# SOCIAL INTERACTIONS AND WE-INTENTIONS FOR AGRIVISITORS' SERVICE ENCOUNTERS

A Dissertation

by

HYUNGSUK CHOO

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2009

Major Subject: Recreation, Park, and Tourism Sciences

## SOCIAL INTERACTIONS AND WE-INTENTIONS FOR AGRIVISITORS' SERVICE ENCOUNTERS

A Dissertation

by

## HYUNGSUK CHOO

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

## DOCTOR OF PHILOSOPHY

Approved by:

Chair of Committee, James F. Petrick
Committee Members, William A. McIntosh

Tazim Jamal

William Pride

Head of Department, Gary D. Ellis

August 2009

Major Subject: Recreation, Park, and Tourism Sciences

#### **ABSTRACT**

Social Interactions and We-Intentions for Agrivisitors' Service Encounters.

(August 2009)

Hyungsuk Choo, B.A., In-Ha University;

M.S., Purdue University

Chair of Advisory Committee: Dr. James F. Petrick

This study addresses how agrivisitors' social interactions affect satisfaction and, in turn, revisit intention. Adopting social exchange theory and resource theory, the study proposes that social interactions with service providers, local residents, companion visitors, and other customers influence satisfaction, which in turn affects revisit intentions. Revisit intentions, in particular, are considered as social intentions which are shared with other people who travel together. Furthermore, this study argues that the effect of social interactions on satisfaction is stronger for visitors who have greater environmental concerns than those who are less concerned.

An onsite and online survey were conducted to examine the proposed model and test the hypotheses. Subjects (N= 400) were visitors who visited organic farms with their companions.

Structural Equation Modeling (SEM) was used to test the proposed model and hypothesized relationships among the constructs. The analyses were performed with Analysis of MOment Structures (AMOS 7.0). One construct (i.e., social interaction with

local residents) was removed due to its high nonresponse rate, so the two hypotheses associated with this construct were not tested. Other than that most hypotheses except one were supported or partially supported by the data and the proposed model also had an acceptable fit to the data. Results of the present study provide a direction for the development of a theoretical framework to understand revisit intentions by seeking to improve the social exchange relationships with visitors. In addition, practical implications are presented for organic farms involved in or considering tourism businesses.

## **DEDICATION**

Dedicated to my mom,

A life was short yet precious.

#### **ACKNOWLEDGEMENTS**

I am humbled as I think about all of the support, guidance, and encouragement I have been given through this dissertation process. I know I will not be able to adequately express my gratitude in this section, but I will do my best.

First and foremost, I would like to sincerely and humbly thank my advisor, Dr. James Petrick. I believe I have had the good fortune to have perhaps the best advisor ever. What has made my advisor so remarkable is not only his academic rigor and his professional reputations, but also his mentorship, friendship, and genuine concern. He has provided tremendous personal and professional examples for me to follow, and I can only hope I might be able to give to my students the way he has given to me. Thank you for being impossibly nice!

I would like to thank Dr. Alex McIntosh and Dr. Tazim Jamal for being accessible, truthful, supportive, and insightful and for helping me to both theoretically and practically think about my dissertation. Thanks also to Dr. William Pride for agreeing to be on my committee as my outside representative, for taking time to chat with me to make me feel welcome.

A warm thanks go in particular to Dr. Joseph O'Leary, my masters' advisor, former RPTS department head, and my decade-old mentor for bringing so much support to my academic life and taking me this far. You and Joanne are in my heart wherever I go. Thank you all!

My sincere gratitude goes out to the former and current RPTS communities (i.e., Ann Gillard, Sunyoung Park, Sangkwon Lee, Naho Maruyama, Lavelle Merit, Marguerite Van Dyke, Kam Hung, Po-Hsin Lai, Blanca Camargo, Angie Yoo, Jin-Young Chung, Yu-Chin Huang, Linda Lelo, Myunghwa Kang, Woo-Jin Lee, So-Yon Kim) that shared precious memories with me and helped obtain the resources and the opportunity to achieve my doctoral degree. You made my time at A&M worth remembering and I cannot thank you enough for that. My pleasant memories of you will be unforgettable.

