ABSTRACT

SALTMARSH, AMY CAROLYN. Local Foods Purchasing: The Influence of On-Farm Experiences. (Under the Direction of Dr. Stacy R. Tomas and Dr. Karla A. Henderson).

Local foods purchasing intentions may be influenced by a variety of factors such as one’s attitudes, subjective norms, and/or past experiences. While some research has been conducted on local foods purchasing intentions, little is known about how these intentions are affected by participation in an on-farm experience. Thus, the purpose of this study was to examine farm tour participants’ perceptions of quality, value, and satisfaction of/on-farm experiences, and analyze how these perceptions influenced these participants’ future local foods purchasing intentions. An online survey was used to collect quantitative data from farm tour participants. Study findings indicated that on-farm experiences led to increased local foods purchasing intentions, willingness to pay more for local foods than non-local foods, intentions to purchase local foods even if the price of local foods increased, and more positive perceptions and personal connections of/to local farms. On-farm experiences were rated as high in quality by the majority of participants and most reported that their on-farm experiences were satisfying and valuable. A modification of Ajzen and Fishbein’s Theory of Reasoned Action (1972) informed the conceptual framework used for this research. Results from this study are intended to aid farmers and farm tour organizers in providing high quality on-farm experiences, and thereby assist them in inspiring more support of local farms and local food.
Local Foods Purchasing: The Influence of On-Farm Experiences

by
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A thesis submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the degree of
Master of Science

Parks, Recreation, Tourism Management

Raleigh, North Carolina

2013

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DEDICATION

For the amazing farmer vendors at the Midtown Farmers’ Market. May these findings bring you increased sales and brighter futures.
BIOGRAPHY

Amy developed her love for food and farming when she discovered her allergies to wheat and dairy in 2010. After purging her pantry, quite literally, Amy began eating as locally as possibly and has never looked back. Several farm and garden apprenticeships later, Amy has a genuine appreciation for the work involved with all aspects of food production. Amy received her undergraduate degree in Sociology from Appalachian State and upon completion of her Masters, looks forward to consulting with farms in and around NC on their Agritourism practices.
ACKNOWLEDGMENTS

Thank you to the hardworking farmers that made the content of this thesis possible.
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CHAPTER 1

Introduction

Every day, Americans are challenged by the high-tech, fast paced, multi-tasking demands of society. Although many people view this “speeding up” as advantageous, others are concerned that it is detracting from Americans’ quality of life and intimacy of interaction. One example is Americans’ relationship with food. Few people today know where their food comes from, how it was produced, who produced it, and what types of nutrients, chemicals, and/or other additives it contains. This lack of knowledge has led to a disconnect and a sense of complacency regarding food choice, an ignorance is bliss and what we don’t know won’t hurt us mentality. However, not knowing can be linked to crises such as the obesity epidemic, lost farmland, and a less than sustainable agriculture system.

Numerous movements and initiatives are focused on changing America’s food system. These movements include: the green revolution, the organic movement, Michele Obama’s obesity campaign, sustainable agriculture schools, local foods campaigns and advocacy groups, community supported agriculture programs (CSA), local foods co-ops, and agritourism (i.e., farm tourism) events and venues such as on-farm experiences. Bestselling books such as The Omnivore’s Dilemma (2006) by Michael Pollan, Fast Food Nation (2006) by Eric Schlosser, and Animal, Vegetable, Miracle (2007) by Barbara Kingsolver address current trends in the American food system. The status of these books as bestsellers implies market interest. Communities of locavores, or people opting to eat only locally grown foods (Delind, 2011; Martinez, Hand, Da Pra, Pollack, Ralston, & Smith, 2010), and popular new diets such as “The 100 Mile Diet,” which encourages consumption of foods produced within
a 100 mile radius of one’s home, are on the rise (Smith & MacKinnon, 2007). In the last
decade, the number of farmers’ markets in America increased by 71% (Mishkovsky, 2009)
with more than 5,275 markets reported in 2009 (Martinez et al., 2010). The number of CSA
programs in the U.S. rose from two in 1986 to more than 1,400 in 2010 (Martinez et al.,
2010). In 2007, 56% of sales on U.S. produce farms were direct-to-consumer sales. Further,
“Direct-to-consumer sales are higher for farms engaged in other entrepreneurial activities,
such as . . . tourism” (Martinez et al., 2010, p. iv). These efforts, publications, and trends
suggest consumers’ increasing desires to reconnect and/or more intimately connect with their
food source.

In 2010, 36 states in the United States had an obesity rate greater than 25%, with
North Carolina at 27.1% (Centers for Disease Control and Prevention; CDC, 2010). Of the
total US population, roughly 1/3 of adults and 17% of children are obese (CDC, 2010).
Increased availability and consumption of processed foods or foods modified from their
original forms, typically through added sweeteners and other taste enhancers, has been linked
to rising obesity rates (Asfaw, 2009; Huang & Glass, 2008; Schwarttz & Puhl, 2003;
Tillotson, 2004). Some researchers argue that the industrial agriculture revolution parallels
rising obesity rates and promotes overconsumption (Tillotson, 2004). Americans are cooking
less and eating fewer whole and raw foods including fresh fruits and vegetables than ever
before (Dixon, Hinde, & Banwell, 2006; Ludwig & Nestle, 2008).

In 2009, less than 1% of Americans claimed farming as their occupation and only 2%
of Americans resided on farms (Environmental Protection Agency; EPA, 2009). The average
age of a U.S. farmer in 2009 was 55 years (EPA, 2009), or higher according to other sources
Clearly, the number of American farmers and farms is diminishing. To attract more persons to the occupation of farming and thereby rebuild America’s farmland, farmers and agriculture professionals must explore new methods of developing interest in the occupation of farming. One alternative method might be on-farm experiences (Tew & Barbieri, 2012).

New markets such as sales during on-farm experiences, farmers’ markets, and CSAs allow farmers to sell directly to consumers. Direct sales add value to farm products and reduce distribution costs through elimination of the middleperson. As a result, farmers yield higher profits (Griffin & Frongillo, 2003). Direct sales also allow consumers to reconnect or more intimately connect with their food source and farmer(s) and to become more familiar with food production methods (Morris & Buller, 2003). Zepeda and Li (2006), Lyson (2007), and Ostrom (2007) found high consumer interest in farmers’ markets, CSAs, and purchasing directly from producers.

Purchasing local foods can be interpreted as an expression of consumer support for a more sustainable agriculture system (Karami & Keshavarz, 2010). Sustainability is a system grounded on themes of community, social justice, social equity, and cultural awareness; the importance of connecting people to their food source; and the mitigation or elimination of harmful environmental impacts associated with the current industrial food system (Horrigan, Lawrence, & Walker, 2002). Local foods purchasing reduces energy consumption through reduced food miles, retains economic value within communities, re-establishes trust between consumers and producers, and increases the value of local foods (Mason & O’Mahony, 2007). Local foods campaigns and agritourism efforts attract new audiences to farms and
encourage consumers to be more appreciative of farming and their food source. In 2007, 8% of all small farms (i.e., those farms having less than $50,000 in total farm sales) participating in direct-to-consumer sales also participated in agritourism (Martinez et al., 2010).

Local foods are perceived by consumers as higher quality and safer than foods sourced from industrial farms (Mason & O’Mahony, 2007). Du Rand, Heath, and Alberts (2003) contended that local foods not only stimulated and supported sustainable agriculture, but also empowered communities through job creation, the generation of pride, and the reinforcement of the brand identity of a place. Horrigan et al. (2002) argued that the consolidation of farms might lead to “the deterioration of rural communities” (p. 446). Further, small farms are as productive, if not more productive per unit acre than industrial farm businesses (Jarosz, 2000). Therefore, discovering and developing means to sustain these small farms and thereby, uphold their benefits to communities and agriculture as a whole are needed.

The increasing popularity of culinary tourism, gastronomy, and other forms of food-related tourism in the U.S. and worldwide can be attributed in part to the high quality of local farms offering this type of tourism experience (Mason & O’Mahony, 2007; McGhee, 2007; Sims, 2008). In the U.S., motivations toward farmer participation in tourism are still being explored, but desires to experience life on the farm and reconnect with one’s family history through an on-farm or agricultural tourism (i.e., agritourism) experience have been reported (McGehee, 2007). Local farms offering tourism experiences allow consumers (i.e., tourists) to interact directly and at varying levels – seeing, touching, and listening – with farms/food sources and producers. On-farm experiences also offer consumers a working knowledge of
farm practices, a relationship with the grower of their food, and the opportunity to ask
questions directly to the grower. Collectively, these opportunities are not available through
indirect foods purchasing such as from a grocery store, farmers’ market, or CSA where
consumers do not see the farm or farmer.

In addition, marketing research shows that higher perceptions of quality lead to
increased satisfaction and value (Baker & Crompton, 2000; Hutchinson, Lai, & Wang, 2009;
Perceptions of quality, value, and satisfaction are also linked to loyalty or likelihood to
repurchase, revisit, or tell a friend (Anand & Niraj, 2011; Petrick, 2004). Therefore, it is
reasonable to hypothesize that a high quality farm tour could positively affect consumers’
perceptions of satisfaction, value, and loyalty related to on-farm experiences and local foods.

Bridging the gap between farmers and consumers is a strategy connected to a more
sustainable agriculture system. Examining the influence of on-farm experiences, specifically
farmer-led farm tours, on local foods purchasing can provide a better understanding of how
this consumer/producer connection can be strengthened and maintained. This study aimed to
explore the influence of farm tour participants’ perceptions of quality, value, and satisfaction
of/with on-farm experiences via farmer-led farm tours, on future local foods purchasing
intentions. Through analysis of responses to an online survey completed by 2012 Piedmont
Annual Farm Tour participants (i.e., visitors), a better understanding of consumer perceptions
of quality, value, satisfaction, loyalty, and behavioral intentions related to farmer-led farm
tours and local foods purchasing was gained. Identifying the components of a successful
farmer-led farm tour, as perceived by visitors, can aid farmers in more successfully connecting to current and future customers.

Statement of the Problem

Farmers and farm tour organizers seek to gain a better understanding of farm tour participants’ perceptions of on-farm experiences. Insight into consumers’ perceptions of quality and value, satisfaction levels, and behavioral intentions toward local foods purchasing, based on their on-farm experiences via farmer led farm tours, might provide farmers and farm tour organizers with information and ideas for improving their services, enhancing visitor experiences, and encouraging local foods purchasing and consumption. This information could also be used to increase income for farmers and support their adoption of sustainable practices. Because farmers and farm tour organizers attend to the diverse needs, missions, and operations of theirs farms and organizations in addition to the needs and expectations of farm-tour visitors, findings and suggestions for improved service and visitor experiences can be made in consideration of these parameters.

Objectives of the Study

This study examined the influence of farm tour participants’ perceptions of quality, value, and satisfaction of with on-farm experiences via farmer-led farm tours on future local foods purchasing intentions. To assess the influence of farm tour features on visitors’ experiences, visitors’ perceptions of the performance of selected tangible farm-tour features were measured.

The questions addressed by this study were:
1. Which quality attributes do participants rate as performing high/low during on-farm experiences?

2. Which quality attributes are most important to participants during on-farm experiences?

3. What are the key determining farm quality attributes that contribute to overall quality, satisfaction, value, and behavioral intentions?

4. Do participants (i.e., first timers and repeaters) differ in their ratings of the dependent variables: quality, value, satisfaction, and behavioral intentions?

**Conceptual Framework**

A modified version of Ajzen and Fishbein’s Theory of Reasoned Action (TRA) informed the conceptual framework for this research (TRA; Ajzen & Fishbein, 1972, 1977, 1980; Fishbein & Ajzen, 2010). The TRA draws from social psychology and provides a map of how and why individuals exhibit certain behaviors. According to the TRA, attitudes and subjective norms can be used to predict behavioral intentions (Trafimow & Borrie, 1999). Attitude, or one’s belief about a behavior, is developed through his/her evaluation of the consequences of performing that behavior (Levine & Pauls, 1996). Attitudes are largely influenced by subjective norms. Subjective norms are one’s perception of what qualifies as normal or accepted behavior.

The TRA holds that an individual’s attitude and perception can be modified through a direct experience such as an on-farm experience (i.e., specifically a farmer-led farm tour). A modified reasoned action approach informed the conceptual model in Figure 1, which is set within the context of an on-farm experience via a farmer-led farm tour. First, farm tour
participants enter the on-farm experience with a specific set of characteristics such as their age, gender, size of their party, knowledge of farming, past experience on farms, etc. These characteristics may influence their motivations for participating in the on-farm experience. Next, participants take the farmer-led farm tour/engage in the on-farm experience. During and after participants’ experience on the farm, perceptions of quality, value, and satisfaction with the on-farm experience develop. The relationships between perceived quality, value, and satisfaction have been widely studied, and shown to tie directly to attitude (Baker & Crompton, 2000; Cronin, Brady, & Hult, 2000; González, Comesaña, & Brea, 2007; Gounaris, Tzempelikos, & Chatzipanagiotou, 2007; Hutchinson et al., 2009, Parasuraman, Berry, & Zeithaml; 1988, Oliver, 1996; Petrick, 2004; 2005; Tomas, Scott, & Crompton, 2002; Zeithaml, 1988; Zeithaml, Berry, & Parasuraman, 1996). Perceptions lead to behavioral intentions. Therefore, following the reasoned action approach, positive perceptions and/or a positive change in attitude would potentially lead to increased local foods purchasing. Finally, in the last stage of this model, intentions for repeated behaviors such as local foods purchasing can be seen as expressions of loyalty toward local foods and farmers.
Figure 1. Conceptual Model for the Study

**Definition of Terms**

**Quality.** Quality is conceptualized as “quality of performance” or “the attributes of a service which are controlled by” the service provider (Baker & Crompton, 2000, p. 787). For example, quality might be conceptualized in an on-farm experience (defined below) as cleanliness, a detailed history of the farm or farm story, or the knowledge and skills gained through participation in the on-farm experience.

**Value.** Like quality, value is tightly linked to the consumer’s experience with a product or service. Value is one’s overall assessment “of the utility of a product according to” (Saura, Velazquez, & Molina, 2011, p. 72) perceptions of what was received as compared to what was given (Baker & Crompton, 2000; Parasuraman et al., 1996; Zeithaml, 1988). “Value is suggested to lead directly to behavioral intentions, with service quality and
satisfaction as antecedents to value” (Hutchinson et al., 2009, p. 299). More simply, “value, to the customer, is benefits received for burdens endured” (Berry, 2009, p. 310).

**Satisfaction.** Satisfaction is conceptualized as one’s “quality of experience” or emotional reaction to/psychological evaluation of services and/or products (Baker & Crompton, 2000), “the result of a comparison process between performance and a standard” (Saura et al., 2011, p. 66). It is a visitor’s judgment of the level of enjoyment and fulfillment he/she gained through an interaction with a service and/or product (Baker & Crompton, 2000). Essentially, satisfaction measures the outcome of an experience (Hutchinson et al., 2009, p. 287). Satisfaction may be influenced by service personnel such as farmers, farm staff, and farm tour volunteers as well as physical environments.

**Behavioral Intentions.** Behavioral intentions are plans to take future actions that are in agreement with an individual’s level of loyalty to a product or service. Behavioral intentions include the amount of effort an individual is willing to exert to perform a specific behavior. Effort can be conceptualized as the allocation of personal resources such as money, time, distance traveled, and/or word of mouth recommendations to obtain or support a product or service. The Theory of Reasoned Action postulates that behavior can be predicted from intentions that correspond directly to a past experience (Baker & Crompton, 2000, p. 789).

**Loyalty.** Loyalty is an expression of one’s level of commitment or dedication to a product or service. “Loyalty is committed behavior and is defined as the biased use of a selected program or resource” (Baker & Crompton, 2000, p. 793). This commitment requires repeat purchase or use, regardless of situational factors and competitors’ efforts (Anand &
Niraj, 2011). Petrick (2005) described five segments of loyalty: possible loyalty, low loyalty, spurious loyalty, latent loyalty, and high loyalty, and argued that, “loyalty can be conceptualized as number of visits, psychological attachment, and intensity of visits” (p. 209). In this research, loyalty will be measured informally and indirectly though past behaviors and as a dimension of behavioral intentions. An informal exploration of loyalty will expose ideas for future research and reveal insights about farm tour participants’ commitment to local foods.

**Agritourism.** The North Carolina Agritourism Networking Association (2009), defined an agritourism farm as a value-added farm or ranch that offers pleasure, recreation, education, information and other services to the public, and may or may not require an admission fee for participation in and/or purchase of an agricultural product or activity. Because no clear definition of agritourism exists (Phillip, Hunter, & Blackstock, 2009), and because agritourism encompasses many types of tourism activities – “from cut flowers to U-picks to on-farm artisan-cheese making classes to farm B&Bs” (Adams, 2008, p. 16), this study will use the term on-farm experience (described below) to describe farm tourism as part of the Piedmont Farm Tour.

**On-Farm Experience.** An on-farm experience is an experience that takes place on a working farm and involves some educational element, interaction with farm features, and direct contact with farm staff. Unlike other forms of agritourism or agritainment, on-farm experiences must take place on a working farm and must be themed around actual farming activities, production techniques, and/or operations that would actually occur on farms despite the presence of visitors. Examples of on-farm experiences might include: farm tours,
overnight farm stays, gardening or composting workshops, cooking classes, harvesting vegetables or produce, and u-picks. In this study, on-farm experiences includes any experience that involves travel to a working farm, participation in an organized activity on a farm such as a farm tour, and direct contact with at least one farm staff. These specifications differentiate on-farm experiences from agritourism. For the purposes of this study, on-farm experiences will be limited to those included on the 2012 Piedmont Farm Tour in North Carolina.

**Farmer-Led Farm Tour.** A farmer-led farm tour is a tour that takes place on a working farm as part of an on-farm experience. A farmer led-farm tour is led by the farmer, farm owner, and/or farm staff of the working farm, as opposed to a self-guided tour. For the purposes of this study, farmer-led farm tours will be limited to those included on the 2012 Piedmont Farm Tour in North Carolina.

**Local Food.** Local food is defined as foods traveling no more than 100 miles from producer to consumer (Delind, 2011; Martinez et al., 2010; Smith & MacKinnon, 2007). “Local foods venues” will be defined as locations where local foods are sold. Venues might include: supermarkets, farmers’ markets, farm stands, co-ops, and CSA programs.

