In Appendix B demographic and behavioral characteristics will be reviewed as well as consumer preferences of Rural, Micropolitan and Metropolitan consumers (Table B.1). Rural cities included in this study were Rochester, IN; Rensselaer, IN and Paxton, IL with populations of 6,457; 5,561; and 4,521, respectively. Micropolitan cities were Michigan City, IN and West Lafayette, IN with populations of 32,405 and 30,847, respectively.

Rural Consumer Demographics and Behavioral Characteristics

For the rural study, 44 surveys were collected. Rural consumer demographics are shown in Table B.1. Overall, Rural consumers were Caucasian (97.1%), female (77.1%), primary shoppers of food (91.4%), college graduates (28.6 %), between the ages of 45 and 54 (34%), with a two person household (49%) and annual income between \$20,000 and \$49,000 (41%). A factor and cluster analysis were both performed on the Rural data but no distinct differences in preferences among rural consumers were found; therefore clusters could not be formed. Based on the cluster analysis, Rural consumers are all Basic Shoppers. Consistently, these consumers preferred quality, freshness, safety, local products, variety, access, cleanliness and appearance. Rural consumers spent an average of \$13 per visit, attended the market an average of 11 times in the season, and traveled an average of seven miles to the market (Table B.2).

Micropolitan Consumer Demographics and Behavioral Characteristics

Micropolitan cities surveyed in this study were: West Lafayette, IN and Michigan City, IN. A total of 32 surveys were collected. Micropolitan consumer demographic information is depicted in Table B.1. Overall, Micropolitan consumers were Caucasian (96%), female (83%), primary shoppers of food (74%), college graduates (39%), between the ages of 45 and 54 (35%), with a two person household (52%) and an annual income between \$50,000 and \$74,999 (29%). A factor analysis and cluster analysis was also performed on the Micropolitan data but no distinct differences among Micropolitan consumers were found. Based on the cluster analysis, Micropolitan consumers are all Basic Shoppers. These shoppers had a preference for quality, freshness, local products, variety, food safety, and distance. On average, Micropolitan consumers spent \$25 per visit, attended the market 10 times and traveled seven miles to the market (Table 2).

Conclusion

For rural and Micropolitan data collected, clusters were not distinct. For rural consumers, there was a consistent preference for freshness, quality, safety, local products, and variety according to their preference ratings for market attributes shown in the cluster analysis. On the other hand, Micropolitan consumers consistently preferred accessibility, distance, freshness, quality, safety, local products and variety also indicated by preference ratings for market attributes shown in the cluster analysis. Therefore, the only difference in preferences between Rural and Micropolitan farmers' market consumers was

the Micropolitan farmers' market consumer's preference for accessibility and distance. This could be attributed to the larger size of Micropolitan cities compared to the Rural cities. Rural consumers spent an average of \$12 less than Micropolitan consumers. Rural consumers had the lowest income making between \$20,000 and \$49,000 per year and Micropolitan and consumers making between \$50,000 and \$74,999 per year.

The failure for both populations to form clusters can be attributed to 1) the sample was not large enough for either Rural or Micropolitan to make adequate clusters or 2) consumers in each population category tend to have the same preferences for farmers' market attributes. Many Rural and Micropolitan farmers' markets are small and basic because of the population they serve, therefore consumers in these cities may not be used to activities such as concerts or cooking demonstrations nor do they need to worry about attributes such as parking.

Future research should focus on capturing a larger sample of farmers' market consumers from Rural and Metropolitan areas. Researchers should also do their best to make sure surveys are fully completed so that all respondents can be included in the segmentation process.