Finally and most importantly, a heartfelt thanks to my husband, Dr. Suhan Ree, for his unconditional and unwavering love and giving meaning for all I have gone through. Having you in my life is definitely the best thing that I can ever think. As I met him, I realized how much God loves me. Thanks, Seyoung for being my daughter. You are the sunshine in my life and you mean everything to me!

## **TABLE OF CONTENTS**

		Page
ABSTRAC	T	iii
DEDICATI	ON	v
ACKNOW	LEDGEMENTS	vi
TABLE OF	CONTENTS	viii
LIST OF T	ABLES	xi
LIST OF FI	IGURES	xiv
CHAPTER		
Ι	INTRODUCTION	1
	Overview	
	Background of the Study	
	Research Questions	
	Limitations	
	Delimitations  Definition of Terms	
	Anticipated Contribution of This Dissertation	
	Dissertation Organization	
II	LITERATURE REVIEW AND CONCEPTUAL MODEL	19
	Overview	19
	Agritourism	20
	Conceptual Model for the Study	
	Service Encounters	
	Social Exchange Theory	
	Resource Theory	
	Satisfaction	
	Intentions: We-Intentions vs. I-Intentions	48

CHAPTER		Page
	New Ecological Paradigm	. 54
III	METHODOLOGY	. 60
	Overview	. 60
	Research Design	. 60
	Survey Instrument	. 61
	Pre-tests	
	Target Population and Sampling Frame	. 70
	Study Site and Site Selection	
	Data Collection	. 73
	Data Analysis Methods	
IV	RESULTS	. 81
	Overview	. 81
	Survey Responses	. 81
	Study Subjects Selected from Survey Respondents	
	Demographic Comparisons of Study Subjects	. 83
	Profiling the Visitors to Organic Farms	
	Missing Values	. 86
	Preliminary Data Analysis	. 89
	Test of Modeling Assumptions	. 98
	Confirmatory Factor Analysis	
	Assessment of Reliability and Validity of Measurement Scale	. 109
	Structural Equation Models	. 114
	Hypothesis Testing	. 119
V	DISCUSSION AND CONCLUSIONS	. 130
	Overview	. 130
	Summary of Key Findings	. 130
	Theoretical Implications	. 137
	Managerial Implications	. 140
	Limitations and Future Research.	. 144

	Page
REFERENCES	
APPENDIX I	
APPENDIX II	
VITA	208

## LIST OF TABLES

		Page
Table 3-1	Description of constructs and observed variables in the hypothesized model	. 66
Table 3-2	Reliability of items of measurement scale	. 70
Table 3-3	Summary of steps taken to refine the social interactions	. 80
Table 4-1	Summary of data collection: total sample, returned sample, invalid sample, and valid sample	. 82
Table 4-2	Organic farms in which survey respondents visited	. 82
Table 4-3	Demographic characteristics of study subjects and other subjects, for all survey respondents and study subjects and other subjects	. 84
Table 4-4	Summary results of SPSS missing value analysis	. 88
Table 4-5	Factor Analysis of Social Interactions with Service Providers	. 91
Table 4-6	Factor Analysis of Social Interactions with Companions	. 92
Table 4-7	Factor Analysis of Social Interactions with Other Customers	. 94
Table 4-8	Descriptive statistics for New Ecological Paradigm scale	. 96
Table 4-9	Mean and Standard Deviation scores for Satisfaction	. 97
Table 4-10	Mean and Standard Deviation scores for Intentions	. 98
Table 4-11	Normality test results of observed variables included in the proposed model	l . 99
Table 4-12	Estimation of fit indices of Social Interactions with Service Providers	. 102

		Page
Table 4-13	Estimation of fit indices of Social Interactions with Companions	104
Table 4-14	Estimation of fit indices of Social Interactions with Other Customers	106
Table 4-15	Estimation of fit indices of We- and I-Satisfaction	108
Table 4-16	Factor loadings and composite reliabilities of retained items of measurement scale	110
Table 4-17	Correlations in the final model for examining Discriminant Validity (N=400)	114
Table 4-18	Variables removed from EFA, CFA and the proposed measurement model based on the examination of low factor loading, multiple loadings and large residuals	117
Table 4-19	Comparison of overall fit indices for proposed and modified full measurement models	117
Table 4-20	Path coefficients in the hypothesized structural model (hypothesis 1 to 4)	120
Table 4-21	Path coefficients in the hypothesized structural model (hypothesis 5)	122
Table 4-22 Table 4-23	Performance of factors in We- and I-Intention Models	125 125
Table 4-24	Fit indices of the We-and I-Intention Models	126
Table 4-25	Estimation of fit indices of baseline model	128
Table 4-26	Multiple group path analysis: comparison of path coefficients and t value for the proposed model	129