**Summary**

The purpose of this study was to examine the influence of farm tour participants’ perceptions of quality, value, and satisfaction of/on-farm experiences on future local foods purchasing intentions. To explore this influence, email addresses of farm tour participants were collected at the check in stations at each of the farm participating in the farm tour. Post tour surveys were then administered to farm tour participants via email,
through a link in the farm tour organization’s electronic newsletter. The survey was included as an addendum to the farm tour organization’s post tour survey. Incentives for participation were offered and a qualifying question was used to ensure that the desired study population was reached.
CHAPTER 2

Literature Review

The purpose of this study was to examine the influence of farm tour participants’ perceptions of quality, value, and satisfaction of on-farm experiences on future local foods purchasing intentions. This chapter reviews related literature from a variety of fields including tourism, marketing, and agriculture. First, the evolution, relationship(s), and meanings of the concepts included in this study’s conceptual framework are discussed. Next, the relationship between the dependent variables, behavioral intentions, and loyalty is explored. Finally, farm-tour and/or agritourism visitors, in addition to persons invested in local foods, are described.

Introduction

Exploring participants’ perceptions of the quality of farm tours, levels of satisfaction with the tours, value of the tours, loyalty to local farms and/or farm products, and intentions to purchase local foods post farm tour can help farmers and farm tour organizers improve the overall quality of farm tours. I hypothesize that improving tour quality will have a positive influence on participants’ experiences and intentions for purchasing local foods in the future. Positive experiences on farms are also likely to increase participants’ likelihood of returning and recommending the farm tour, farm, and/or farm products to others. More visits and repeat visitation to farms and increased local foods purchasing promotes a more sustainable agriculture system and increases revenue for small farmers.

The concepts of quality, value, satisfaction, loyalty, and behavioral intentions are commonly assessed in the tourism and service marketing literature (Garcia & Caro, 2010;
González et al., 2007). These concepts are intertwined and are neither straightforward nor
simple (Zeithaml et al., 1996). Perceived service quality has been linked to customer
retention, marketing variables, and profitability (Zeithaml et al., 1996). According to Cronin
et al. (2000), “the first determinant of overall customer satisfaction is perceived quality” (p.
195), and the second is perceived value. Value is “perceived service quality relative to price”
and is based “on the consumer’s amalgamation of service quality attributes” (Cronin et al.,

Quality is widely studied and debated and companies are increasingly looking to
quality, satisfaction, and loyalty as keys to attaining market leadership (Cronin et. al, 2000, p.
210). Li and Petrick (2008) found that value and experience are created through joint efforts
of tourists and tourism providers and encouraged tourism providers to focus on specific sets
of tourists. Li and Petrick argued that tourists should only be approached by service
providers from a relational value-centered perspective. González, et al. (2007), Gounaris,
Tzempelikos, and Chatzipanagiotou (2007), and Hutchinson et al. (2009) linked behavioral
intentions to consumers’ perceptions of service quality and levels of satisfaction. These
findings supported the conclusions of past studies such as Baker and Crompton (2000),
Cronin et al. (2001), Parasuraman et al. (1988), Oliver (1996), Petrick (2004; 2005); Tomas,

Loyalty is of increasing interest to the tourism and marketing fields. It is less
expensive for service providers to maintain current customers than attract new customers
(Petrick, 2005). Oliver (1999), Petrick (2004; 2005), Gounaris et al. (2007), McKercher,
Denizci-Guillet, and Ng (2011), Anand and Niraj (2011), and Saura et al. (2011) highlighted
the potential positive effects of loyalty on behavioral intentions, difficulties of defining loyalty, and the importance of addressing loyalty as a multidimensional concept. Given the complexity and interrelatedness of these concepts, developing an understanding of each as it relates to consumers’ perceptions of farm tours is important. The relationship between these concepts can be better understood through the Theory of Reasoned Action.

**Theory of Reasoned Action**

Fishbein and Aizen’s Theory of Reasoned Action (TRA) holds that attitudes and subjective norms can be used to predict behavioral intentions (Trafimow & Borrie, 1999). Attitude, or one’s belief about a behavior, is developed through an individual’s evaluation of the consequences of performing that behavior (Levine & Pauls, 1996). Attitudes are largely influenced by subjective norms. Subjective norms are a “person's perception that most people who are important to him or her think he should or should not perform the behavior in question" (Fishbein & Ajzen, 1975). More simply, subjective norms are an individual’s perception of what qualifies as normal or accepted behaviors. According to the Theory of Reasoned Action, individuals’ attitudes and perceptions can be modified through experience. Therefore, one’s attitudes and perceptions about local food and farming could be positively altered by an on-farm experience. The elements of quality, value, satisfaction, loyalty, and behavioral intentions were elements of planned behavior, which provided the theoretical foundation for this study.

**Quality**

Quality is an individual’s reaction to extrinsic cues of excellence or an “externally mediated perception that a product or service possesses excellent levels of a key dimension”
desired and/or expected by the consumer (Oliver, 1996, p. 144). Quality is cognitive, experienced through exposure, and is high when an individual perceives that a high standard has been reached. Quality is a measure of the performance of the service provider (e.g., the farmer, farm, and farm tour). To determine quality, individuals must have a point of comparison. Quality has been conceptualized as a precursor to both value and satisfaction (Oliver, 1996; Petrick, 2004; Zeithaml, Berry, & Parasurman, 1996). Baker and Parasurman (1994) identified product and service quality, as “critical components in the consumer’s decision making process” (p. 329). Parasuraman, Berry and Zeithaml (1985; 1994) defined “service quality as the gap between customers’ expectations and perceptions” (1994, p. 111). Parasuraman et al. (1985) identified five gaps that might occur during a service exchange and argued that if present, these gaps led to low or poor perceptions of service quality. Gaps included:

1. Visitor expectations and management’s perception of visitors’ expectations are not in line – Consumer expectation/management perception gap
2. Manager’s perceptions of visitor expectations do not match entity specifications for service delivery – Management perception/service quality specification gap
3. Service specifications do not translate into service delivery – Service quality specifications/service delivery gap
4. Discrepancy between what service entity promises and what it actually delivers – Service delivery/external communications gap
5. Customers’ expectations for a service do not line up with his/her perceptions of the service – Expected service/perceived service gap
In 1988, Parasurman et al. developed a 22-item SERVQUAL instrument, designed to measure consumer perceptions of service quality and identify the above described gaps. This instrument has been used and continues to be used today by tourism and marketing personnel globally, and has proved particularly valuable to addressing gaps in service delivery and expected/perceived service. Parasurman et al. (1988) defined service quality as the consumer's judgment about an entity's overall excellence or superiority. Quality is related to, but not the same as satisfaction, and results from the comparison of consumer expectations to consumer perceptions of a retail or service provider’s performance (Parasurman et al., 1988).

Service quality can be broken down into five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Each of these dimensions has a significant influence on the customer’s perception and opinion of a company or service provider. Definitions of the dimensions provided by Parasuraman et al. (1988,) include:

(1) Tangibles: Physical facilities, equipment, and appearance of personnel
(2) Reliability: Ability to perform the promised service dependably and accurately
(3) Responsiveness: Willingness to help customers and provide prompt service
(4) Assurance: Knowledge and courtesy of employees and their ability to inspire trust and confidence
(5) Empathy: Caring, individualized attention the firm provides its customers (p. 23).

Bitner (1992) argued that the servicescape, or environment/physical space wherein a service takes place influences consumers’ perceptions of quality. Through nonverbal communication such as the type of furniture in an office and the attire of persons working in
the office, a servicescape imparts meaning to consumers (Bitner, 1992). Servicescapes include vertical dimensions (i.e., who is performing within the servicescape) and horizontal dimensions (i.e., the physical features or objects of a servicescape). Examples of the vertical dimension of a servicescape include: “self-service” with many customers and few employees and “remote service” with few if any customers and many employees (Bitner, p. 58).

“Interpersonal services” exist when both customers and employees are highly and equally active within the servicescape (Bitner, p. 58). A farmer-led farm tour is an example of an interpersonal service. Bitner argued that the physical environment has a greater effect on the quality of interaction “between and among customers and employees” participating in interpersonal service (p. 58). Because physical environments (e.g., farms) represent particular “social rules, conventions, and expectations” (p. 61), Bitner asserted that different groups of persons interacting in the same physical environment will behave in similar ways.

Baker and Parasuraman (1994) examined how elements of a store environment influenced consumers’ perceptions of quality. Ambient factors, design factors, and social factors were analyzed. Each of these factors can be controlled and/or modified by the service provider. Ambient factors included environmental elements that were not visual such as: “temperature, lighting, music, and scent” (Baker & Parasuraman, 1994, p. 330). For example, on a hot day, farms might offer a shaded bench or fan and cold drinks to help participants cope with the heat. Design factors included environmental elements that were either functional and/or aesthetic such as layout, color, and style (Baker & Parasuraman, 1994). Design factors were found to have the least significant effect on consumer perceptions of quality. Social factors included people in the environment, customers and
employees. While the behavior of all customers cannot be controlled by service providers, employee interactions and management of customers can. Therefore, social factors are considered modifiable by service providers (Baker & Parasuraman, 1994). Baker and Parasuraman found that “good staff were associated with higher product quality” (p. 332). In the context of on-farm experiences, an understanding of servicescapes can help farmers create positive first impressions for visitors, and thereby, positively influence visitors’ experiences.

Baker and Parasuraman (1994) identified product and service quality, as “critical components in the consumer’s decision making process” (p. 329). Oliver (1996) defined quality as an individual’s reaction to extrinsic cues of excellence or an “externally mediated perception that a product or service possesses excellent levels of a key dimension” desired and/or expected by the consumer (p. 144). Oliver argued that quality is cognitive, experienced through exposure, and is high when an individual perceives that a high standard has been reached. Quality is a measure of the performance of the service provider (e.g. the farmer, farm, and farm tour). Positive correlations exist between quality and usefulness of a product/service. To determine quality, individuals must have a point of comparison. Quality has been conceptualized as a precursor to both value and satisfaction (Oliver, 1996; Petrick, 2004; and Zeithaml et al., 1996).

Zeithaml et al. (1996) examined the influence of service quality at the individual consumer level and found that the relationship between service quality and behavioral intentions was strong. “Service consumers seem to place greater importance on the quality of a service than they do on the costs associated with its acquisition” (Cronin et al., 2000, p.
Baker and Crompton (2000) understood quality as quality of performance, or “quality of opportunity” (p. 787), and as primarily controlled by the supplier. To evaluate quality of performance, Baker and Crompton suggested analysis of consumers’ perceptions of the provider’s performance.

Tian-Cole, Crompton, and Wilson (2002) explored the relationship between wildlife refuge visitors’ perceptions of quality and satisfaction, and how these perceptions influenced behavioral intentions. Tian-Cole et al. addressed quality of performance and quality of experience. Quality of performance was defined as “visitors’ perceptions of the attributes of a facility that are controlled by management,” while quality of experience referred to the psychological outcomes visitors derived from an experience (Tian-Cole et al., 2002, p. 2).

Garcia and Caro (2010) tested an alternative model for examining consumer perceptions of quality. Garcia and Caro claimed that Baker and Crompton’s (2001) model for evaluating service quality was lacking in dimensions and hierarchical. Quality cannot be separated from its attributes. Garcia and Caro offered the following suggestions for designing instruments to measure perceived service quality:

1. **Build specific context instruments, (i.e., a tailored instrument for each specific sector or industry).**

2. **Use only performance measures and not a discrepancy function between expectations and performance.**

3. **Identify the attributes or factors of service quality that are susceptible to being evaluated by using qualitative research and literature revision, in the framework of Brady and Cronin’s (2001) hierarchical and multidimensional model.**
Implement measures of valence and global service quality evaluation to compare these measures with the service factors evaluated.

Achieve a latent class cluster analysis to identify possible groups with a disparate pattern of response with respect to relevant variables, and profiling the clusters with appropriate additional covariates.

These suggestions offer guidance that can be implemented when assessing perceived quality of farm tours and designing survey instruments. They also stress the importance of the multidimensionality of quality measures. To be examined accurately and to yield reliable and valid results, quality must be examined thoroughly and with careful consideration of its application within the farm context. Quality must also be examined with consideration for other dependable variables such as value.

**Value**

According to Zeithaml (1988), “what constitutes value, even in a single product category, appears to be highly personal and idiosyncratic” (Zeithaml, 1988, p. 13). Zeithaml defined value as “consumers’ overall assessment of the utility of a product based on perceptions of what is received and what is given” (p. 14). Value was conceptualized as any combination of the following: (1) low price (i.e., sales, specials, and coupons), (2) whatever consumers want in a product (e.g., utility, convenience), (3) quality of what consumers get for the price they pay (e.g., price first, quality second or lowest price for quality brand), and (4) what consumers get for what they give (i.e., utility and enjoyment per dollar or sacrifice; Zeithaml, 1988, pp. 13-14). Value was associated with sacrifices of time, money, and effort (Zeithaml, 1988). Oliver (1996) defined value as “a positive function of what is received and
a negative function of what is sacrificed” (Oliver, 1999, p. 144). Cronin et al. (2000) adapted Zeithaml’s 1988 definition of value and concluded that value is a better predictor of intention to repurchase than either satisfaction or quality. Petrick (2004), however, argued that value and satisfaction are intertwined. Petrick also argued that future purchase intentions and behavior result from consumer perceptions of value. “Satisfaction is an antecedent to the outcome of perceived value and perceived value is what leads to repeat purchase and brand loyalty over time (p. 398).

Petrick (2004) concluded that value can be best measured though a five dimension scale called SERV-PERVAL, which was an extension of the SERVQUAL measure. This scale operationalized perceived value according to dimensions of “quality, monetary price, non-monetary price, reputation, and emotional response” (Petrick, p. 399). Petrick found the SERV-PERVAL scale reliable and valid at the p< .05 level. Li and Petrick (2008) further examined relationship marketing and its use in the tourism industry. Li and Petrick described a transition of marketing logic from goods centered to service centered. This transition led to a shift in understandings of resources and value, allowing definitions and measures of value to include elements of both quality and satisfaction.

Satisfaction

Bitner (1992) argued that satisfaction with a place or experience is strongly influenced by an individual’s purpose for being there. According to Oliver (1996), satisfaction is “an experiential judgment of outcomes compared to a set of goals or standards resulting in a sense of fulfillment” (Oliver, 1996, p. 144). Typically, satisfaction increases as a function of increased quality and value (Baker & Crompton, 2000). Andereck et al. (2006)
associated high levels of satisfaction with good experiences. Good experiences involve the consumer in the culture and heritage of an unfamiliar area (i.e., a destination like a farm), allow for the appreciation of social factors, grant consumers some control over their experience, and encourage/enable consumers to respond to the scenery. Negative experiences are associated with low satisfaction and are most commonly attributed to bad luck or other external factors out of the control of the service provider (Andereck et al., 2006).

Anand and Niraj (2011) discussed two types of satisfaction: overall and attribute. Overall satisfaction resulted from consumers’ perceptions of overall experience. Attribute satisfaction involved consumers’ evaluations of how well individual attributes, or parts of an experience, performed (Anand & Niraj, 2011). Understanding farm tour participants’ levels of overall and attribute satisfaction in addition to differences in satisfaction levels, may help farmers and farm tour organizers identify ways to improve farm tours and on-farm experiences. Also tied to satisfaction, but more closely to value, is the concept of embeddedness.

**Embeddedness and the On-Farm Experience**

Rural sociologists discuss the notion of embeddedness (i.e., one’s level of involvement with a particular social network) and its relationship to value and value added products (Hinrichs, 2000). Embeddedness is examined through marketness, the relevance of price in transactions and instrumentalism, or individuals’ transaction motivations (Hirichs). On-farm experiences and farmer-led tours serve as direct-to-consumer, or farmer-to-consumer, markets. This type of market involves “personal relations and social interaction”
that enhances embeddedness and adds value to the consumer’s experience (i.e., both goods and service; Hinrichs, 2000, p. 299). Embeddedness relates to social capital and trust. The term is used by social economists to understand economic exchanges between humans (Hinrichs, 2000). On-farm experiences that offer direct-to-consumer markets such as farmers’ markets and CSAs, “involve personal encounter(s) and mutual knowledge on the part of farmers and consumers” (Hirichs 2010, p. 298). The high level of personal connection, in addition to the shared information and trust involved in farmer-to-consumer exchanges such as on-farm experiences and farm tours may lead to perceptions of higher value of farm products and services.

Farmers and farm tour organizers cannot ignore the on-farm experiences’ potential for added service and product value. Due to the broad definition and the lack of consistent understanding and definition of embeddedness among scholars, embeddedness will not be measured in the study. Embeddedness is worthy of exploration in future studies, particularly related to the on-farm experiences. Given the relationship between embeddedness and economic exchanges, there is a potential that one’s level of embeddedness could be used to predict behavioral intentions such as local foods purchasing.

**Behavioral Intentions**

Zeithaml et al. (1996) explained behavioral intentions as indicators of customers’ willingness to establish or not to establish, and maintain or not to maintain, a sustainable relationship with a brand or company. Behavioral intentions are grounded in attitudes and subjective norms and can be used to predict future behaviors (Levine & Pauls, 1996; Trafimow & Borrie, 1999). Behavioral intentions are influenced by an individual’s attitude
toward performing a behavior and the perceived social pressures of performing that behavior (Baker & Crompton, 2000).

Favorable behavioral intentions are associated with: (a) consumers saying positive things about the producer, (b) recommending the producer to other consumers, (c) remaining loyal to the producer through repurchasing, (d) spending more money with the producer, and (e) paying higher price premiums (Cronin et al., 2000; Petrick, 2004; Zeithaml et al., 1996).

When purchasing food, both intrinsic (i.e., color, texture, and taste) and extrinsic factors (i.e., retail environment) are considered by the consumer (Zepada & Leviten-Reid, 2004). Behavioral intentions are further moderated by the demographic and socioeconomic characteristics of the consumer (González et al., 2007; Weatherell, 2003).