Table B.1 Consumer Demographic Characteristics by Population Category

Characteristics	Rural	Metropolitan
Gender		
Male	22.9%	17.4%
Female	77.1%	82.6%
Age		
Under 25	5.7%	0%
25-34	5.7%	4.3%
35-44	2.9%	21.7%
45-54	34.3%	34.8%
55-64	25.7%	17.4%
65 and over	25.7%	21.7%
Education		
Some high school	0%	0%
High school graduate	20.0%	4.3%
Some college	25.7%	26.1%
College graduate	28.6%	39.1%
Post-graduate	25.7%	30.4%
Ethnicity		
Black	0%	5%
Caucasian	97.1%	95.5%
Asian	0%	0%
Hispanic	2.9%	0%
Native Hawaiian Pacific Islander	0%	0%
American Indian	0%	0%
Other	0%	0%

Table B.1 Consumer Demographic Characteristics by Population Category (Continued)

Characteristics	Rural	Metropolitan
Household		
1	18%	17%
2	48.5%	52.2%
3	18.2%	13.0%
4	12.1%	8.7%
5	0%	4.3%
6	0%	4%
7	3%	0%
Primary Shopper		
Yes	91.4%	73.9%
No	8.6%	26.1%
Income		
Less than \$20,000	11.8%	14.3%
\$20,000-49,000	41.2%	23.8%
\$50,000-74,999	26.5%	28.6%
\$75,000-99,999	14.7%	23.8%
\$100,000 and over	5.9%	9.5%

Table B.2 Behavioral Characteristics by Population Category

<i>Characteristic</i>	Rural	Micropolitan
Average Money Spent(Dollars)	\$11	\$25
Average Number of Visits to Market	9	10
Average Distance Traveled(Miles)	6	7

Appendix C. Means-End Decision Making Process

Previous literature indicates the importance of understanding consumer's decision making processes by use of a means end model. A means end model is a hierarchy that depicts how a consumer reaches a certain goal and why they are motivated to reach the goal. This study was not able to evaluate consumer means-end decision making processes therefore, Appendix C details previous literature on means-end models to provide information for future research.

Introduction to the Means-End Model

The basis of the Means-End theory is that an individual makes decisions based on perceived consequences and or values. Consumer means-end models are hierarchal systems based on theory that consumers choose products or services based on an expected outcome (Gutman 1977; Reynolds and Perkins). The term "means" refers to any action, happening or circumstance that has the potential to result in a specific outcome (Gutman, 1982). The desired outcome, also called an "end" is a valued state of being (Gutman, 1982) such as success, happiness, or better health. Means-End models depict consumer's thought processes about product or service attributes and consequences, as well as the desired values and goals the consumer wishes to satisfy (Gutman, 1997). Many means-end models hold value and goal oriented structures at the top of the hierarchy, whereas others hold knowledge of product attributes at the top of the hierarchy and values at the bottom. The difference is categorized into "bottom-up" and "top-down" processing routes (Brunso et al., 2003). In the bottom-up process, knowledge

of a product and its inherent benefits or consequences leads consumers into a purchasing decision. Inversely, the top-down process holds that decisions are goal oriented and goals are the product of personal values (Brunso et al., 2003 Pitts and Woodside, 1984).

Pieters et al., 1995 divided the Means-End model into three levels: super-ordinate goals, motivations, and subordinate goals. Super-ordinate goals are the motivations, subordinate goals are the means, and the focal goals are the desired end states. In this case, super-ordinate goals are the values that drive the consumer.

Brunso et al., 2003 categorized this dual processing system into bottom-up and top-down processing routes. The bottom-up process theorizes knowledge of a product and its inherent benefits or consequences lead a consumer to making a purchasing decision. The top-down process theorizes consumer decisions are goal oriented and goals are the product of personal values (Brunso et al, 2003).

Role of Product Attributes

While it is true that consumers seek to satisfy goals that reflect their personal values, four bottom- up studies found that product knowledge is the basis of the consumer decision making process.