		Page
Table 4-27	Results of testing for moderating effects based on the proposed model: test of invariance for path coefficients	129
Table 5-1	Summary of Hypothesis Testing	131

## LIST OF FIGURES

		Page
Figure 1-1	Social Exchange Relationships in Agrivisitors' Service Encounter	11
Figure 2-1	The cognitive structure of resource classes	37
Figure 2-2	Social Exchange Relationships in Agrivisitors' Service Encounter for High NEP Group	59
Figure 2-3	Social Exchange Relationships in Agrivisitors' Service Encounter for Low NEP Group	59
Figure 4-1	First-order measurement model of Social Interactions with Service Providers	103
Figure 4-2	Second-order measurement model of Social Interactions with Service Providers	103
Figure 4-3	Measurement model of Social Interactions with Companions	105
Figure 4-4	Measurement model of Social Interactions with Other Customers	107
Figure 4-5	Measurement models of We- and I-Satisfaction	108
Figure 4-6	Measurement models of We- and I-Intentions	109
Figure 4-7	Final modified model for this study	118
Figure 4-8	Test results for the proposed structural model: standardized path coefficients and squared multiple correlations $(R^2)$	121
Figure 4-9	Test results for the proposed structural model: standardized path coefficients and squared multiple correlations (R <sup>2</sup> ) for We- and I-Intention models	126

#### **CHAPTER I**

## **INTRODUCTION**

#### Overview

General background and study justification and purposes are presented in chapter one. In the first part, theoretical and practical background information is presented regarding agritourism research, the characteristics of agrivisitors and tourism on organic farms. In the second part, the research questions addressed to service as the focus of this study are discussed. Thereafter, anticipated contributions of this study are discussed.

## **Background of the Study**

Agritourism refers to activities that include visiting working farm or agricultural operation to: enjoy, get educated or get involved in what is happening on the operation (Weaver & Fennell, 1997). Visiting farms for leisure and recreational purposes is also referred in the literature as agricultural tourism or farm recreation (Chang, 2003). Tourism activities on the farm are various in forms but can be classified into three categories: on-site retail purchases,

This dissertation follows the style of *Tourism Management*.

enjoyment and education (Veeck, Che, & Veeck, 2006). Examples include, but are not limited to, "u-pick" fruits, farm stays, farm touring, corn mazes, petting and feeding zoos, dude ranches, on-farm farmers' markets, hayrides, Christmas tree sales, crops tasting, winery tours, rural bed & breakfasts, adventurous ranch safaris, story-telling of history, classes about the benefits of avoiding artificial hormones, farm festivals, etc.

Although agritourism has long been a phenomenon in many countries, its popularity has only recently been increased for farmers, tourists and consumers of agricultural products and services (McGehee, 2007; Sharpley & Vass, 2006). It has been suggested that this has occurred for three reasons: the realization that agritourism can have a significant effect on the promotion of agriculture (Clarke, 1995, 1999), the growing interest in the "green" tourism market (Hong, Kim, & Kim, 2003), and that it provides farmers with the opportunity to increase farm revenues (Sharpley & Vass, 2006).

On the supply side, traditional methods of agriculture production system and management are becoming less viable, and adapting to necessary changes has generated economic uncertainty for many farming communities in rural regions of the world (Busby & Rendle, 2000; McGehee & Kim, 2004). Moreover, social and economic challenges have resulted from decreased farm incomes, poor agricultural product prices, high production and chemical costs, industrialization, globalization and decreases in rural population McGehee & Kim, 2004. Thus, farmers have looked for alternatives to help diversify traditional farm operations, hoping to reverse the steady erosion in net farm incomes (Fleischer & Pizam, 1997).