Current research continues to demonstrate the connection between quality, satisfaction, and behavioral intentions (Zeithaml et al., 1996). By exploring this connection through the context of on-farm experiences this study spoke to the strengths and levels of influence of these variables independently, and in conjunction with one another. An understanding of the influence of these variables on participants’ behavioral intentions may enable farmers and farm tour organizers to better focus their planning and operational efforts as well to promote loyalty among consumers.

**Loyalty**

Zeithaml et al. (1996) stated that, “The longevity of a customer’s relationship favorably influences profitability” (p. 33). Oliver (1999) described loyalty as “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational
influences and marketing efforts” of competitors (p. 34). Backman and Crompton (1991) defined loyalty in terms still commonly used today: “committed behavior that is manifested by propensity to participate in a particular recreation service” (p. 205). According to Backman and Crompton, the most frequently used conceptualization and definition of loyalty is from Jacoby and Kyner (1973). They stated that loyalty is “a biased behavior expressed over time by an individual with respect to one or more alternatives and is a function of psychological processes” (cited in Petrick, 2005, p. 201).

Past research has suggested that it is more desirable and less expensive to retain current or loyal customers than to attract new customers (e.g., Petrick, 2005). “Loyal customers are more likely to discuss past service experiences positively than non-loyal customers, creating a potential for word-of-mouth advertising at no extra cost to the service provider” (Petrick, 2005, p. 199). Petrick (2005) found that when service errors were made, loyal customers were more likely to give service providers a second chance and to attribute errors to unstable or uncontrollable factors rather than factors controlled by the provider.

Petrick (2005) discussed the loyalty ripple effect, which provides service providers with opportunities for additional revenue streams by adding value to services and reducing operation costs. Loyalty has been found to secure the consumer-supplier relationship, particularly when the consumer is faced with attractive competitive offers and the supplier’s shortcomings.

Petrick (2005) modified Backman’s 1988 index of behavioral loyalty to create the consumer loyalty matrix. He used four categories to explain loyalty. These categories included: low loyalty, latent loyalty, spurious loyalty and high loyalty (Petrick, 2006, p. 201).
Petrick’s (2004) loyalty categories were based on the findings about cruise ship passenger loyalty. The low loyalty category included persons with low behavioral consistency and low psychological attachment. The latently loyal category included participants with high psychological attachment and low behavioral consistency. The spuriously loyal category included participants with low psychological attachment and high behavioral consistency. Finally, the highly loyal category included participants with high “behavioural consistency and high psychological attachment” (Petrick, 2005, p. 201). Spuriously loyal consumers were seen as lacking true attachment to a product and therefore, likely to switch patronage if less expensive and/or more convenient products or services were offered. Latently loyal customers had the potential to become highly loyal if coaxed (Petrick, 2005).

McKercher et al. (2011) highlighted problems with loyalty as commonly defined by the tourism and hospitality field. McKercher et al. (2011) argued that loyalty frameworks are too conventional and need to modernize and adapt to current tourism practices, to overcome the gap between theory and practice. McKercher et al. advocated for a multidimensional approach to loyalty and three types of loyalty including: vertical loyalty hierarchy, horizontal loyalty hierarchy, and experiential loyalty. Vertical loyalty hierarchy occurs when loyalty exists at different tiers of the tourism system. Horizontal loyalty hierarchy exists when tourists are simultaneously loyal to separate and unique brands or companies at the same tier within the tourism system. Experiential loyalty exists when tourists express their preference for a certain style or type of experience across tourism tiers.

According to Anand and Niraj (2011), loyalty is a customer’s intrinsic commitment to make a repeat purchase of a preferred product or service on an ongoing basis, despite
situational factors and/or competitors’ efforts. This definition focuses on attitudinal components of loyalty. Attitudinal loyalty is based on consumers’ cognitive response to a product or service and leads to brand or company commitment due to a strong disposition toward that brand and/or company. Behavioral loyalty focuses on the results of outcomes such as repeat purchasing of feeling loyal. The behavioral definition of loyalty is considered insufficient by many researchers because it does not explain how or why customer loyalty might be altered (Anand & Niraj, 2011; Petrick, 2005). Neither the attitudinal nor the behavioral definition of loyalty sufficiently explains loyalty on its own (Anand & Niraj, 2011; Backman & Crompton, 1991; Petrick, 2005).

An examination of loyalty through participants’ past levels of participation in the farm tour, might allow farmers and farm tour organizers to identify and understand differences between first time and repeat participants. This understanding could provide insights that would help farmers and farm tour organizers to adapt their marketing efforts to increase loyalty, and thereby behavioral intentions such as local foods purchasing.

The Relationship between Behavioral Intentions and Loyalty

The relationship between behavioral intentions and loyalty has received considerable attention from the tourism and marketing fields. Loyalty results from consumer satisfaction with an experience (Azjen & Fishbein, 1980). Backman and Crompton (1991) argued that loyalty involves more than repeat use or purchase of a product or service (i.e., behavioral loyalty). Backman and Crompton further suggested that loyalty includes an attitudinal measure, which assesses consumer preference for and affection toward brands. Zeithaml et al. (1996) conceptualized attitudinal loyalty as consumers’ intentions to repurchase,
likelihood of future positive statements about the brand or company, and intention to recommend and/or encourage others to use a product and or service. Oliver (1999) found that for some customers, sharing thoughts about an experience resulted in greater satisfaction that the experience or brand itself. Petrick (2005) noted a lack of empirical research on the relationship between loyalty and behavioral intentions. He attributed this lack of research to the tendency of academics to narrowly define loyalty as “a behavior of repeated purchases,” rather than an attitude (Petrick, 2005, p. 200).

Defining loyalty from either a solely behavioral perspective, or an attitudinal perspective, has been for some time considered problematic (Backman & Crompton, 1991; Petrick, 2005). The more satisfied a customer is with a service or product, the more likely he or she is to advocate for that company or brand (Petrick, 2005). Gounaris et al. (2007) stated that the differentiation between loyalty and behavioral intentions stems from the attitudinal component of loyalty. Gounaris et al. (2007) found that attitudinal loyalty results from satisfaction, making it a conative or impulsive variable. Azjen and Fishbein (1980) argued that conative variables mediate the relationship between attitudes and behaviors. Further, Chiou and Droge (2006) held that based on Azjen and Fishbein’s findings, satisfaction indirectly affected behavioral intentions. Azjen and Fishbein asserted that the relationship between satisfaction and behavioral intentions was mediated by attitudinal loyalty.

Gounaris et al. (2007) also found that a state of “premium loyalty” or consistent positive attitude toward a brand/company must exist for a customer to participate in positive word-of-mouth advocacy, rebuy, and/or express cross-buying intentions (Gounaris et al., 2007, p. 71). Gounaries et al. explained that “inertia loyalty” (p. 71) occurs when consumers
purchase or repurchase out of convenience or habit, rather than “emotional commitment to a brand.” Through this explanation of inertia loyalty, Gounaris et al. proved that loyalty and behavioral intentions are separate concepts. Loyalty, unlike behavioral intentions, cannot be fully understood though repeat purchase intentions (Gounaris et al., 2007; Petrick, 2005). Because it is easier and less expensive to retain current customers, an understanding of loyalty may allow farmers and farm tour organizers to adapt their services to the needs and wants of their loyal customer base. These adaptations can reduce costs and efforts, and thereby increase efficiency. Both loyalty and behavioral intentions should be measured so that farmers and farm tour organizers can better focus their marketing efforts.

**Farmer-led Farm Tours**

Higher levels of interaction (e.g., speaking directly with the grower of one’s food) have been shown to result in a higher quality experience, which increases consumer perceptions of a product’s value (Mason & O’Mahony, 2007; Oliver, 1996; Smithers & Joseph, 2000; Veeck, Che, & Veeck, 2006). For example, Smithers and Joseph surveyed vendors, customers, and managers at 15 farmers’ markets in Ontario, Canada. Customers reported being able to interact directly with the grower of their food as highly important. Mason and O’Mahony explored tourists’ perceptions of food and wine trails in Australia and found that “interactions between consumers and the people engaged in the description, preparation, and presentation of the product, process, and place stories are critical tourism exchanges” (p. 507). Tourists that engaged directly with farmers and other food producers, particularly when the farm or producer told the story of the history of his/her business, reported higher levels of attachment and enjoyment to service providers, in addition to plans
to revisit (Mason & O’Mahony, 2007). Veek et al. studied changes on small farms in Michigan and found that farms participating in farm tours and other forms of agritourism were viewed by communities as enhancing regional economies and reducing leakage. Farms offering tourism experiences had more and stronger connections with area restaurants and more retail customers (Veek et al., 2006). Phillip, Hunter, and Blackstock (2009) argued that farmer-led farm tours are a form of working farm direct contact staged agritourism (WFDCS). WFDCS agritourism occurs on a working farm, involves direct contact with a farmer or farm staff member, and includes visitor participation in a staged (i.e., allows consumers to glimpse but not fully participate in farm operations/production practices) organized agriculture activity or a farm tour (Phillip et al., 2009). This type of agritourism allows consumers to connect to local foods on a variety of levels.

Local Food

Confusion surrounds the concept of local food (Beer, 2008; Hardesty, 2008; Khan & Prior, 2010; Martinez et al., 2010; Morris & Buller, 2003; Sims, 2009; Zepeda & Leviten-Reid, 2004). Morris and Buller (2003) suggested two definitions. The first emphasizes the geographic locality of food, with local foods being produced, processed and retailed within a circumscribed geographic area. The second view of local includes all foods distinguished as local though labeling and/or accreditation or certification schemes. In other words, local products are identified as coming from, but not necessarily consumed in, a particular geographic area (Morris & Buller, 2003). Local food is believed to stimulate rural development, reduce food miles, and allow consumers to gain a better understanding of where their food comes from (Morris & Buller, 2003). Hardesty (2008) found that
consumers are often driven to purchase local food because they believe it is healthier, fresher, higher quality, and tastier. However, many are deterred from purchasing due to barriers such as cost, convenience, and availability (Hardesty, 2008; Martinez et al., 2010).

Smithers (2009) and Martinez et al. (2010) found that the concept of local is frequently associated with mileage. Local has become a synonym for quality bundled into a category of *good food* that includes concepts such as organic, family-scale farming, and natural (Smithers, 2009). Many motivations for purchasing what is perceived as local food existed including wanting a personal relationship with producers, supporting local farmers, desiring fresher products, and generating social and economic value within one’s community (Martinez et al., 2010; Smithers, 2009). According to Martinez et al., “Consumers who are willing to pay higher prices for locally produced foods place importance on product quality, nutritional value, methods of raising a product and those methods’ effects on the environment, and support for local farmers” (p. iv).

Delind (2011) asked where the local foods movement was going and discussed barriers to the movement’s success. Delind created categories for what she perceived to be the movement’s barriers. These categories helped explain why local has yet to take on a universal definition. Delind’s categories included: locavore, Wal-mart, and Pollan emphases. The locavore emphasis highlighted the sense of individual responsibility provoked by the local foods movement. Delind argued that this emphasis, however good intentioned, places blame on individuals who do not purchase local foods and does not consider circumstance when calculating local foods purchasing feasibility. The Wal-mart emphasis confronts problems with defining local, and the idea that a definition for local foods can be established
by a global company. If local is defined by a non-local source such as Wal-mart, Delind argued that the community and individuals to which the term was meant to refer lose ownership of the term, and their connection to it. Finally, Delind blamed the Pollan emphasis for narrowing the lens of what can be considered local and setting too many standards. According to this emphasis, local takes on a hierarchical, exclusive definition and thereby, loses meaning and application. Essentially, Delind argued that because a variety of groups are trying to define the term, and because each of these groups/ways of thinking is not necessarily any better than the other, local may never be clearly defined. The local foods movement will continue to succeed only if it remains rooted in “the voice and power of small and brilliant people” (Delind, 2011, p. 282).

Moving away from theory and politics, a definition or at least an understanding of local might be gained through an on-farm experience where consumers reconnect or connect for the first time with the grower and source of their food. A positive on-farm experience might lead to recommendations regarding the experience, revisits, and support of the local food movement through continued and/or increased purchase of local products. Therefore, to potentially support the local foods movement, farmers and farm tour organizers can consider providing high quality farm tours and on-farm experiences. An understanding of farm tour participants’ perceptions of farm-tours can assist farmers and farm tour organizers in creating high quality experiences, and thereby support the local foods movement and sustainable agriculture.
Sustainable Agriculture

According to Hinrichs (2010), “sustainable agriculture involves the innovation, development and diffusion of more environmentally sensitive production practices . . . and resistance to and mobilization against the socially and environmentally destructive conventional agriculture paradigm” (p. 296). Though a widely accepted meaning of sustainable agriculture does not exist, several themes prevail. These themes include the importance of community, social justice, social equity, and cultural awareness; the importance of connecting people to their food source; and the mitigation or elimination of harmful environmental impacts associated with the current industrial food system (Hinrichs, 2010; Horrigan et al., 2002). Karami and Keshavarz (2010) argued that humans are central to the implementation of agricultural sustainability and that agricultural sustainability is rooted in both ecological and social dimensions. The mission of sustainable agriculture is “the provision of adequate and secure agricultural products, supplied on a continual basis to meet demands” (Karami & Keshavarz, 2010, p. 23). The notion of equity is not included in this definition, but is an important dimension of sustainability. Sustainable agriculture supports farmer and consumer equity (Kerami & Keshavarz, 2010). In a sustainable system, all things are just, fair, and equal. Farm hands are paid a living wage, the land is treated well in the best interest of future generations who will need to use it, and prices charged are fair to consumers and allow the farmer to provide to the community as well as him/herself. A sustainable system is a balanced system. If on-farm experiences and farmer led farm tours educate consumers about the local foods and farming and the importance of sustainability and sustainable practices, this balance can be recreated.
Summary

The purpose of this study was to examine the influence of farm tour participants’ perceptions of quality, value, and satisfaction of/with on-farm experiences on future local foods purchasing intentions. An understanding of these perceptions can aid farmers and farm tour organizers in more effectively connecting with customers and inspiring support of local farms and food. This understanding may also assist the CFSA in more effectively accomplishing its mission: to educate the public about sustainable farming, build ways for local organic family farms to succeed, and advocate for fair farm policies (CFSA, 2011). This research can provide farmers and farm tour organizers with information that will assist them in hosting high quality farm tours, and enable them to recruit more customers.
CHAPTER 3

Methods

This chapter describes the methods and approaches used to examine farm tour participants’ perceptions of quality, value, and satisfaction of/with on-farm experiences, and analyze how these perceptions influenced participants’ future local foods purchasing intentions. Descriptions of the study site, questionnaire design, procedures for sampling and data collection, and techniques and programs used for data analysis are included.

Study Site

In 2011, North Carolina hosted five annual regional farm tours including: Carolina Farm Stewardship Association’s (CFSA) Piedmont Farm Tour near Pittsboro, NC (April 16-17; 40 farms) Appalachian Sustainable Agriculture Project’s (ASAP) Family Farm Tour near Asheville, NC (June 25-26; 41 farms); Blue Ridge Women in Agriculture’s (BRWIA); High Country Farm Tour near Boone, NC (August 6-7; 20 farms); CFSA’s Eastern Triangle Farm Tour near Raleigh, NC (September 17-18; 25 farms); and Know Your Farms’ (KYF) Charlotte Area Farm Tour near Charlotte, NC (September 17-18; 32 farms). Each farm tour featured farms in 4-6 counties. Farm tours were marketed through ads in local magazines and newspapers, radio broadcasts, Facebook, Twitter, blog posts, posts on farm tour organizations’ websites, and signs in grocery stores such as Earthfare and Whole Foods. Tickets were for sale at select retail shops, grocery stores, and farmers’ markets in counties included on the farm tours. Farm tour organizations also offered tickets for sale through their websites. Each tour charged per carload $25 pre-purchase and $30 the day of the event. Tickets, in the form of pin on buttons were available for purchase during farm tours at all
participating farms. One button was provided to each carload, which allowed the carload to visit any or all farms on the tour.

Farm tour organizers at each of the above listed organizations claim that tours attract between 1,000 and 3,000 visitors each year, and that the number of visitors is steadily increasing (F. Broadwell, personal communication, February 16, 2012; C. Shi, personal communication, June 24, 2011; Cramer, M. personal communication, July 21, 2011; Wilson, L., personal communication, February 11, 2012). Each farm tour provided visitors with a printed or printable brochure including brief descriptions of participating farms, a map, and tips and tricks for making the most out of the farm tour experience. Farm tours operated for four to five hours on two consecutive weekend afternoons. Times of operation ranged from: 12:30pm to 5:30pm (KYF), to 1:00pm to 5:00pm (CFSA), to 1:00pm to 6:00pm (ASAP), and to 2:00pm to 6:00pm (BRWIA). Know Your Farms was the only farm tour that did not open all participating farms both days of its tour. Instead, based on farmer input, half of KYF’s farms were open on Saturday only. The other half were open on Sunday only. This arrangement allowed participating farmers, farm staff, and volunteers to visit other farms on the tour (C. Shi, personal communication, June 24, 2011).
The 2012 Piedmont Farm Tour, the study site chosen for this research, is hosted every April by the CFSA in Pittsboro, NC. The Piedmont Farm Tour is in its 17th year of operation. The tour helps CFSA achieve its mission to: educate the public about sustainable farming, “build ways for local organic family farms to succeed,” and “advocate for fair farm policies” (CFSA, 2011). The 2012 tour ran from 1-5pm on Saturday and Sunday, April 28th and 29th. The tour included 40 farms across five North Carolina counties: Alamance, Chatham, Durham, Orange, and Person. These counties are located to the west and northwest of Raleigh as shown in Figure 2. Farms participating in the tour offered a variety...
of products for consumption and/or feature/display. Products and species included but were not be limited to: produce, herbs, flowers, mushrooms, wine, bees, goats, lambs, sheep, beef, dairy (cow and goat), horses, rabbits, bison, chickens (broilers for meat), hens/eggs, prawns, turkey, llamas, tobacco, and grain. According to Fred Broadwell, CFSA Program Manager and farm tour coordinator, the Piedmont Farm Tour had nearly 2,000 individual visitors in 2011 and more than 3,000 in 2012 (personal communication, February 16, 2012; May 24, 2012).