Botschen et al., (1999) found product attributes do not necessarily explain why consumers choose to buy a product or service; rather, consumers are motivated by the idea that the product attributes will lead to a certain benefit or consequence. The term benefit and consequence are used intermittently throughout previous scholarly literature on consumer behavior. In this study, Botschen et al., (1999), uses benefit segmentation:

the categorization of target markets based on similar benefit preferences. Benefit segmentation is based on the idea that groups of individuals are placed into “true” market segments due to the common benefit they are seeking to gain from purchasing or consuming a product or service (Botschen et al., 1999). By use of a laddering technique and cluster analysis Botschen et al., (1999), proved that means-end chains are effective tools for “true” benefit segmentation.

There are two segments of consequences taken into consideration in a means-end model: psychological and instrumental (Rewerts and Hanf 2009; Botschen et al., 1999; Walker and Olson, 1991). A consumer may decide to purchase a caffeinated beverage in order to stay awake and consequently, they will be able to get more work done and feel productive; this is a theoretical example of instrumental and psychological consequences, respectively.

Consumers use both cognitive and affective information processing when making purchase decisions termed the “think/feel” distinction (Clayes, 1995). This version of a means end model suggests that consumers use different levels of involvement when making a decision. “Think” emotions capture the utilitarian, tangible performance of product attributes, while “feel” emotions capture the value expressive, intangible ability of a product to satisfy a hierarchy of needs (Clayes, 1995). The study concluded that “think” products rely on knowledge of functional consequences while “feel” products rely on emotional affect and are more involving than “think” products (Clayes, 1995).

Bagozzi and Dholakia (1999), described the means end model as consumer goal setting and goal striving. Goal setting involves the consumer deciding what end result they wish to attain and goal striving is the process by which the result is reached. The

hierarchy of the Bagozzi and Dholakia (1999) means end model is as follows: goal setting, intention, planning, initiation, and attainment or failure. The study concluded that consumers are faced with the problem of determining the relevance or need for a new product since no prior experience with the product exists and that desire initiates goals setting (Bagozzi and Dholakia, 1999).

Role of Values

Values have proven to give great insight on consumer's decision making processes (Gutman, 1982). Four top-down studies analyzed consumer behavior and concluded that purchasing decisions are motivated by values. In previous research, values, defined as standards that guide action, have been viewed as antecedents to behavior (Pitts and Woodside, 1984), which influence consumption patterns suggesting that understanding values can be beneficial to managers (Valette-Florence and Jolibert, 1990; Pitts and Woodside, 1984). Though very different, attitudes can sometimes be confused with values. Values differ from attitudes in that values are very specific constants and do not vary depending on the situation (Pitts and Woodside, 1984).

In the context of the means-end model, values are distinguished into two categories, instrumental values and terminal values (Botschen, et al., 1999). Instrumental values are fundamental values such as success or responsibility, whereas terminal values depict the end state an individual is pursuing such as losing weight or self-confidence (Rewerts and Hanf (2009); Pitts and Woodside (1984); Botschen, et al., (1999).

Pieters et al., (1995) divided the Means-End model into three levels: super-ordinate goals, motivations, and subordinate goals. Super-ordinate goals are the

motivations, subordinate goals are the means, and the focal goals are the desired end states. In this case, super-ordinate goals are the values that drive the consumer. Similarly, Vinson et al., (1977) concluded values are responsible for an individual's desired end goal, and these same values heavily influence the means to the ends. The difference between individual values across societies is usually a matter of the pattern or hierarchy of the values. Values are criteria or a set of preferences used in making decisions and taking actions (Rockeach, 1979). Values define desired gratifications, or consequences, and identify the source(s) of attainment of the gratification, or means (Rockeach, 1979). Values serve as guidance in goal-directed behavior (Rockeach, 1979). Values are central ideals that are connected to perception of product attributes which lead to purchasing decisions (Vinson et al., 1977). Keeping with the theory that self is the construct that underlies human motivation Walker and Olson (1991) conducted a means end model that examined product knowledge and self knowledge and found that different decision situations elicit different aspects of an consumer's self-perception. Higher levels of motivation result in a consumers increased level of perceived self involvement, thereby affecting the means-end relationships and having no affect on a consumers feelings on attribute importance. In example, a consumer buying a wedding card feels more involved and attached to the end result of the purchase and may travel to various stores to find the best card, whereas that same consumer shopping for a "Thinking of You" card would not be as motivated and would not be willing to travel to various stores to find the best card. During this process, the consumer's idea of what greeting card attributes are most important does not change, but the means end relationship for each situation is different due to the consumers level of motivation.

Appendix D. Farmers' Market Consumer Intercept Survey

Farmers' Market Survey

Purdue University would like for you to participate in a survey that will help determine farmers' market consumer motivations for shopping at farmers' markets. By participating in this survey, you will help give market masters a better understanding of what is important to farmers' market consumer when deciding to shop. It will also give researchers a better understanding of farmers' market consumer's decision making processes.

Except for your time, there is very little risk associated with participation in this study and participation is voluntary. The survey should take approximately 10-15 minutes to complete. All responses will remain anonymous.

Please complete the front and back of each sheet.

1. Complete this sentence by **checking** the statement(s) that match your purpose for this shopping trip TODAY, and **circle** the primary reason you decided to shop. *(Please check all that apply)*

My purpose for coming to this farmers' market TODAY was:

- | | |
|--|---|
| <input type="checkbox"/> To pick up specific item(s) | <input type="checkbox"/> I needed to stock up on items |
| <input type="checkbox"/> To browse the market | <input type="checkbox"/> I came to enjoy the friendly atmosphere |
| <input type="checkbox"/> To bargain shop | <input type="checkbox"/> I wanted fresh quality produce |
| <input type="checkbox"/> Because this market offers quality products | <input type="checkbox"/> I need to save money |
| <input type="checkbox"/> To buy items in bulk | <input type="checkbox"/> I came with someone-I did not intend to shop |
| <input type="checkbox"/> To buy food to eat immediately | <input type="checkbox"/> Other |
| <input type="checkbox"/> Because of an event | _____ |
| <input type="checkbox"/> I ran out of a specific item(s) at home | _____ |

2. On average how much money do you spend **per visit** at farmers' markets?

3. How many times did you come to **this farmers' market** this year? _____
4. How many times did you shop at **ANY farmers' market** this year? _____
5. Where did you travel from today to get to this farmers' market? (*Please check one*)
- | | |
|--|--|
| <input type="checkbox"/> Another farmers' market | <input type="checkbox"/> Grocery store |
| <input type="checkbox"/> Home | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Work | |
6. How far is this farmers' market from your home? _____ Miles
7. Listed below are several statements that describe attitudes toward shopping at farmers' markets. *Please check the statement(s) that best describes you.*
- I shop at farmers' markets for specific items only
 - I like to shop without anything specific in mind
 - I shop with a strict budget
 - I only shop at farmers' markets if other stores that I like are nearby
 - Distance of the farmers' market is not important to me
 - I buy all of my produce from farmers' markets only
 - I shop at both farmers' markets and grocery stores for produce depending on price
 - Other
-

8. Please check the statement that best describes your attitude towards **shopping ANYWHERE**. *(Please check all that apply)*

- I like to take my time and find the best bargains
- I shop impulsively
- Shopping is a fun activity for me
- Quality of a product is important to me regardless of the price
- Quality and low price are equally important to me
- I like shopping in an environment where I feel welcome and the people are friendly
- I do not enjoy shopping

9. Please check the box that corresponds with your opinion about the following statements.

Shopping at a farmers' market is important to me because:

	Strongly Disagree (1)	(2)	(3)	(4)	(5)	(6)	Strongly Agree (7)
I feel that I am helping the environment							
I want to support the local farmer							
I enjoy the friendly atmosphere							
It helps me save money							
The farmers' market is near other stores that I shop at frequently							
Quality is important to me							
Entertainment is important to me							
Shopping at farmers' markets is not important							
Comments:							