Data Collection

The target population of this study was participants in the 2012 Piedmont Farm Tour. Data were collected from 2012 Piedmont Farm Tour participants who provided email addresses to CFSA during the on-line or on-farm tour registration process. Research protocol/methods were submitted to the IRB for approval and research was conducted after this approval was gained (see Appendix A). An email containing a link to an online post tour survey was sent two days after the farm tour to all farm tour participants who provided their email addresses. The online survey was formatted using Survey Monkey, and was added to CFSA’s six question post tour survey. Survey Monkey was used because it was CFSA’s preferred survey tool.

After completing CFSA’s survey, participants were asked to participate in a more in-depth survey. This survey assessed perceptions of quality of performance related to the farm tour, value of interaction with farmer, time on farm, farm products, satisfaction with the quality of the farm tour experience, behavioral intentions concerning purchasing local foods after the farm-tour, and loyalty related to likelihood of revisiting and/or recommending the
farm tour to others. The online post tour survey was recommended as the most effective method for reaching the target audience given past tour participants’ unwillingness to respond to intercept surveys (F. Broadwell, personal communication, February 16, 2012), and limited economic resources and volunteers available for this study.

The problems with the 2010 and 2011 surveys were taken into account in determining how to optimize data collection for 2012. In 2010, for example, CFSA received 283 individual responses to a single page four question intercept survey, collected at all 40 farms on the farm tour. An estimated 2,700 individuals participated in the 2010 tour with approximately half of all participating adults being asked to complete the survey (F. Broadwell, personal communication, February 16, 2012). Therefore, CFSA’s 2010 survey yielded only a 20% response rate. This low response rate was attributed to participants’ lack of time and social constraints (i.e., needs and wants of other persons in their party), the desire to move on and visit other farms (i.e., many farms required 20-30 minutes of driving), short attention spans of young children, and the limited rest areas available during the tours. Despite the simplicity (i.e., three multiple choice and one open-ended question), the broad administration (i.e., 40 farms) of CFSA’s 2010 intercept survey resulted in low response rates.

In 2011 a different method was employed to get feedback about the farm tours. CFSA conducted an online survey, using Survey Monkey, of Piedmont Farm Tour participants. CFSA collected 700 emails from farm tour participants and sent a link to the online survey to each of these addresses. A total of 231 individual questionnaires were completed, which yielded a 33% response rate (F. Broadwell, personal communication, February 16, 2012).
While this response rate was higher by 13% than the 2010 response rate, problems with email transferal were reported and it is likely that many potential respondents did not receive the survey (F. Broadwell, personal communication, February 16, 2012). Further, the time window for completing this 2011 survey was only one week and the survey was emailed to participants more than one week post farm tour. CFSA staff hoped that more accurate transferal of email addresses, administering the survey closer to the time of the tour (i.e., two days post tour as opposed to seven), and a longer window for questionnaire completion would increase 2012 response rates. Given the low response rate of the previous 2010 intercept surveys coupled with limited funding and volunteer availability, conducting multi-page intercept surveys at the exits of a select number of farms was unlikely to afford a sufficient response rate for this study. Thus, the rationale for administering an online survey was supported.

For this study, CFSA collected farm tour participants’ email addresses during the farm tour registration process or at the first farm participants visited each day. Booths, located at the front of all farms participating in the Piedmont Farm Tour, were staffed by volunteers and served as registration/check-in stations (F. Broadwell, personal communicator, February 25, 2012). Farm tour participants were required to stop at these booths and register or show proof of registration (i.e., tickets/buttons). During check-in or registration, volunteers asked participants if this farm was their first visit of the day. If so, participants were asked to write their name and email address on the sign-in sheet, and check if they wished to be added to CFSA’s list serve. Two days after the farm tour, CFSA
transferred the emails from the sign-in sheets and contacted participants with the online questionnaire.

CFSA also included a short feature about the more detailed survey in its April newsletter that came out before the tour. Further, they included information about the survey in the May and June newsletters, which were both post tour. These newsletters were distributed via email to all CFSA newsletter subscribers. Features in the newsletter, in addition to the increased response window were intended to raise awareness about the survey and increase response rates.

This study’s questionnaire accompanied CFSA’s online follow up survey. Upon completion of CFSA’s six survey questions, participants were asked to complete a more detailed survey. Those willing to participate were entered to win one of three $100 Whole Foods gift cards. These gift cards were paid for by the researcher and by funds from the Department of Parks, Recreation and Tourism Management at North Carolina State University.

A qualifying question was used to ensure that the desired sample population was being reached. The qualifying question asked: During the 2012 Piedmont Farm Tour, did you visit at least one farm that offered a GUIDED farm tour led by a farmer or a member of the farm’s staff? Those respondents who answered “no” were thanked for their time and informed that the raffle winner would be announced following the survey close date. Respondents who answered “yes” were directed to the detailed questionnaire and were instructed: “While completing this survey, please think about a farm(s) you visited that offered a GUIDED tour, a tour led by a farmer, or a member of the farm's staff.
answer the following questions based solely on your experience(s) at a farm(s) that offered a guided farmer-led tour.”

**Questionnaire Design**

To better understand the influence of farm tours on local foods purchasing intentions, the following constructs were operationalized: quality of performance, satisfaction with experience, value, loyalty, and behavioral intentions. One sociodemographic characteristic, zip code, was also collected. Zip code allowed average distance and range of distances traveled to the farm tour to be estimated. The questionnaire was modified to fit the context of this study and adapted based on discussions with farm tour organizers and farmers. A copy of the questionnaire can be found in Appendix B.

Questions about participants’ perceptions of quality, value, and satisfaction with the farms where they took guided farm tours, as well as their behavioral intentions post tour, and loyalty to the tour were created from analysis of instruments used in tourism studies including: Baker and Crompton (2000), Baker and Parasurman (1994), Bitner (1992), Li and Petrick (2008), Parasuraman et al. (1988), Petrick (2004), and Zeithaml et al. (1996). Scales and questions were proven reliable and valid through use in past studies and the completion of reliability measures, and were adapted to fit the context of this research.

Overall quality was measured using a single item, 7-point Likert-type scale modeled after a scale proven reliable and valid by Tian-Cole, Crompton, and Wilson (2002). Value was measured using a four-item Likert type scale adapted from Petrick (2004). A reliability coefficient (Cronbach’s alpha) was calculated for the value scale, resulting in a score of 0.96. This indicated that the scale had good internal consistency. A total value scale score was
created from the four-item scale. Satisfaction was measured through a single-item, 7-point semantic differential scale modeled after a scale used by Petrick (2005).[1]

Behavioral intentions were examined using a five-item Likert-type scale modeled after Petrick’s (2005) instrument, which was found to have high internal consistency, and one close ended, multiple choice question. The behavioral intentions scale revealed high internal consistency with a Cronbach’s alpha coefficient of .859. All items in this scale loaded on a single factor accounting for 66.58% of variance. A total behavioral intentions scale score also was created for this analysis. The diagnostics for multicollinearity (i.e., tolerance and variance inflation factors) were in acceptable ranges” (Meyers, Gamst, & Guarino, 2006).

Loyalty was examined as a subset of behavioral intentions and through assessment of past behaviors via a single question asking participants about past farm tour attendance. More detailed descriptions of how each of the dependent variables were measured are provided below.

Quality. Consumer perceptions of quality of performance were measured using a multiple item, 7-point Likert type scale. Quality items were created based on examples from previous research and were anchored by 1 extremely poor and 7 extremely well. Tian-Cole et al. (2002) used six quality of performance domains including: (a) education and conservation, (b) staff/volunteers, (c) comfort amenities, (d) cleanliness, (e) information, and (f) wildlife. These domains were adapted to fit this study. For example, domains a-e remained the same, while domain (f) was adapted to “farm products.” Sixteen quality attribute items that fell under the quality domains were then created using quality of performance scales from past studies including: Baker and Crompton (2000), Petrick, (2005),
Tian-Cole et al. (2002) Tomas, Crompton, and Scott (2003), Tomas, Scott, and Crompton (2002), and Zeithaml et al. (1996). Quality attributes were adapted to fit the context of this study. Respondents were asked on the questionnaire (Appendix B) to “please rate how well the following farm features performed, with 1 being performed extremely poorly and 7 being performed extremely well.”

**Value.** Value was measured using a four item, 7-point Likert type scale adapted from Petrick (2004). Petrick adapted SERVQUAL and SERV-PERVAL to measure five dimensions of perceived value: quality related to price paid, monetary price, behavioral price, emotional response, and reputation. As two of the dimensions were found to overlap (i.e., quality and behavioral), Petrick adapted the scale to measure four dimensions. These dimensions also can be seen on the questionnaire in Appendix B.

**Satisfaction.** Satisfaction with experience was measured through a single-item, 7-point semantic differential scale. In the past, satisfaction has been measured using a single item global analysis (e.g., Baker & Crompton, 2000; Petrick, 2005; Tomas et al., 2002; Tomas et al., 2003). Petrick (2005) used a single-item, 10 point scale anchored by 1 *very dissatisfied* and 10 *very satisfied* to measure cruise ship passenger’s satisfaction. Petrick’s (2005) rubric was adapted to a 7-point scale to remain consistent with quality and value scales. Anchors remained unchanged. Question wording was modified from Petrick’s cruise ship context, to a farm tour context, to fit the needs of this study. To keep this questionnaire short and thereby afford a higher response rate, only overall satisfaction was assessed as shown in the questionnaire in Appendix B.
Loyalty. Loyalty was measured using a close ended multiple choice question that asked participants how many times they had attended the farm tour, including this year. Although not an exhaustive analysis of loyalty, this item served to identify participant loyalty to the annual farm tour. Loyalty is most often measured as a subset of behavioral intentions. Zeithaml et al. (1996) employed a 5-item loyalty scale as part of a 13-item battery to gauge consumers’ behavioral intentions. Loyalty items included: “say positive things about XYZ to others,” “recommend XYZ to someone who seeks your advice,” “encourage friends and relatives to do business with XYZ,” “consider XYZ your first choice to buy ______ services,” and “do more business with XYZ in the next few years” (Zeithaml et al., 1996, p. 38). Petrick (2005) examined loyalty through number of past visits, psychological attachment, and intensity of visit. Number of past visits was operationalized as the number of cruises passengers had taken in their lifetime. A five-item, seven-point semantic differential scale was used by Petrick to measure psychological attachment. Respondents rated the cruise line from 1 negatively to 7 positively and the measure was anchored by “unpleasurable/pleasurable,” uninteresting/interesting, and negatively/positively” (Petrick 2005, p. 204). Intensity of visit was measured by the number of cruises respondents had taken in the last year. For the purposes of this study, loyalty was operationalized as a subset of behavioral intentions and measured by number of past visits (i.e., number of years participating in the farm tour), and intensity of visit (i.e., number of times local foods purchased in the last year).

Behavioral Intentions. To assess behavioral intentions, a 5-item, 7-point Likert type scale modeled after Zeithaml et al. (1996) and Tian-Cole et al. (2002) was used. This scale
measured how likely visitors were to take future actions and was anchored by 1 not at all likely and 7 extremely likely, as Tian-Cole et al. (2002) recommended. A few of the behavioral intentions items that were adapted and used in this study included: “Purchase local foods, in the future,” “Purchase local foods, even if the price of local foods was to increase,” and “Say positive things about local foods, in the future.” Anchors were not changed as shown in the questionnaire in Appendix B.

Finally, one sociodemographic question was asked. One fill in the blank question asked for participants’ zip codes, which allowed distance traveled to farms to be estimated.

**Data Analysis**

Data were analyzed using SPSS (IBM Statistical Package for the Social Sciences Version 19) and Microsoft Excel software programs. Descriptive statistics including frequencies, means, and standard deviations were used to describe farm tour participants’ perceptions of farm tours and future intentions to purchase local foods.

To answer Question 1, “Which quality attributes are rated as performing high/low by participants during on-farm experiences?” the mean scores for the quality attributes were examined. Mean scores were compared and ranked to identify attributes perceived by participants as highest/lowest quality.

Question 2, “Which quality attributes are most important to participants during on-farm experiences?” examined the frequency and percent of participants’ selection of the top three most important features of the farm tour. Features were ranked by frequency and percentage.
Question 3, “What are the key determining farm quality attributes that contribute to overall quality, satisfaction, value and behavioral intentions?” was examined through standardized Beta coefficients from multiple regression and correlation analyses. All 16 quality attributes were regressed against overall quality, overall satisfaction, total value scale scores, and total behavioral intentions scale scores.

Question 4, “Do participants (first timers and repeaters) differ in their ratings of the dependent variables: quality, value, satisfaction, and behavioral intentions?” used independent- samples t-tests to compare the differences between first time and repeat farm tour participants’ mean scores on each total scale score for the dependent variables. Significant differences in first timers vs. repeaters’ ratings of satisfaction were detected at the .05 level.

Summary

The purpose of this study was to examine the influence of farm tour participants’ perceptions of quality, value, and satisfaction of/with on-farm experiences on future local foods purchasing intentions. An understanding was gained though administration of an electronic survey to participants in the 2012 Piedmont Farm Tour. This survey explored participants’ perceptions of the dependent variables, as related to their farm tour experience via guided farm tour. Results are reported in the following chapter.
CHAPTER 4

Results

This chapter describes the findings from this quantitative study of the influence of 2012 Piedmont Farm Tour participants’ perceptions of quality, value, and satisfaction of on-farm experiences, on future local foods purchasing intentions. First, a brief description of survey respondents is provided. General findings are then overviewed. Finally, research questions and associated findings are addressed.

Sample

In response to three emails sent by CFSA to farm tour participants, a total of 286 farm tour participants initiated the questionnaire. Of these individuals, 247 answered yes to the qualifying question, “During the 2012 Piedmont Farm Tour, did you visit at least one farm that offered a GUIDED farm tour led by a farmer or a member of the farm’s staff?” and were permitted to continue with the survey. Because this survey was structured as an addendum to CFSA’s proprietary survey of farm tour participants, I was not granted access to CFSA’s email list (i.e., the full list of emails to which the survey was sent). Therefore, a response rate could not be calculated. This limitation is discussed in more detail in the final chapter.

Most farm tour participants came from North Carolina with the following exceptions: one participant each from California, Nevada, Oregon, Ohio, Tennessee, and two from South Carolina. Figure 3 presents a map of the participants’ zip codes. Also shown in this figure are boundaries of the counties in which farms represented on the tour were located.

A total of 223 respondents completed question eight, “Including this year, how many times have you attended the Piedmont Farm Tour?” Times attending the tour ranged from
First Time to 15 times. Table 1 provides additional details.

![Map of Participant Zip Codes and Farm Tour Counties at the 2012 Piedmont Farm Tour.](image)

Table 1

Number of Times of Visitors that Participated in Farmer-Led Tours in the Past

<table>
<thead>
<tr>
<th>Number of Visits</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Time</td>
<td>141</td>
<td>63.2</td>
</tr>
<tr>
<td>2</td>
<td>31</td>
<td>13.9</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>9.0</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>5.4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>2.2</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>2.2</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>2.2</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>
General Findings

Before specific findings are addressed, general findings are reported. Of the 286 farm tour participants that started the survey, 87.2% \((n = 247)\) visited a farm that offered a guided farm tour as part of the annual 2012 Piedmont Farm Tour. Therefore the sample size for this study was \(N = 247\).

Table 2 shows the responses to which three features or quality attributes were most important to farm tour participants. Participants most frequently selected Information about farm products/practices with 69.5\% \((n = 167)\) of respondents selecting this feature. Information provided during the farm tour(s) was selected as a most important feature by 50.6\% \((n = 122)\) of respondents. Knowledge of farmer/farm staff was selected by 37.2\% \((n = 89)\). Printed materials for visitors was selected as a most important feature by only .8\% \((n = 2)\) of respondents. See Table 2 for additional information about the most important features.
Table 2

Sixteen Quality Attributes of Farm Tours Most Frequently Selected as Most Important

<table>
<thead>
<tr>
<th>Feature</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information about farm products/practices</td>
<td>167</td>
<td>69.5</td>
</tr>
<tr>
<td>Information provided during the farm tour(s)</td>
<td>122</td>
<td>50.6</td>
</tr>
<tr>
<td>Knowledge of farmer/farm staff</td>
<td>89</td>
<td>37.2</td>
</tr>
<tr>
<td>On-farm demonstration(s)</td>
<td>77</td>
<td>31.9</td>
</tr>
<tr>
<td>Responsiveness of farmer/farm staff to helping visitors</td>
<td>45</td>
<td>18.8</td>
</tr>
<tr>
<td>Variety of farm products</td>
<td>42</td>
<td>17.4</td>
</tr>
<tr>
<td>Information about farm history</td>
<td>40</td>
<td>16.6</td>
</tr>
<tr>
<td>Food and/or drinks for sale</td>
<td>29</td>
<td>12.0</td>
</tr>
<tr>
<td>Food and/or drinks for sample</td>
<td>26</td>
<td>10.8</td>
</tr>
<tr>
<td>Information about farmer(s)/their family</td>
<td>25</td>
<td>10.4</td>
</tr>
<tr>
<td>Schedule of farm tour times</td>
<td>15</td>
<td>6.2</td>
</tr>
<tr>
<td>Availability of restrooms</td>
<td>14</td>
<td>5.9</td>
</tr>
<tr>
<td>Overall appearance of the farm(s)</td>
<td>14</td>
<td>5.9</td>
</tr>
<tr>
<td>Length of farm tour(s)</td>
<td>11</td>
<td>4.5</td>
</tr>
<tr>
<td>Parking</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>Printed materials for visitors</td>
<td>2</td>
<td>0.8</td>
</tr>
</tbody>
</table>

1Measured using a 3 choice multiple choice question: “Below is the same list of features you just rated. Of these features, please choose the THREE FEATURES that are MOST IMPORTANT to you. (Check 3).”
Respondents rated the overall quality of the farm(s) where they took a guided farmer-led tour as very high with 79.1% \((n = 189)\) selecting *Extremely High* or *High* in quality. None of the respondents selected *Extremely Low* as a rating of overall quality for any of the farms on which guided tours were offered. Table 3 provides a complete breakdown of overall quality ratings.

Table 3

**Overall Quality Ratings of Farms that Offered Guided Tours**

<table>
<thead>
<tr>
<th>Overall Quality</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Quality(^1)</td>
<td>6.14</td>
<td>0.887</td>
<td>189</td>
<td></td>
</tr>
<tr>
<td>Extremely High</td>
<td>96</td>
<td>40.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>93</td>
<td>38.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat High</td>
<td>42</td>
<td>17.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neither/Nor</td>
<td>5</td>
<td>2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat Low</td>
<td>2</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ext Low</td>
<td>0</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Measured on a 7-point Likert-type scale from 1 = “extremely low” to 7 = “extremely high”

Perceived value was measured through a four item, 7-point Likert type scale. In response to the first value statement, “I feel that I got my money’s worth on these farms,” 53.4% \((n = 127)\) of respondents choose *Strongly Agree*, 34.9% \((n = 83)\) chose *Agree*, and
8.0% \( (n = 19) \) chose Somewhat Agree. Only .4% \( (n = 1) \) selected Strongly Disagree and .4% \( (n = 1) \) Disagree in response to this question. Somewhat Disagree was selected by 1.7% \( (n = 4) \) of respondents.

In response to, “I feel that I received good quality for the price I paid for visiting these farms,” 50.4% \( (n = 119) \) chose Strongly Agree, 37.3% \( (n = 88) \) chose Agree and 8.5% \( (n = 20) \) chose Somewhat Agree. Strongly Disagree or Somewhat Disagree. Disagree was never selected. Responses to the third value statement “After evaluating my experience on these farms, I am confident that I received quality for the price I paid,” were as follows: 50.4% \( (n = 119) \) Strongly Agree, 38.1% \( (n = 90) \) Agree, and 6.6% \( (n = 19) \) Somewhat Agree, Somewhat Disagree, Strongly Disagree, or Neither Agree Nor Disagree.

The final value statement read, “I feel that the purchase of my farm tour button met both my high quality and low-price requirements.” Responses to this statement were similar to the other value statements with 47.5% \( (n = 112) \) selecting Strongly Agree, 36.0% \( (n = 85) \) selecting Agree, and 10.6% \( (n = 25) \) selecting Somewhat Agree. See Table 4 for a complete breakdown of value scale scores.
### Table 4

Perceptions of Value of On-Farm Experiences via Farmer-Led Tours

<table>
<thead>
<tr>
<th>Perception</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Value</strong></td>
<td>0.40%</td>
<td>0.40%</td>
<td>1.70%</td>
<td>1.30%</td>
<td>8.00%</td>
<td>34.90%</td>
<td>53.40%</td>
</tr>
<tr>
<td>I feel that I got my money’s worth on these farms. (n=236)</td>
<td>n=1</td>
<td>n=1</td>
<td>n=4</td>
<td>n=3</td>
<td>n=19</td>
<td>n=83</td>
<td>n=127</td>
</tr>
<tr>
<td>I feel that I received good quality for the price I paid for visiting these farms. (n=236)</td>
<td>0.30%</td>
<td>0.00%</td>
<td>1.40%</td>
<td>1.40%</td>
<td>7.00%</td>
<td>30.80%</td>
<td>41.60%</td>
</tr>
<tr>
<td></td>
<td>n=1</td>
<td>n=0</td>
<td>n=4</td>
<td>n=4</td>
<td>n=20</td>
<td>n=88</td>
<td>n=119</td>
</tr>
<tr>
<td>After evaluating my experience on these farms, I am confident I received quality for the price I paid. (n=236)</td>
<td>0.30%</td>
<td>0.00%</td>
<td>1.00%</td>
<td>1.40%</td>
<td>6.60%</td>
<td>31.50%</td>
<td>41.60%</td>
</tr>
<tr>
<td></td>
<td>n=1</td>
<td>n=0</td>
<td>n=3</td>
<td>n=4</td>
<td>n=19</td>
<td>n=90</td>
<td>n=119</td>
</tr>
<tr>
<td>I feel that the purchase of my farm tour button met both my high quality and low price requirements. (n=236)</td>
<td>0.40%</td>
<td>0.40%</td>
<td>2.50%</td>
<td>2.50%</td>
<td>10.60%</td>
<td>36.00%</td>
<td>47.50%</td>
</tr>
<tr>
<td></td>
<td>n=1</td>
<td>n=1</td>
<td>n=6</td>
<td>n=6</td>
<td>n=25</td>
<td>n=85</td>
<td>n=112</td>
</tr>
</tbody>
</table>

¹ Measured on a Likert-type scale with 1 = “strongly disagree” and 7 = “strongly agree”
In response to survey question 7, “Overall, how satisfied were you with your experience on the farm(s) that offered guided farmer-led tours?,” 66.0% \((n = 157)\) of respondents indicated that they were \textit{Very Satisfied}. Additionally, 26.1\% \((n = 62)\) said they were \textit{Satisfied} and 5.9\% \((n = 14)\) said they were \textit{Somewhat Satisfied}. \textit{Very Dissatisfied}, \textit{Dissatisfied}, \textit{Somewhat Dissatisfied} was selected only once by .4\% of respondents. Table 5 presents a breakdown of overall satisfaction scores.

### Table 5

Overall Satisfaction with Experience on Farms that Offered Guided Tours

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction(^1)</td>
<td>6.53</td>
<td>0.825</td>
<td>157</td>
<td>66.0</td>
</tr>
<tr>
<td>Very Satisfied</td>
<td></td>
<td></td>
<td>157</td>
<td>66.0</td>
</tr>
<tr>
<td>Satisfied</td>
<td></td>
<td></td>
<td>62</td>
<td>26.1</td>
</tr>
<tr>
<td>Somewhat Satisfied</td>
<td></td>
<td></td>
<td>14</td>
<td>5.9</td>
</tr>
<tr>
<td>Neutral</td>
<td></td>
<td></td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Somewhat Dissatisfied</td>
<td></td>
<td></td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td></td>
<td></td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td></td>
<td></td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

\(^1\)Measured on a 7-point semantic differential scale from 1 = “very dissatisfied” to 7 = “very satisfied”

The majority, 98.7\% \((n = 237)\), of survey respondents had purchased local foods in the past month. Of those, 29.2\% \((n = 70)\) indicated that they purchased local foods more than two times per week during the past month. Only 1.0\% \((n = 3)\) said they \textit{Never} purchased
local foods in the past month. Farm tour participants were already a somewhat loyal group. Even before attending the tour, respondents had already "bought into" the local foods movement as evidenced by their awareness of the tour (Tour information was only provided at Whole Foods and online via CFSA’s website). An in-depth discussion of this finding is offered in Chapter 5. See Table 6 for additional details about pre-tour purchasing behaviors.

Table 6
Local Foods Purchasing Behaviors Pre Farm Tour

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Once</th>
<th>Every Week</th>
<th>Once Per Week</th>
<th>More Than 2 Times Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the past month, how often have you purchased local foods?</td>
<td>1.3%</td>
<td>10.4%</td>
<td>15.1%</td>
<td>33.6%</td>
<td>24.5%</td>
</tr>
<tr>
<td></td>
<td>n = 3</td>
<td>n = 25</td>
<td>= 46</td>
<td>n = 96</td>
<td>n = 70</td>
</tr>
</tbody>
</table>

\(^1\text{Measured on a rating scale with 1 = “never” and 5 = “more than 2 times per week”}\)

To explore farm tour participants’ future local foods purchasing intentions, respondents were asked to rate the likelihood that they would perform several different local foods-related actions. As Table 7 shows, responses were overwhelmingly positive with no one choosing Not at all Likely to perform any of the actions. Only one respondent indicated that he/she would be Unlikely, and two said they would be Somewhat Unlikely to pay a
higher price for local foods than for non-local foods. Four respondents indicated that they would be *Somewhat Unlikely* to purchase local foods if the price of local foods increased. More than 80% of respondents – 80.7% (n = 192) and 82.8% (n = 198) – said that they would be *Extremely Likely* to purchase local foods and to say positive things about local foods, respectively, in the future. When asked if they would pay a higher price for local vs. non local foods in the future, 57.3% (n = 137) chose *Extremely Likely* and 26.8% (n = 64) of respondents chose *Likely*. Even if the price of local foods increased, 42.7% (n = 102) and 31.8% (n = 76) of respondents said they would still be *Extremely Likely* and *Likely*, respectively, to purchase local foods.
Table 7

Intentions of Guided Farm Tour Participants related to Local Foods Purchasing

<table>
<thead>
<tr>
<th></th>
<th>Not at all Likely</th>
<th>Unlikely</th>
<th>Somewhat Unlikely</th>
<th>Undecided</th>
<th>Somewhat Likely</th>
<th>Likely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase local foods, in the future. (n=238)</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>5.9%</td>
<td>13.4%</td>
<td>80.7%</td>
</tr>
<tr>
<td></td>
<td>n=0</td>
<td>n=0</td>
<td>n=0</td>
<td>n=0</td>
<td>n=14</td>
<td>n=32</td>
<td>n=192</td>
</tr>
<tr>
<td>Pay a higher price for local foods than for non-local foods, in the future. (n=239)</td>
<td>0.0%</td>
<td>.4%</td>
<td>.8%</td>
<td>2.5%</td>
<td>12.1%</td>
<td>26.8%</td>
<td>57.3%</td>
</tr>
<tr>
<td></td>
<td>n=0</td>
<td>n=1</td>
<td>n=2</td>
<td>n=6</td>
<td>n=29</td>
<td>n=64</td>
<td>n=137</td>
</tr>
<tr>
<td>Purchase local foods, even if the price of local foods was to increase. (n=239)</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.7%</td>
<td>5.0%</td>
<td>18.8%</td>
<td>31.8%</td>
<td>42.7%</td>
</tr>
<tr>
<td></td>
<td>n=0</td>
<td>n=0</td>
<td>n=4</td>
<td>n=12</td>
<td>n=45</td>
<td>n=76</td>
<td>n=102</td>
</tr>
<tr>
<td>Say positive things about local foods, in the future. (n=239)</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>3.8%</td>
<td>13.0%</td>
<td>82.8%</td>
</tr>
<tr>
<td></td>
<td>n=0</td>
<td>n=0</td>
<td>n=0</td>
<td>n=1</td>
<td>n=9</td>
<td>n=31</td>
<td>n=198</td>
</tr>
<tr>
<td>Encourage my friends and relatives to purchase local foods. (n=240)</td>
<td>0.0%</td>
<td>0.0%</td>
<td>.8%</td>
<td>2.1%</td>
<td>5.8%</td>
<td>22.1%</td>
<td>69.2%</td>
</tr>
<tr>
<td></td>
<td>n=0</td>
<td>n=0</td>
<td>n=2</td>
<td>n=5</td>
<td>n=14</td>
<td>n=53</td>
<td>n=166</td>
</tr>
</tbody>
</table>

1Measured on a Likert-type scale with 1 = “not at all likely” and 7 = “extremely likely”
Question 11 on the survey asked participants if they planned to buy more from local farmers after having visited local farms. Participants responded overwhelmingly, Yes with 90.4% ($n = 216$) saying they would be more likely to buy from local farmers after visiting local farms. When participants were asked, in Question 12 on the survey, if they had a more personal connection to local farms due to their on-farm experiences, 97.1% ($n = 231$) said Yes.

If participants said Yes to question 12, they were directed to question 13, which asked if this more personal connection to local farms would encourage them to purchase more from local farmers. Responses to this question were overwhelmingly Yes with 96.1% ($n = 223$) saying that their more personal connection to local farms would encourage them to purchase more from local farmers.

This concludes the general findings section. A presentation of more detailed findings pertaining to the specific research questions follows.

**Research Question One**

The first research question for this study was:

Q1. Which quality attributes do participants rate as performing high/low during on-farm experiences?

To answer this question, mean scores and standard deviations for each of the 16 quality attributes were calculated, and then rank-ordered (see Table 9). *On-farm demonstration(s)* were rated highest in quality ($n = 241; M = 6.79; SD = 1.168$), followed by *Information provided during the farm tour(s)* ($n = 244; M = 6.72; SD = 0.768$), *Responsiveness of farmer/farm staff to helping visitors* ($n = 243; M = 6.66; SD = 0.809$), and
Knowledge of farmer/farm staff \((n = 243; M = 6.66; \text{SD} = .82)\). Farm tour participants rated Information about farmer(s)/their family as the lowest in quality \((n = 241; M = 6.21; \text{SD} = 1.14)\). Overall, little variation in mean scores of the attributes appeared, which indicated that farm tour participants agreed on how well the attributes performed (See Table 8).

Table 8

Rank Order of Service Quality Attributes – Performance\(^1\)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Attribute</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>On-farm demonstration(s)</td>
<td>241</td>
<td>6.79</td>
<td>1.17</td>
</tr>
<tr>
<td>2.</td>
<td>Information provided during the farm tour(s)</td>
<td>244</td>
<td>6.72</td>
<td>0.77</td>
</tr>
<tr>
<td>3.</td>
<td>Responsiveness of farmer/farm staff to helping visitors</td>
<td>243</td>
<td>6.66</td>
<td>0.81</td>
</tr>
<tr>
<td>4.</td>
<td>Knowledge of farmer/farm staff</td>
<td>241</td>
<td>6.66</td>
<td>0.82</td>
</tr>
<tr>
<td>5.</td>
<td>Overall appearance of farm(s)</td>
<td>242</td>
<td>6.62</td>
<td>0.76</td>
</tr>
<tr>
<td>6.</td>
<td>Food and/or drinks for sample</td>
<td>240</td>
<td>6.48</td>
<td>1.62</td>
</tr>
<tr>
<td>7.</td>
<td>Information about farm products/practices</td>
<td>240</td>
<td>6.46</td>
<td>0.92</td>
</tr>
<tr>
<td>8.</td>
<td>Schedule of farm tour time(s)</td>
<td>238</td>
<td>6.39</td>
<td>1.30</td>
</tr>
<tr>
<td>9.</td>
<td>Length of farm tour(s)</td>
<td>241</td>
<td>6.39</td>
<td>0.95</td>
</tr>
<tr>
<td>10.</td>
<td>Variety of farm products</td>
<td>241</td>
<td>6.38</td>
<td>0.94</td>
</tr>
<tr>
<td>11.</td>
<td>Printed materials for visitors</td>
<td>242</td>
<td>6.37</td>
<td>1.53</td>
</tr>
<tr>
<td>12.</td>
<td>Availability of restrooms</td>
<td>240</td>
<td>6.37</td>
<td>1.53</td>
</tr>
<tr>
<td>13.</td>
<td>Food and/or drinks for sale</td>
<td>241</td>
<td>6.34</td>
<td>1.35</td>
</tr>
<tr>
<td>14.</td>
<td>Parking</td>
<td>238</td>
<td>6.28</td>
<td>0.92</td>
</tr>
<tr>
<td>15.</td>
<td>Information about farm history</td>
<td>242</td>
<td>6.23</td>
<td>1.13</td>
</tr>
<tr>
<td>16.</td>
<td>Information about farmer(s)/their family</td>
<td>241</td>
<td>6.21</td>
<td>1.14</td>
</tr>
</tbody>
</table>

\(^1\)Measured with a Likert-type scale where 1 = “extremely poorly” and 7 = “extremely well”
All attributes received positive ratings by farm tour participants, which indicated an overall positive perception of on-farm experiences. On average, attribute scores were more than $M = 6.0$ out of a possible $M = 7.0$. The lowest score was $M = 6.21$ for Information provided about farmers/their family. Quality ratings were consistently high, with low standard deviations, indicating that participants consistently agreed about the level of quality of the farms where they took tours. Table 9 and Figure 4 provide detailed breakdowns of mean scores for the 16 quality attributes.

### Table 9

**Rank Order of Service Quality Attributes – Importance**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information about farm products/practices</td>
<td>167</td>
<td>69.5</td>
</tr>
<tr>
<td>Information provided during the farm tour(s)</td>
<td>122</td>
<td>50.6</td>
</tr>
<tr>
<td>Knowledge of farmer/farm staff</td>
<td>89</td>
<td>37.2</td>
</tr>
<tr>
<td>On-farm demonstration(s)</td>
<td>77</td>
<td>31.9</td>
</tr>
<tr>
<td>Responsiveness of farmer/farm staff to helping visitors</td>
<td>45</td>
<td>18.8</td>
</tr>
<tr>
<td>Variety of farm products</td>
<td>42</td>
<td>17.4</td>
</tr>
<tr>
<td>Information about farm history</td>
<td>40</td>
<td>16.6</td>
</tr>
<tr>
<td>Food and/or drinks for sale</td>
<td>29</td>
<td>12.0</td>
</tr>
<tr>
<td>Food and/or drinks for sample</td>
<td>26</td>
<td>10.8</td>
</tr>
<tr>
<td>Information about farmer(s)/their family</td>
<td>25</td>
<td>10.4</td>
</tr>
<tr>
<td>Schedule of farm tour times</td>
<td>15</td>
<td>6.2</td>
</tr>
<tr>
<td>Availability of restrooms</td>
<td>14</td>
<td>5.9</td>
</tr>
<tr>
<td>Overall appearance of the farm(s)</td>
<td>14</td>
<td>5.9</td>
</tr>
<tr>
<td>Length of farm tour(s)</td>
<td>11</td>
<td>4.5</td>
</tr>
<tr>
<td>Parking</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>Printed materials for visitors</td>
<td>2</td>
<td>0.8</td>
</tr>
</tbody>
</table>

1 Measured using a multiple choice question with 3 answers.
Research Question Two

The second research question asked:

Q1. Which quality attributes are most important to participants during on-farm experiences?

After rating the quality of these 16 attributes, respondents were asked to choose the three most important attributes to their on-farm experiences. *Information about farm products/practices* was the attribute most frequently selected by farm tour participants with 69.5% \((n = 167)\) of respondents selecting this feature. *Information provided during the farm tour(s)* was selected as a most important feature by 50.6% \((n = 122)\), or half of the
respondents. Knowledge of farmer/farm staff by was rated high by 37.2% (n = 89) of respondents, followed by On-farm demonstration(s) by 31.9%. (n = 77) of respondents. A summary of all the selections are presented in Table 9. Printed materials for visitors was selected as a most important feature by only .8% (n = 2) of respondents and Parking was selected as a most important by only 1.3% (n = 3). Table 9 ranks most important features by frequency and percent.

**Research Question Three**

Question three asked:

Q2. What are the key determining farm quality attributes that contribute to overall quality, satisfaction, value and behavioral intentions?