10. Please check the box that corresponds to how you feel towards the following statements about farmers' markets.

	Strongly Disagree (1)	(2)	(3)	(4)	(5)	(6)	Strongly Agree (7)
Low prices are important							
Availability of organic items is important							
Quality is more important than price							
Convenient location is important							
Availability of assorted products is important							
Other attractions (i.e., entertainment) are important							
Supporting local farmers' is important							
Availability of fresh products is important							

11. What kinds of items did you purchase here TODAY (*Please check all that apply*)

- | | |
|---|--|
| <input type="checkbox"/> fruits | <input type="checkbox"/> freezer meat (beef, elk, etc) |
| <input type="checkbox"/> eggs | <input type="checkbox"/> herbs |
| <input type="checkbox"/> processed foods (relish, salsa, etc) | <input type="checkbox"/> maple syrup |
| <input type="checkbox"/> vegetables | <input type="checkbox"/> wool |
| <input type="checkbox"/> honey | <input type="checkbox"/> cheese |
| <input type="checkbox"/> jams and jellies | <input type="checkbox"/> crafts |
| <input type="checkbox"/> organic produce | <input type="checkbox"/> other dairy |
| <input type="checkbox"/> wine | <input type="checkbox"/> bedding plants or cut flowers |
| <input type="checkbox"/> baked goods (breads, pastries) | <input type="checkbox"/> other (specify) - |
| <input type="checkbox"/> mushrooms | |
| <input type="checkbox"/> cider | |

12. 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 | — Presence of flowers/shrubs/herbs |
| — Loud Music | — Presence of meat and poultry |
| — Quality | — Presence of processed food |
| — Food safety | products (i.e., cheese, jellies, |
| — Presence of locally grown | jam, etc.) |
| produce | — Presence of food for on-site |
| — Product variety | consumption |
| — Price of products | — Social events/entertainment |
| — Customer service | — Presence of organic produce |
| — Accessibility of market | — Physical appearance of market |
| — Availability of parking space | — Method of payment at market |
| — Distance to market | — Presence of nearby grocery stores |
| — Non-local products | — Presence of nearby non-grocery |
| — Cleanliness of market | stores |
| — Hours of operation of market | — Other (please specify) |
| — Presence of crafts | _____ |

13. Of the following statements, which best describes how you feel about the result of your shopping trip (*Please check all that apply*):

- I spent *less* than intended today
 I spent *more* than intended today

14. Please circle the number that corresponds to how you feel about the following statement.

	<u>Highly Likely</u>				<u>Highly Unlikely</u>
I will return to this market next season.	1	2	3	4	5
I will shop at <i>other</i> farmers' markets next season.	1	2	3	4	5

15. Please indicate your gender.

Male

Female

16. Please indicate your age.

Under 25

45-54

25-34

55-64

35-44

65 or over

17. How many people *including* yourself live in your household?

18. What is the zip code of your residence?

19. Are you the primary shopper of food in your household?

Yes

No

20. Please indicate the highest level of education you have achieved.

- | | |
|---|---|
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Some college |
| <input type="checkbox"/> High school graduate | <input type="checkbox"/> College graduate |
| | <input type="checkbox"/> Post-graduate |

21. Please check the box you feel best indicates your ethnicity.

- | | |
|--|---|
| <input type="checkbox"/> Black or African American | <input type="checkbox"/> Native Hawaiian and Pacific Islander |
| <input type="checkbox"/> Caucasian | <input type="checkbox"/> American Indian and Alaska Native |
| <input type="checkbox"/> Asian | <input type="checkbox"/> Multiracial |
| <input type="checkbox"/> Hispanic or Latino | <input type="checkbox"/> Other (please specify)_____ |

22. In what range does your annual household income fall?

- | | |
|---|---|
| <input type="checkbox"/> Less than \$19,999 | <input type="checkbox"/> \$75,000-99,999 |
| <input type="checkbox"/> \$20,000-49,999 | <input type="checkbox"/> \$100,000 and over |
| <input type="checkbox"/> \$50,000-74,999 | |

THANK YOU!
Your participation is greatly appreciated