This question examined how the 16 service quality attributes contributed to the dependent variables: overall quality, overall satisfaction, value, and behavioral intentions. Additional reliability analyses allowed the researcher to ensure that the four items on the value scale and the five items on the behavioral intentions scale were measuring their respective domains, and were within the constructs of overall value and overall behavioral intentions. In each analysis, all items loaded saliently on one factor, which indicated that only one domain was present in each scale. Overall quality and overall satisfaction were assessed through single-item questions.
Table 11
Summary of Reliability Analysis on Overall Value and Behavioral Intentions Scales

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Value</td>
<td>0.96</td>
<td>6.31</td>
<td>0.88</td>
</tr>
<tr>
<td>I feel that I got my money's worth on these farms.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I received good quality for the price I paid for visiting these farms.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After evaluating my experience on these farms, I am confident I received quality for the price I paid.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that the purchase of my farm tour button met both my high quality and low price requirements.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Intentions</td>
<td>0.859</td>
<td>6.51</td>
<td>0.61</td>
</tr>
<tr>
<td>Purchase local food, in the future</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay a higher price for local foods than for non local foods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase local foods, even if price increased</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Say positive things about local foods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage friends and relatives to purchase local foods</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Once the reliability analyses were completed and the total scale scores created, the relationships between the service quality attributes and the dependent variables were examined through a comparison of beta coefficients and R-squared values, resulting from four multiple regression analyses. Regression results are presented in Table 12. Only significant, standardized beta coefficients are reported in the table. High beta (β) scores indicated the relative importance of the service quality feature on the dependent variable. The higher the β score, the more important that variable was to the model.

Overall quality was significantly correlated to the quality attributes ($r^2 = .346$), as were overall satisfaction ($r^2 = .382$) and overall value ($r^2 = .322$). The relationship between behavioral intentions and the quality attributes was not significant ($r^2 = .027$). The $r^2$ value for the behavioral intentions and quality attributes models was relatively low. Thus, the quality attributes were better predictors of overall satisfaction and overall value.

Because there were several moderate correlations among the quality attributes (Table 10), diagnostics for multicollinearity (i.e., tolerance and variance inflation factors) were examined. Results of these tests were in acceptable ranges and showed no influence on the regression models (Meyers, Gamst, & Guarino, 2006).

After controlling for the effects of the other service quality features, Information provided during the farm tour(s) ($\beta = .229$) and Variety of farm products ($\beta = .206$) were positively and significantly related to overall quality. Parking ($\beta = - .195$) was negatively and significantly related to this variable, suggesting that even if a farm tour participant rated parking as low in quality, he/she still rated overall quality as high. None of the other
relationships between the quality of performance attributes and overall quality were significant.

*Information provided during the farm tour(s) (β = .176) and Information about farm products/practices (β = .261) were positively and significantly related to overall satisfaction. Parking (β = -.208) and Availability of restrooms (β = -.159) were negatively and significantly related to overall satisfaction, which indicated that even if farm tour participants rated these attributes as low in quality, they still rated their overall satisfaction with the farm tour experience as high.

Schedule of farm tour times (β = .144), Information about farm products/practices (β = .221), and Overall appearance of the farms (β = .184) were positively and significantly related to overall value. Only Information about farm history (β = .239) was positively and significantly related to behavioral intentions.
Table 12
Regression Analysis on Dependent Variables

<table>
<thead>
<tr>
<th>Info provided during the farm tour(s)</th>
<th>Schedule of farm tour times</th>
<th>Variety of farm products</th>
<th>Info about farm history</th>
<th>Info about farm products/practices</th>
<th>Avail of restrooms</th>
<th>Parking</th>
<th>Overall appear of the farm(s)</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td>β</td>
<td></td>
</tr>
<tr>
<td>Overall Q</td>
<td>.229**</td>
<td>---</td>
<td>.206**</td>
<td>---</td>
<td>---</td>
<td>- .195**</td>
<td>---</td>
<td>0.346</td>
</tr>
<tr>
<td>Overall S</td>
<td>.176*</td>
<td>---</td>
<td>---</td>
<td>.261**</td>
<td>.159**</td>
<td>- .208**</td>
<td>---</td>
<td>0.382</td>
</tr>
<tr>
<td>Overall V</td>
<td>---</td>
<td>.144*</td>
<td>---</td>
<td>.221*</td>
<td>---</td>
<td>.184*</td>
<td>---</td>
<td>0.322</td>
</tr>
<tr>
<td>BI</td>
<td>---</td>
<td>---</td>
<td>.239*</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>0.027</td>
</tr>
</tbody>
</table>

Only significant standardized Beta coefficients are reported here.

* p<.05. ** p<.01. ***p<.001.

Research Question Four

Research question four asked:

Q3. Do participants (first timers and repeaters) differ in their ratings of the dependent variables: quality, value, satisfaction, and behavioral intentions?

Independent sample t-tests were conducted to compare the overall quality, overall value, overall satisfaction, and overall behavioral intentions scores between first time and repeat farm tour participants. The results are presented in Table 12. There were no significant
differences in the overall quality scores for first timers ($M= 104.16, SD = 8.88$) and repeaters. ($M = 104.76, SD = 7.82; t (199) = -.49, p = .62$, two-tailed). The difference between these means (mean difference = -.04, 95% CI: -.19 to -.11) was small (eta squared = .005). There was also no significant difference in the overall value scores for first timers ($M=25.21, SD = 3.65$) and repeaters ($M = 25.69, SD = 2.61; t (219) = -1.03, p = .30$, two-tailed). The magnitude of the differences in these means (means difference = -.48, 95% CI: -1.39 to .44) was also small (eta squared = .005).

A significant difference between overall satisfaction scores for first timers and repeaters did appear, first timers ($M=6.44, SD = .92$) and repeaters ($M = 6.78, SD = .45; t (221) = -3.62, p = .00$, two-tailed). The magnitude of the differences in these means (means difference = -.34, 95% CI: -.516 to -.153) was larger than any other difference between these groups (eta squared = .056). Finally, there was no significant difference in the overall behavioral intentions scores for first timers ($M = 32.55, SD = 3.13$) and repeaters ($M=32.73, SD = 2.81; t (221) = -.42, p = .67$, two-tailed). The magnitude of the differences in these means (mean difference = -.18, 95% CI: -1.01 to .65) was very small (eta squared = .001).
Table 13

Differences in First Time and Repeat Participants’ Ratings of Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>M Difference</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>1st Timers</td>
<td>140</td>
<td>6.14</td>
<td>0.93</td>
<td>-</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>Repeaters</td>
<td>82</td>
<td>6.26</td>
<td>0.77</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>1st Timers</td>
<td>139</td>
<td>6.3</td>
<td>0.91</td>
<td>-</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Repeaters</td>
<td>80</td>
<td>6.42</td>
<td>0.65</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>1st Timers</td>
<td>140</td>
<td>6.44</td>
<td>0.92</td>
<td>-</td>
<td>-0.34</td>
</tr>
<tr>
<td></td>
<td>Repeaters</td>
<td>81</td>
<td>6.78</td>
<td>0.45</td>
<td>3.06</td>
<td>0</td>
</tr>
<tr>
<td>BI</td>
<td>1st Timers</td>
<td>139</td>
<td>6.51</td>
<td>0.62</td>
<td>-</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>Repeaters</td>
<td>82</td>
<td>6.55</td>
<td>0.56</td>
<td>0.42</td>
<td></td>
</tr>
</tbody>
</table>

* Numbers in parentheses are the adjusted scores, divided by total number of items on the scale.

Summary

Survey respondents rated On-farm demonstration(s) as performing the best of the quality attributes, while Information about farmer(s)/their family was rated as the lowest among the quality attributes. Information about farm products/practices was the quality attribute most frequently selected by farm tour participants as a most important feature during their on-farm experience. The key determining farm quality attributes that contributed
to overall quality, value, overall satisfaction, and behavioral intentions were: Information provided during the farm tour(s) and Variety of farm products (overall quality); Information provided during the farm tour and Information about farm products/practices (value); Schedule of farm tour times Information about farm products/practices, and Overall appearance of the farms (overall satisfaction); and Information about farm history (behavioral intentions). Parking and Availability of Restrooms were negatively related to overall quality and overall satisfaction. First time and repeat participants responded similarly to questions about quality attributes, overall quality, value, and behavioral intentions, but repeat visitors rated their satisfaction with the tour significantly higher than first time visitors. The implications of these findings, as well as additional discussion about their meanings are presented in the next chapter.
CHAPTER 5
Discussion, Conclusions, and Implications

The purpose of this study was to examine the influence of farm tour participants’ perceptions of quality, value, and satisfaction of/on-farm experiences, on future local foods purchasing intentions. To examine farm tour participants’ perceptions of quality, value, satisfaction, and behavioral intentions related to their experiences on farms offering guided farm tours, four research questions were tested. In this chapter, a discussion of general findings and their ties to tourism literature is provided. Results and their theoretical underpinnings and implications are discussed, managerial implications are detailed, study limitations are considered, and suggestions are made for future research.

General Findings and Conclusions

Farm tour participants’ experiences on farms that offered guided tours led to connections to farmers, farms, and local food. Over 80% of respondents said that after visiting farms that offered guided tours, they would be likely to say positive things about local foods and purchase local foods in the future. Similarly, more than 90% of respondents said that they planned to buy more from local farmers, after visiting farms on the tour. This study’s findings were congruent with previous research, which found that higher levels of interaction with service providers resulted in higher quality experiences and increased consumer perceptions of the value of products and services (Mason & O’Mahony, 2007; Oliver, 1996; Smithers & Joseph, 2000; Veeck, Che, & Veeck, 2006).

Because the majority, 73.2%, of survey respondents said that they had purchased local foods within the last month, they appeared already somewhat loyal to local foods. Thus,
the sample for this study was somewhat biased by previous awareness of and loyalty toward local foods. Perhaps now, post tour, respondents will be more loyal to the participating farms and their products.

Most survey respondents (60%) were first time participants in the farm tour, which suggested that there may be varying levels of loyalty to local foods. This finding was congruent with the findings of Petrick, (2005). Before any tour, Petrick might argue that participants were in the *spuriously loyal* category with low psychological attachment (i.e., interpersonal connection to local farms/farmers) and high behavioral consistency (i.e., local foods purchasing). Post tour, participants’ behavioral intentions and survey responses were consistent with Petrick’s *highly loyal* category, which included “behavioral consistency and high psychological attachment” (Petrick, 2005, p. 201). Perhaps, farm tour participants viewed the farm tour as a way to develop a stronger connection to the local foods they were already purchasing.

Because this study did not directly explore participants’ knowledge of local foods, past interactions with local foods, or participants’ expectations and/or reasons for attending the farm tour, and because local foods are becoming more available in traditional grocery stores and other retail locations, respondents’ loyalty levels prior to the farm tour cannot be accurately gauged. Regardless, due to respondents’ high ratings of quality and high levels of satisfaction, on-farm experiences appeared to enhance loyalty levels, and reflected positively on local farmers.
Highest and Lowest Performing Quality Attributes During an On-Farm Experience

The survey results showed that participants rated *On-farm demonstration(s)* as performing at the highest level of quality, suggesting that farm tour participants found the demonstrations entertaining, enjoyable, and educational. *Information provided during the farm tour(s)* was rated as performing at the second highest level of quality, suggesting that information was sufficient, useful, and helpful. *Responsiveness of farmer/farm staff to helping visitors* and *Knowledge of farmer/farm staff* were each rated as performing at the third highest level of quality, indicating that farmers and farm staff were accessible, able to help visitors, and well-versed in the topics about which they spoke. At some level, each of these attributes was tied to education, suggesting that participants perceived the educational opportunities provided by the farms offering guided tours as high in quality. This study’s findings were congruent with Tian-Cole and Scott (2004) who found that nature tourists were more concerned with, and rated higher in quality, the educational elements of their tourism experiences. Since the farm tours took place outdoors in nature, possibly nature tourists and farm tour participants shared at least some similar characteristics. Additional research comparing these groups might lead to a better understanding of farm tour participants, their motivations, expectations, and other characteristics.

Farm tour participants rated *Information about farmer(s)/their family* as the lowest in quality, indicating perhaps that either this type of information was not provided, or was insufficient. The lower rating of this quality feature suggested that farm tour participants would have liked to see more information about farmers and their families during their on-farm experiences. The lower rating of this feature might also suggest that information about
farmers and their families might need to be more creatively presented and/or more readily available/easily accessible to farm tour participants. Nevertheless, the mean score of Information about farmers/their family was overwhelmingly positive, which corresponds to responses between the categories of High (in quality) and Extremely High (in quality). Overall, little variation in the mean scores of the quality features appeared and all quality attributes were rated positively, indicating an overall positive perception of the tour.

Quality Attributes most Important to Participants During an On-Farm Experience

Survey results showed that Information about farm products/practices, Information provided during the farm tour(s), and Knowledge of farmer/farm staff were the most important features to participants during their experiences on farms that offered guided tours. These ratings suggested that the main reason farm tour participants participated in guided on-farm tours was to learn about farm products and practices. Participants expected guided tours to provide an educational experience, and found that their expectations were met. These expectations emphasized both the educational importance of farm tours and offered insight into the type of information desired by tour participants. Information provided during the farm tour(s) was the second most frequently selected important feature, which further emphasized participants’ desire for an educational experience during the farm tour. Knowledge of farmer/farm staff was the third frequently selected most important feature, which could suggest that participants expected farmers and farm staff to be well versed in topics pertaining to their field(s) and should be able to share their knowledge with visitors. On-farm demonstration(s) was the fourth most frequently selected important feature. Since this feature was also selected as the highest in quality, this rating indicated that farms
that offered guided farm tours likely succeeded in providing educational, entertaining, positive demonstrations to visitors. Participants expected high quality on farm demonstrations, and their expectations appeared to be met. A focus on offering high quality on-farm demonstrations should be maintained. Marketing efforts might be restructured to place greater emphasis on these demonstrations, as they were perceived as high in quality, and as important. Farmers/farms that did not offer on-farm demonstrations might also be encouraged to add this activity during future tours to boost participants’ perceptions of the quality of their experience on those farms.

Few individuals rated *Printed materials for visitors* and/or *Parking* as most important features. Although these features were not rated as most important, they still were rated as high in quality. This finding suggests that visitors were seeking education through more hands-on, oral, and experiential styles rather than printed materials. Because neither *Parking* nor *Printed materials* were frequently ranked as most important features, it is unlikely that making improvements to their quality will increase the quality of participants’ experiences. Farmers and farm tour organizers should take note of this finding and should not focus too many additional resources on these features. *Parking* should be available, accessible and sufficient to ensure that participants begin their tour on a positive note.

**Farm Quality Attributes that Contribute to Perceptions of Overall Quality, Value, Satisfaction and Behavioral Intentions**

Results from the multiple regression analyses revealed that eight quality attributes were significantly related to overall quality, satisfaction, value, and behavioral intentions scores. *Information provided during the farm tour(s)* was the most important attribute in
explaining overall quality scores. Variety of farm products was also positively and significantly related to overall quality. The relationships between these attributes and overall quality suggested that participants attending these farm tours sought educational experiences. A high quality educational experience consists of detailed, relevant, and helpful information. The absence of this type of educational experience could theoretically lead to a lower perception of overall quality (Tian-Cole & Scott, 2004).

The strong relationship between the Variety of farm products and overall quality implied that participants associated a diversity of farm products with high quality. Therefore, farmers and farm tour organizers might strive to showcase numerous farm products during guided farm tours as opposed to focusing on only a few. Additional activities, displays, and demonstrations might also be created or expanded to include a wider range of products.

The third quality attribute that was significantly related to overall quality was Parking. Unlike the other attributes, Parking was negatively related to this variable. In other words, even if a participant rated Parking as low in quality, he/she still rated the overall quality of the farms on which guided tours were offered, as high. Perhaps this suggests that farm tour participants had set reasonable or lower expectations for parking during farm tours, so when parking was not available, was insufficient, or was in less than ideal conditions participants still perceived the farm on which the guided tour was offered as high in quality.

Parking is a maintenance issue or a hygiene factor as defined by Herzberg (1965). Parking does not necessarily contribute to satisfaction, but can lead to dissatisfaction when it does not meet participants’ needs. It is a comfort amenity, and is often taken-for granted by visitors (Tian-Cole & Scott, 2004). Herzberg found that hygiene factors or dissatisfiers were
related to the context of the environments. Hygiene factors serve primarily to prevent dissatisfaction with an environment (Herzberg, 1965). Therefore, farmers and farm tour organizers should ensure adequate Parking, but enhancing the quality of the Parking may not greatly enhance the quality of participants’ experiences. Parking probably needs to meet participants’ most basic needs. It should be available, accessible, and sufficient.

This finding about Parking is also congruent with Bitner’s (1992) research on servicescapes. Bitner found that the environment or physical space in which a service takes place influences the customer’s perception of quality. This finding about Parking related to farm tours was also congruent with Parasurman et al.’s (1988) conclusion that tangible features such as space to park, influence customers’ perceptions of service providers, only if they are inadequate or missing.

When examining the relationships between overall quality and the quality attributes, significant associations appeared, as discussed above. These findings were congruent with Garcia and Caro (2010) who indicated that quality could not be separated from its attributes, and that both ratings of quality attributes and overall quality must be measured to accurately gage consumers’ perceptions of service quality. Overall ratings tended to be more inflated or deflated than ratings of individual attributes, which further supported the need for both ratings (Garcia & Caro, 2010). Overall and individual ratings revealed discrepancies and consistencies in perceptions. In this study, both individual attribute and overall quality ratings were high, indicating a consistent perception of high quality.

Overall satisfaction and overall value related to the farm tour were also significantly associated with the quality attributes. These findings were similar to Oliver (1996), Petrick,
(2004), and Zeithaml et al. (1996) who found that one’s perception of quality was a precursor to his/her perception of value and satisfaction.

The positive and significant relationships between overall satisfaction and *Information provided during the farm tour(s), Information about farm products/practices,* and the *Availability of restrooms* indicated a tie between perceptions of service quality and overall satisfaction. When visitors perceived these quality attributes as high, they were more satisfied with their farm tour experiences. Thus, it is important that farmers and farm tour organizers provide detailed, relevant, and helpful information during tours and about their practices. Further, farmers may want to assure that restrooms are made available and accessible to participants. Like *Parking,* restrooms are a hygiene factor or dissatisfier as defined by Herzberg (1965). If restrooms are unavailable, inaccessible, insufficient, or dirty, participants may be less likely to have a positive perception of their environment (Tian-Cole & Scott, 2004). *Parking* was negatively and significantly related to overall satisfaction, meaning that even when ratings of *Parking* were low, participants’ overall satisfaction ratings were still high. Given that both overall satisfaction and overall quality were negatively associated with *Parking,* farmers and farm tour organizers must ensure that *Parking* is adequate, accessible, and available.

When examining the relationship between value and the quality attributes, value was positively and significantly related to the *Schedule of farm tour times.* This relationship suggested that tour logistics and organization are important to participants. Value was defined as “benefits received for burdens endured” (Berry, 2009). Thus, an off-schedule tour was perceived as a burden on the valuable time of participants who were trying to plan their
days and experiences during the farm tour around these scheduled tours/activities. Therefore, farmers and farm tour organizers should consider creating and operating according to a tight schedule using tools such as timelines, stopwatches, and other resources to ensure a schedule is met/kept. A tighter schedule during farm tours likely will lead to enhanced perceptions of value among participants.

Value was also positively and significantly related to *Information about farm products/practices*. This relationship suggested that participants attended tours to gain information about products and practices. If this information was lacking, irrelevant, unhelpful, and/or insufficient, participants were likely to perceive their experience as less valuable. Value was also positively and significantly related to the *Overall appearance of the farms*, suggesting that aesthetics are important to participants and that participants were more likely to perceive their on-farm experiences as high value if farms are clean, organized, and well kept. This finding supported Hutchinson et al.’s (2009) conclusion that quality is an antecedent of value.

Behavioral intentions were significantly related to only one quality attribute – *Information about farm history*. This relationship indicated that when a farmer or farm staff member shared information about a farm’s history, a stronger emotional connection between that farmer, farm staff, and/or farm and the farm tour participant was established. This emotional connection can lead to positive behavioral intentions, and possibly greater loyalty to that farmer, farm staff, and/or farm. This finding was congruent with Petrick (2005), who reoperationalized the loyalty framework and found that cruise ship passengers with high
attachment to their experiences were more likely to repurchase. In summary, this study uncovered interrelationships between the quality attributes and all of the dependent variables. **Differences in First Time and Repeat Participants’ Ratings of Quality, Value, and Satisfaction, and Their Behavioral Intentions**

In general, first timers and repeaters rated the overall quality of the farms where guided tours were offered similarly, with no statistically significant differences between ratings. The similarity of these ratings indicated that both first timers and repeaters perceived the farms where guided tours were offered as high in quality, and that perceptions of quality varied little based on past farm tour attendance. First timers and repeaters’ overall value scores were also similar, which meant that both groups perceived their on-farm experiences as high value and worth their time and money. In addition, the behavioral intentions scores of first timers and repeaters were also similar. Both groups reported that they would be likely to purchase local food following the tour, even if the price of local foods increased and/or cost more than non-local foods. First timers and repeaters also said that they would be likely to say positive things about local foods and encourage friends and family to purchase local foods. The lack of differences between the responses of first timers and repeaters further supported that this sample was predisposed toward local foods. Regardless of past attendance, participants had a positive experience at and perception of the farm tours.

Regarding overall satisfaction with on-farm experiences, a significant difference in first timers and repeaters’ scores did appear. First timers rated their experiences on farms that offered guided tours as slightly less satisfying than repeaters. It makes sense that repeaters’ overall satisfaction scores were slightly higher, because higher levels of satisfaction have
been shown to enhance visitors’ likelihood of returning (e.g., Baker & Crompton, 2000, González et al., 2007, Gounaris et al., 2007; Parasuraman et al., 1988, 1994; Petrick, 2004; Petrick, 2005; Tian-Cole et al., 2002).

Thus, to convert more first timers to repeaters, the needs and expectations of first timers might be better addressed. This strategy could be accomplished through more thorough analysis of the sociodemographic information collected by CFSA in its initial post tour survey. Marketing messages might be tested and adapted to attract more first time participants and a pre-tour survey or focus group of first timers might be conducted, to ensure that first time participants are adequately informed about the tour and that proper expectations are set. Further, the high number of first time participants indicated that many participants attended the farm tour seeking a new experience. Therefore, farmers and farm tour organizers must work to make each experience fresh and unique each year through added activities, farms, products, and/or other methods.

**Managerial Implications**

The findings of this study speak directly to the intrinsic value of agritourism and on-farm experiences. If people participate in an on-farm experiences, their connections to the farm that offered that experience likely will be stronger, perceptions of that farm more positive, and local foods purchasing intentions higher. It can be likened to a reversal of the idea, “If they (consumers) come (to farms/on-farm experiences), you (the farmer) will feed them.”

The goal of on-farm experiences via farmer led farm tours, in keeping with the mission of the CFSA, should be to provide high quality satisfying experiences to farm tour
participants. The findings of this study showed that after visiting a farm that offered a guided
tour, participants reported intentions to: (a) purchase local food in the future, (b) pay a higher
price for local foods than for non local foods, (c) purchase local foods even if price increased,
(d) say positive things about local foods, and (e) encourage friends and relatives to purchase
local foods. It is possible that these positive behaviors could lead to increased sales for
farmers, and additional support for and promotion of the local foods movement. Therefore, it
is critical that farmers and farm tour organizers continue to offer experiences that are
perceived by participants as high in quality and value, as well as highly satisfying.
Hopefully, these experiences will lead to increased local foods purchasing and positive
behaviors surrounding local foods.

According to this study and other studies in the tourism field, perceptions of high
service quality lead to more positive experiences for visitors. Visitors who report positive
experiences also report higher levels of overall satisfaction (Cronin et al., 2000, Tian-Cole et
al., 2002). Therefore, the higher the service quality, the more positive the experience. Thus,
service quality and visitor satisfaction go hand in hand. The question then becomes how
farmers, farm staff, and farm tour organizers can further enhance the quality of on-farm
experiences and enhance participants’ satisfaction with these experiences to encourage
positive future behaviors such as increased support of local farmers and increased local foods
purchasing. One idea might be to encourage more farms on the tour to offer guided tours.
Including a guided high quality tour could enhance consumers’ connection to the farm and
farm products, lead to higher ratings of quality, value, and satisfaction with on-farm
experiences, and improve overall perceptions of the farm tour.
An overwhelming majority of respondents said that they now had a more personal connection to local farms due to their on-farm experiences. Almost all of these respondents said that this more personal connection would encourage them to purchase more local foods in the future. This finding is important. On-farm experiences not only brought participants closer to local farms/farmers, helping to bridge the gap between consumers and producers, but may have also inspired more local foods/products purchasing. From a marketing perspective, this information is valuable. Farmers and farm tour organizers should make additional efforts to provide opportunities for consumers to visit farms, get to know farmers, and engage with farm products because these visits boosted local foods/products purchasing intentions.

Participants rated educational elements such as *Information about farm products/practices*, *Information provided during farm tours*, *Knowledge of farmer/farm staff*, and *On-farm demonstrations* as the most important features to their on-farm experiences. Therefore, additional efforts should be made to ensure that the high quality of information presented during farm tours is maintained, and that information is relevant, accessible, understandable, and helpful. Farmers and farm tour organizers might also better prepare farm staff with in-depth knowledge about farm topics, presentation/demonstration skills, and other tips for speaking to, teaching, and engaging groups. If farmers are able, the addition of on-farm demonstrations to their current farm tour activities would likely enhance participants’ perceptions of the quality of their farms. Though participants clearly valued information and wanted to learn from their on-farm experiences, few participants rated *Printed materials* as a most important feature. This finding indicated that participants were not necessarily seeking
to learn through written takeaways, although they did rate takeaways as high in quality. Perhaps participants would have preferred learning through more creative methods. Thus, farmers and farm tour organizers may not want to focus additional resources on the creation and provision of *Printed materials*, but rather, on enhancing the quality of information provided orally, through signage, hands-on, engaging experiential methods, and through other non-print means.

The lowest rated quality attribute was *Information about farmers/their families*. Because participants seemed to place such a high value on information provided during on-farm experiences, it is likely that enhancing this type of information such as the provision of additional stories, pictures, a time line, and signage would lead to higher perceptions of overall quality. By providing additional *Information about farmers/their families*, and/or presenting this information in different ways, participants might feel even more connected to the farmers/farms on the tour. Participants appear to want to meet the farmers, see the farms, interact with a variety of farm products, and engage in hands on, educational experiences. If farmers and farm tour organizers were able to provide these opportunities at each farm on the tour, perhaps participants would be more satisfied with the tour as a whole, more likely to return, and more likely to perceive their experience as even higher in quality.

*Parking*, selected as a most important feature by only three respondents, and was negatively and significantly related to overall quality and satisfaction. Therefore, farmers and farm tour organizers should to ensure that parking is available, accessible, and sufficient for participants, but it is unlikely that parking will lead lower ratings of quality and/or satisfaction. Partnering with nearby businesses with larger parking lots and having a shuttle
to take participants to and from farms might be an option. Other options might include: blocking off parts of driveways for parking, adding signage and volunteers to direct participants to parking locations, and/or more strongly encouraging participants to carpool to farms. Carpooling could be encouraged through e-newsletters, on the CFSA website, in the farm tour brochures, on the farm tour buttons, at the locations selling the farm tour buttons, at the farms on the tour, at area organizations associated with farming/interested in the tour, and anywhere else farm tour participants might go. CFSA might also create an online carpooling registration system where participants could login, connect with other participants, and create their own carpooling schedule. Carpooling routes including designated meeting times and locations and a schedule of farms to visit might also be created. Central carpooling locations or hubs could include parking lots that could be reserved by farm tour organizers. The locations of these hubs also could be added to the farm tour map. Rewards such as a free farm tour t-shirt or product at the first farm they visited could be offered to participants who chose to carpool.

Other ideas are to encourage participants to bike or hike between farms and offer rewards for biking or hiking. In summary, farmers and farm tour organizers should think carefully about the logistics associated with on-farm experiences and create a unique plan for Parking for each farm location.

Schedule of farm tour times was positively and significantly related to participants’ perceptions of value. Therefore, to ensure that participants continue to perceive their on-farm experiences as high in value, farmers and farm tour organizers might create a more detailed schedule of guided tours occurring on farms participating in the overall tour, and
publicize this schedule more broadly. By creating a tour logistics document and asking each farmer participating in the tour to complete it, farm tour organizers could space tour times to ensure that more participants were able to arrive at farms and join tours soon after arrival, rather than waiting around. For example, if farms in one geographic area, offered their tours on the hour and on the half hour, participants might be able to visit more farms due to shorter wait and travel times. However, farms on the tour are different distances away, different sizes, and offer different activities so this type of coordination could be difficult. Nevertheless, if a farm tour organizer knows that one farm is offering a unique workshop at a certain time each day, this information should be publicized so that participants can better plan their routes.

*Overall appearance of the farms* was also positively and significantly related to participants’ perceptions of value. Therefore, farmers and farm tour participants should make additional efforts to ensure that farms are clean, neat, well kept, clearly identified, and displaying proper signage. Displays created with flowers, seasonal produce, farm equipment, trinkets, and other appealing materials could lead to more positive and more memorable aesthetic experiences for visitors. For instance, when thinking back on the tour, participants are likely to remember the farms with “That cool old grist mill” or “Those big beautiful marigolds.” Clever places to sit and rest such as a grouping of hay bales beside a garden, rocking chairs, or a porch swing with sign that reads “Take a break and enjoy the orchard,” or something similar could make participants feel more welcome, comfortable, and entice them to stay longer. Enhanced aesthetics might suggest a more positive, well-planned, and
inviting environment and trigger positive memories. These appearances are, therefore, likely to improve participants’ experiences and perceptions of farms.

A better understanding of differences between first timers and repeaters’ perceptions of on-farm experiences can help to enhance visitors’ experiences on farms and the likelihood of returning. Why aren’t more past tour attendees returning? Is the farm tour a one-time event and once attendees have participated, they feel they saw it all? What could farmers and farm tour organizers do to encourage more repeat attendance? The findings of this study supported the need for additional research on farm tour participants’ expectations, perceptions of their experiences during and after the tour, and post tour behaviors.

First time farm tour participants reported slightly lower levels of satisfaction than repeat participants. Although this finding is not surprising, farmers and farm tour organizers might want to focus additional efforts on first time visitors such as adapting their marketing messages, taking more time to show them the farm, offering longer question and answer sessions, and providing the type of information they desire. First time visitors might be identified through a question included on the farm tour registration form or when participants purchase their farm tour button. Enhanced orientation for first time visitors might help uncover and develop their expectations. If expectations were better set, or if participants were more prepared (i.e., they knew what to expect from the tour), perhaps their satisfaction levels would be higher. Enhanced orientation efforts might take place on the first farm the first time participants visit, or through the CFSA or farm tour website.

Finally, CFSA might also analyze its post tour survey to uncover additional information about the sociodemographics of farm tour participants. A better understanding of
farm tour participants might lead to more successful marketing campaigns and might help CFSA determine the type of activities and information that will best meet the needs and expectations of current and future farm tour participants.

**Study Limitations**

This study contributed to the growing body of literature on agritourism and farm tourism in the US through examination of farm tour participants’ perceptions of quality, value, satisfaction, and behavioral intentions. Questions were asked that had not yet been explored directly by other studies in the field, and therefore, the study can provide a baseline for future studies.

Because the sample of farm tour participants was not randomly selected, the results of this study may not be representative of the total population of participants at the 2012 Piedmont Farm Tour, or of all farm tours. Only participants with an email address were contacted and asked to participate in the survey. Participants without a computer, email address, or access to email may not have been contacted. It is likely that an on-site survey would have generated a higher response rate, but this approach was not feasible due to budget limitations. Further, because of the way this survey was administered, post tour as opposed to during the tour, or pre tour and after tour, possibly the respondents’ memories of their on-farm experiences had faded. In addition, it is possible that many of the respondents already had an affinity towards, or a strong emotional connection to this activity. Although a gift card incentive was offered to try to attract participants without an affinity toward farms and local foods to complete the survey, the sample may have been somewhat biased.
Because this survey was structured as an addendum to CFSA’s initial post tour survey, I also had limited input on the survey administration logistics. Ideally, the survey would have been conducted separately and the survey completion period would have lasted longer. Additional reminder emails and a mailer might also have been included.

Because 73.2% of respondents reported that they purchased local foods monthly, weekly, or more than once a week, the sample used in this study was somewhat biased/predisposed toward local foods. A more diverse group of respondents would provide a broadened understanding of the effect of on-farm experiences on local food purchasing intentions. To attract a more diverse attendance, CFSA might consider expanding its advertising outlets for the tour.

Weather may also have had a negative effect on farm tour attendance. Sunday, the second afternoon of the tour, was rainy and windy and likely deterred potential participants from attending. Baker and Crompton (2000) found that satisfaction equated to quality of experience, and that factors outside the control of management such as weather could detract from satisfaction. The weather might have discouraged participants from visiting any or as many farms, due to longer travel between farms because of rain, lack of rain gear, or belief that the tours would be canceled.

A final limitation to this study was that only quantitative questions were included. Since quantitative research yields less in depth responses, specific details may have been missed. Despite these limitations, however, this study did provide an exploratory way to examine the farm tour experience that may be useful for future researchers.
Suggestions for Future Research

Several suggestions can be offered for future research, based on the findings and logistics of this study. First, this type of survey and its analysis could be expanded to other types of on-farm events or experiences such as tours that are not part of the annual tour, on-farm workshops and demonstrations, and seasonal activities. More research about farm experiences will strengthen farmers,’ farm tour organizers,’ agritourism, and extension professionals’ understanding of the people who participate in this type of experience. This understanding might help these persons to better identify and more effectively advertise to their target audience. Additional research would also provide more information on the strengths and weaknesses of on-farm experiences, and allow professionals in this field to address them.

A longitudinal study of farm tour participants would allow researchers to better track changes in participants’ attitudes and behaviors before the tour and after the tour. A pre-tour survey could enable researchers to identify before tour purchasing habits and after tour purchasing habits, as opposed to relying on self-reported behavioral intentions. Studying repeat participants and uncovering some of the motivations behind their repeat farm tour attendance would be worthwhile. Repeat attendance may be associated with loyalty. If so, farmers would be able to better identify traits of loyal participants and hopefully convert them to loyal customers. Because loyal customers are more desirable and easiest to retain, a better understanding of these personalities would aid farmers in their marketing efforts and likely lead to increased purchasing and support (Petrick, 2005).
Studying the routes participants take when attending a farm tour might also be beneficial to farmers and farm tour organizers. This research could help identify trends in planning, identify farms that had the most/least visitors, and identify problems with traffic, signage, directions, or other travel related issues including the amount of time spent at farms and traveling. A better understanding of routes might help farmers and farm tour organizers assist participants with planning their tours, making this process as fun, efficient, and inclusive as possible.

Overall, the results of this research support using the Theory of Reasoned Action as a loose theoretical informant for the examination of the behavioral intentions that might stem from participation in an on-farm experience. According to the TRA, changes in attitudes lead to related behavioral intentions. In this study, farm tour participants expressed stronger connections to farms due to their on-farm experiences. They said they would be more likely to purchase local foods in the future. These findings demonstrated changes in attitude (i.e., stronger connection to local foods/farms) and associated changes in behavioral intentions (i.e., increased likelihood of future local foods purchasing).

Concluding Remarks

This study aimed to provide farmers and farm tour organizers with information that will help them provide high quality on-farm experiences, and thereby assist them in inspiring more support of local farms and local food. This study also contributed to the growing body of research on tourists’ connections to places and how those connections contribute to the meaning of an experience. The Theory of Reasoned Action suggested that attitudes and subjective norms can be used to predict behavioral intentions, which appeared to be true in
the context of on-farm experiences. This study offered a survey instrument that could be adapted to fit the needs of other farm tours, or repeated by this farm tour to track yearly perceptions of quality, satisfaction, value, and behavioral intentions. This study added to the agritourism literature by confirming that on-farm experiences are likely to motivate local foods purchasing intentions, and identified service quality attributes that could be adjusted by farmers and farm tour organizers to enhance visitors’ perceptions of quality, satisfaction, value, and behavioral intentions.
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From: Carol Mickelson, IRB Coordinator
North Carolina State University
Institutional Review Board

Date: April 10, 2012

Title: The Relationship between On-Farm Experiences and Local Foods Purchasing

IRB#: 2606

Dear Ms. Saltmarsh,

The research proposal named above has received administrative review and has been approved as exempt from the policy as outlined in the Code of Federal Regulations (Exemption: 46.101. b.2). Provided that the only participation of the subjects is as described in the proposal narrative, this project is exempt from further review.

NOTE:
1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU projects, the Assurance Number is: FWA00003429.

2. Any changes to the research must be submitted and approved by the IRB prior to implementation.

3. If any unanticipated problems occur, they must be reported to the IRB office within 5 business days.

Please forward a copy of this letter to your faculty sponsor, if applicable. Thank you.

Sincerely,

Carol Mickelson
NC State IRB
North Carolina State University  
Institutional Review Board for the Use of Human Subjects in Research  
REQUEST FOR EXEMPTION (Administrative Review)

**GENERAL INFORMATION**

1. Date Submitted: 4/10/2012  
2. Title of Project: The Relationship between On-Farm Experiences and Local Foods Purchasing  
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6. Email: acsalmarsh@ncsu.edu  
7. Phone Number: 704-860-8809  
8. Fax Number: 919-515-3687 (this is Karla Henderson’s, one of my advisors, fax number)  
9. Faculty Sponsor Name and Email Address if Student Submission: Stacy Tomas, stomas@nitech.edu, and Karla Henderson, karla_henderson@ncsu.edu  
10. Source of Funding? (required information): NCSU Parks, Recreation, Tourism Management Department, Stacy Tomas, and Amy Salmarsh will provide funds for incentive (see below)  
11. Is this research receiving federal funding? No  
12. If externally funded, include sponsor name and university account number: 

13. **RANK:**  
   - Faculty: □  
   - Student: □ Undergraduate; □ Masters;  
   - or □ PhD  
   - Other (specify): □

As the principal investigator, my signature testifies that I have read and understood the University Policy and Procedures for the Use of Human Subjects in Research. I assure the Committee that all procedures performed under this project will be conducted exactly as outlined in the Proposal Narrative and that any modification to this protocol will be submitted to the Committee in the form of an amendment for its approval prior to implementation.

**Principal Investigator:**

Amy Salmarsh  
(type/t/printed name)  
(signature)  
4/10/2012

As the faculty sponsor, my signature testifies that I have reviewed this application thoroughly and will oversee the research in its entirety. I hereby acknowledge my role as the principal investigator of record.

**Faculty Sponsor:**  
Karla Henderson  
(type/t/printed name)  
(signature)  
4/10/2012

*Electronic submissions to the IRB are considered signed via an electronic signature

**PLEASE COMPLETE AND DELIVER TO:**  
(carol_nickelson@ncsu.edu) or Institutional Review Board, Box 7514, NCSU Campus (Administrative Services III, Room 245)

**************************************************************************

**Regulatory Compliance Office Disposition**

- Exemption Granted □ Not Exempt, Submit a full protocol  
Exempt Under: □ b.1  
- b.2  
- b.3 □ b.4 □ b.6

Page 1 of 6
Project Description: Describe your project by providing a summary and answering the requests for information below.

1. Project Summary. Please make sure to include the purpose and rationale for your study as well as a brief overview of your study.

   This study will use an electronic survey consisting of reliable and valid scales commonly used in the tourism field to examine farm tour visitors’ perceptions of quality, value, and satisfaction with on-farm experiences via farmer-led farm tours. This study will explore how visitor perceptions relate to loyalty to local foods and behavioral intentions for future local foods purchasing. To assess the influence of farm tour features on visitors’ experiences, visitors’ perceptions of the performance of selected tangible farm tour features will be measured. Survey Monkey will be used to create the survey, and the survey will be disseminated by the Carolina Farm Stewardship Association (CFSA) to all 2012 Piedmont Farm Tour participants that willingly provided email addresses during the farm tour registration process. Farm tour registration will occur at each of the 40 farms on the tour, at registration booths located at the farm entrance. Registration tables will be staffed by CFSA volunteers. Because high perceptions of service quality are likely to lead to visitor satisfaction with farm tours and ultimately to enhance the financial sustainability of small farms, an understanding of visitors’ perceptions of these experiences will help farmers and farm tour organizers plan more successful, high quality events, thereby more efficaciously promoting local foods and support of small farms in NC.

2. Description of participant population, including age range, inclusion-exclusion criteria, and any vulnerable populations that will be targeted for enrollment.

   The participants in this study will be persons who participated in the 2012 Piedmont Farm Tour, hosted by the Carolina Farm Stewardship Association (CFSA) and provided a valid email address during the farm tour registration process. The Piedmont Farm Tour runs from 1-5pm April 28 and 29, 2012 and includes 40 farms in Person, Orange, Chatham, Alamance, and Durham counties. In 2011, approximately 4,000 individuals attended the tour. Farm tour participants purchase tickets (also known as farm tour buttons) before or during the tour for $25 per carload. Buttons allow participants to visit farms on the tour both days. Individuals who purchase buttons before the tour using CFDSA’s website, www.carolinafarmstewards.org, are asked to enter their email address. CFSA stores these email addresses and then combines them with email addresses collected during the tour, for dissemination of the CFSA post tour survey. At each farm, participants are asked to sign in at a registration table. When participants sign in, they are asked by a farm tour volunteer staffing the registration table to provide an email address. Participants typically only provide an email address at the first farm they visit. Email addresses (those collected pre and during the tour) will be compiled by a CFSA staff member and used for administering the survey via Survey Monkey. CFSA will create and send all email communications.

   The age range of farm tour participants/potential respondents will vary. Only adults will be asked to complete the survey, as CFSA only collects emails from adults. This survey, referred to as the “detailed survey,” will be linked to CFSA’s short, post tour survey. Thus, email addresses will not be tied to detailed survey respondents. The “Save IP Addresses in Results” feature in Survey Monkey has been turned off using the “No, the respondent's IP address will not be stored in the survey results” option. The second question on the detailed survey will ask participants if they visited a farm with a guided farmer-led tour. This is a qualifying question, designed to weed out farm tour participants that did not visit a farm that offered a guided tour. Many types of tours, other than guided, are offered during the Piedmont Farm Tour, but this research aims to look only at guided tours due to the higher level of interaction between farmer or farm staff and farm tour participant that tends to occur on this type of tour. Positive interaction with a service provider (the farmer/farm staff) typically leads to repeat visits, purchases, and higher levels of satisfaction and perceptions of quality. Therefore, this study will look at the influence of this interaction. If respondents did not visit a farm that offered a guided, farmer-led tour they will be exited or disqualified from the survey and thanked for their time.

3. Description of how potential participants will be approached about the research and how informed consent will be obtained. Alternatively, provide an explanation of why informed consent will not be obtained. Include a copy of recruitment materials, such as, scripts, letters of introduction, emails, etc. with your submission.

   The below introduction page in Survey Monkey will be used to gain informed consent.

   “Carolina Farm Stewardship Association (CFSA) has invited NC State University to conduct a survey of 2012 Piedmont Farm Tour participants to explore the relationship between farm tours and local foods
3. 2-3 days post tour, registration sheets from each farm will be reviewed by a member of the CFSA staff. Information collected from these sheets will be compiled and analyzed by CFSA. Emails will be entered into excel, and used for sending a tour follow up email. This email will be composed and sent by CFSA to all email addresses provided on the registration sheets and through the CFSA website for those participants that purchased tickets/bottles before the tour. CFSA’s email will briefly describe the survey and include a link to CFSA’s short, post tour survey. The detailed survey will be attached to the CFSA survey through a link in the last question. This link will take participants to a separate survey, also in Survey Monkey, but with different privacy settings, as explained above.

4. After completing CFSA’s survey, participants will be asked in the final question if they want to complete the more detailed survey, and if so, to follow the link.

5. If participants follow the link, they will be taken to the detailed survey’s introduction page which includes the informed consent clause. On this page, participants will be asked if they wish to continue. If they answer yes, they will be taken to the next question on the detailed survey, the qualifying question.

6. The second question on the detailed survey is the qualifying question. Those who answer “yes” to this question will be taken to the remainder of the survey.

7. Respondents who choose to take the detailed survey will complete the survey at this time. Those who do not want to complete the detailed survey will be thanked for their time and will exit the survey.

8. At the end of the survey, respondents will be asked if they want to enter the raffle to win one of three Whole Foods gift cards. If they choose to enter, they will be taken to a separate survey and asked to enter their email address. Because this is a separate survey, email addresses cannot be linked back to survey responses (as explained above). If respondents do not wish to enter the raffle, they will be thanked for their time and exited from the survey.

9. Raffle winners will be selected using Excel, random selection. Winners will be contacted via email and asked for their mailing address so their gift card can be mailed. After winners are contacted, contact information will be deleted/destroyed through destruction/deletion of the gift-card raffle survey. Email trails will be printed and saved for 1 year post survey collection. After one year, these emails will be destroyed.

10. Survey responses will be analyzed using SPSS and Excel. Results will be reported in a thesis document presented to the Parks, Recreation, Tourism Management Department at NCSU, and interested farmers and farm tour organizers (who will be invited by CFSA) in the fall of 2012.

11. Detailed survey responses will be stored for one year, and then destroyed by the researcher.

This study uses a simple Survey Monkey instrument, modeled after quality, value, satisfaction, behavioral intentions, and loyalty scales used by tourism researchers. The instrument will only contain scales that have been pretested, and proved reliable and valid. Scale items have been slightly reworded to fit the context of this study.

6. Will minors (participants under the age of 18) be recruited for this study? No

7. Is this study funded? No. If yes, please provide the grant proposal or any other supporting documents.

8. Is this study receiving federal funding? No

9. Do you have a significant financial interest or other conflict of interest in the sponsor of this project? No

10. Does your current conflicts of interest management plan include this relationship and is it being properly followed? No

11. HUMAN SUBJECT ETHICS TRAINING
*Please consider taking the Collaborative Institutional Training Initiative (CITI), a free, comprehensive ethics training program for researchers conducting research with human subjects. Just click on the underlined link.

Page 5 of 6
12. ADDITIONAL INFORMATION:

a) If a questionnaire, survey or interview instrument is to be used, attach a copy to this proposal.

b) Attach a copy of the informed consent form to this proposal. See the IRB website for a Sample Consent Form and Informed Consent Checklist http://www.ncsu.edu/spaerc/irb/forms.html

c) Please provide any additional materials (i.e., recruitment materials, such as “flyers”, recruitment scripts, etc.) that may aid the IRB in making its decision.

*If a survey instrument or other documents such as a consent form that will be used in the study are available, attach them to this request. If informed consent is not necessary, an information or fact sheet should be considered in order to provide subjects with information about the study. The informed consent form template on the IRB website could be modified into an information or fact sheet.

The Following are categories the IRB office uses to determine if your project qualifies for exemption (a review of the categories below may provide guidance about what sort of information is necessary for the IRB office to verify that your research is exempt):

Exemption Category: (Choose only one of the following that specifically matches the characteristics of your study that make this project exempt)

☐ 1. Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

☒ 2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

*Please Note- this exemption for research involving survey or interview procedures or observations of public behavior does not apply to research conducted with minors, except for research that involves observation of public behavior when the investigator(s) do not participate in the activities being observed.

☐ 3. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) required(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

☐ 4. Research, involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available, or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

☐ 5. Not applicable

☐ 6. Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed, or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration, or approved by the Environmental Protection Agency, or the Food Safety and Inspection Service of the U.S. Department of Agriculture.
1. Carolina Farm Stewardship Association (CFSA) has invited NC State University to conduct a survey of 2012 Piedmont Farm Tour participants in an effort to explore the relationship between farm tours and local foods purchasing and to help farmers and tour organizers ensure high quality experiences for farm visitors. You are being asked to volunteer to participate in this study, and you may accept or decline participation without penalty. The answers you provide are completely anonymous and confidential and cannot be linked back to you. After completing this survey, you will have the opportunity to enter to WIN A $100 LOCAL FOODS GIFT CARD. 3 winners will be selected. This survey will take less than 10 minutes to complete. Your participation is greatly appreciated. Would you like to participate in the survey?

☐ Yes  
☐ No

This research project is a collaboration between CFSA and NC State University, Department of Parks, Recreation and Tourism Management. For questions about this project, please contact Karla Henderson, Professor, NCSU at 919-513-0252 or karla_henderson@ncsu.edu. You may also contact the NCSU IRB Board at 919-515-4514.
<table>
<thead>
<tr>
<th>Piedmont Farm Tour/Local Foods Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. During the 2012 Piedmont Farm Tour, did you visit at least one farm that offered a GUIDED farm tour led by a farmer or a member of the farm's staff?</td>
</tr>
<tr>
<td>☐ Yes</td>
</tr>
<tr>
<td>☐ No</td>
</tr>
</tbody>
</table>
Thank you for agreeing to answer a few brief questions related to your experience on the 2012 CFSA Piedmont Farm Tour. Your feedback is critical in helping to ensure positive, quality experiences in the future.

INSTRUCTIONS: While completing this survey, please think about a farm(s) you visited that offered a **GUIDED** tour, a tour led by a farmer or a member of the farm’s staff. Please answer the following questions based solely on your experience(s) at a farm(s) that offered a guided farmer-led tour.

3. Please rate how well the farm(s) that offered guided farmer-led tours performed on each of the following features. If you did not experience the feature, please mark **Did Not Experience**.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Extremely Poorly</th>
<th>Poorly</th>
<th>Somewhat Poorly</th>
<th>Neither Poorly Nor Well</th>
<th>Somewhat Well</th>
<th>Well</th>
<th>Extremely Well</th>
<th>Did Not Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information provided during the farm tour(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>On-farm demonstration(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Schedule of farm tour times</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of farm tour(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Variety of farm products</td>
<td></td>
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<td></td>
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<tr>
<td>Food and/or drinks for sample</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Food and/or drinks for sale</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information about farmer(s)/their family</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Information about farm history</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information about farm products/practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsiveness of farmer/staff to helping visitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of farmer/staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printed materials for visitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Availability of restrooms</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Parking</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Overall appearance of the farm(s)</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>
4. Below is the same list of features you just rated. Of these features, please choose the THREE FEATURES that are MOST IMPORTANT to you. (Check 3)

- Information provided during the farm tour(s)
- On-farm demonstration(s)
- Schedule of farm tour times
- Length of farm tour(s)
- Variety of farm products
- Food and/or drinks for sample
- Food and/or drinks for sale
- Information about farmer(s)/their family
- Information about farm history
- Information about farm products/practices
- Responsiveness of farmer/farm staff to helping visitors
- Knowledge of farmer/farm staff
- Printed materials for visitors
- Availability of restrooms
- Parking
- Overall appearance of the farm(s)
5. Please rate the OVERALL QUALITY of the farm(s) on which you participated in a guided farmer-led tour.

<table>
<thead>
<tr>
<th>Overall Quality of farm(s) that offered guided farmer-led tour(s)</th>
<th>Extremely Low</th>
<th>Low</th>
<th>Somewhat Low</th>
<th>Neithe Low nor High</th>
<th>Somewhat High</th>
<th>High</th>
<th>Extremely High</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

6. Please rate how strongly you agree with the following statements regarding your experience on a farm(s) that offered a guided farmer-led tour.

<table>
<thead>
<tr>
<th>I feel that I got my money's worth on these farms</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I feel that I received good quality for the price I paid for visiting these farms.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>After evaluating my experience on these farms, I am confident that I received quality for the price I paid.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I feel that the purchase of my farm tour button met both my high quality and low-price requirements.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

7. Overall, how satisfied were you with your experience on the farm(s) that offered guided farmer-led tours?

<table>
<thead>
<tr>
<th>Overall Satisfaction with farm(s) that offered guided farmer-led tour(s)</th>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Neutral</th>
<th>Somewhat Satisfied</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Page 5
**Piedmont Farm Tour/Local Foods Survey**

8. Including this year, how many times have you attended the Piedmont Farm Tour? If this is your first time, please choose the number “1.”

9. For purposes of this study LOCAL FOOD is defined as food traveling no more than 100 miles from producer to consumer. In the past month, how often have you purchased local foods?

- Never
- Once
- Every Other Week
- Once per Week
- More Than 2 Times per Week

10. Please rate how likely you are to perform the following actions:

<table>
<thead>
<tr>
<th>Action</th>
<th>Not at all Likely</th>
<th>Unlikely</th>
<th>Somewhat Unlikely</th>
<th>Undecided</th>
<th>Somewhat Likely</th>
<th>Likely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase local foods, in the future</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Pay a higher price for local foods than for non-local foods, in the future</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Purchase local foods, even if the price of local foods was to increase</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Say positive things about local foods, in the future</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Encourage my friends and relatives to purchase local foods</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
## Piedmont Farm Tour/Local Foods Survey

11. Do you plan to buy more from local farmers, now that you have visited local farms?
   - [ ] Yes
   - [ ] No

12. Do you now have a more personal connection to local farms, due to your on-farm experience(s)?
   - [ ] Yes
   - [ ] No
Piedmont Farm Tour/Local Foods Survey

13. Will this more personal connection to local farms encourage you to buy more foods and/or products from local farmers?
   - Yes
   - No

14. What is your zip code?

   [Blank space]
Thank you for taking time to complete this survey! Your responses are greatly appreciated. If you are interested in entering a raffle to **WIN A $100 LOCAL FOODS FOODS GIFT CARD**, please [CLICK HERE](#). If you click this link, or the link below, you will be taken to a new screen and asked to enter your email address. Your email address cannot be connected back to your survey responses and all of your responses to the survey will remain completely anonymous and confidential. You will not be contacted for any other purposes, and your email address will not be sold. If you do not wish to enter the raffle, please click [Done](#).

I want to enter the raffle.
### Table 10

Intercorrelations among Quality Attributes (1-7) of On Farm Tours

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Information provided</td>
<td></td>
<td></td>
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Table 10

Intercorrelations among Quality Attributes (8-16) of On Farm Tours

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** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).