Combining tourism business with conventional agricultural production is the most common and popular strategy for diversification. There are several terms for this new multifunctional farm tourism business: agricultural tourism, agritourism, farm tourism, and leisure farm to name just a few (hereafter agritourism). Although it has various names, farm diversification into tourism, in general, presents a potential to generate additional income, diversify the farming economy, lower risks and uncertainties and form a symbiotic relationship with agriculture for the farming communities (Clarke, 1999).

Agritourism also provides benefits to tourists and consumers. Since the majority of the general population may have little or no contact with agriculture, agritourism could also be a mechanism by which urbanites can enjoy nature and culture, learn about agriculture and purchase locally grown farm products (Carpio, 2006; Sonnino, 2004; Veeck, et al., 2006). In sum, agritourism has been commonly guided and motivated by a vision of a thriving, viable agriculture that has a diversity of small-scale farms that remain profitable, enhance the environment, enrich the indigenous culture, and improve the quality of life for farmers and consumers.

While a growing body of literature related to agritourism exists, the vast majority deals with tourism from the supply side (Jolly & Reynolds, 2005; McIntosh & Bonnemann, 2006). To date, little attention has been given to farm visitors (the demand side) and their relationships with farmers even though the recent growth in agritourism is driven by both demand and supply. There are considerable opportunities for growth of the demand for agritourism and an increasing number of farmers are also diversifying

into tourism businesses (Lobo, et al., 1999). Therefore, it is believed that research should be conducted to understand the factors affecting consumers' perspectives for agritourism activities in order to fill this gap.

Moreover, the agritourism experience has not been considered in the context of organic farms where ecological conservation is a primary concern of the farmers. As more and more consumers are concerned about their health and are more mindful of environmental degradation and its impacts, a growing number of consumers have come to desire organic food, and are being typically attracted to organic farms (Choo & Jamal, 2009). Thus, it is believed that an understanding of information related to visitors to organic farms would be important not only to organic farmers engaging in or considering tourism business but also to development planners who are considering agritourism as an option to promote regional development and environmental conservation.

In the marketing literature, there is wide agreement that creating value for customers is at the core of marketing efforts (Kotler, 1997). Whereas – until recently -- most marketing research explicitly or implicitly has restricted value-creation to innovation, production and delivery processes of products and services by organizations, there is increasing academic discourse about consumption as a value-creating activity (Gummesson, 1998; Holbrook, 1994; Holt, 1995; Tzokas & Saren, 1997). It has been argued that consumers' participation or contribution in value creating activities is still underestimated and constitutes a gap in marketing theory (Tzokas & Saren, 1997). Exceptions can be found in the services marketing literature (Schneider & Bowen, 1995), however, the possibilities of customers for joint value creation as a co-producer are

limited to the general characteristics of the service and have not been fully explored in tourism settings. The increased importance of a customer orientation has changed these limitations and a significant need of research in a tourism specific context is emerging. In the case of agritourism, studies on the characteristics of the general service industry are limited in understanding agritourism where the service program is particularly based on the nonrenewable natural and cultural resources. This implies that a different or unique conceptual framework is called for.

Like other forms of tourism, agritourism is a service-involved economy. This creates a need to focus on service encounters in which a customer interacts with staff and/or other customers (Bitner, Booms, & Tetreault, 1990). The heterogeneity of service delivery and the inseparability of production and consumption in service contexts emphasize the role of customers as a co-producer, partial employee or active participant (Lovelock & Gummesson, 2004; Namasivayam, 2002; Sierra & McQuitty, 2005; Yi & Gong, 2009). This is particularly important in agritourism contexts where onsite interpersonal interaction is essential among service providers (farmers) and visitors (Reichel, Lowengart, & Milman, 2000).

Therefore, this study will examine how agrivisitors, when they visit farms, interact with service providers (farmers), other local residents, their travel companions, and other visitors. In the service marketing literature, service encounters represent social encounters in which employees' interpersonal skills affect customer satisfaction and behavior (Bitner, Booms, & Mohr, 1994; Bowers, Martin, & Luker, 1990) and customers influence one another indirectly as a part of the environment or directly

through interpersonal encounters (Bitner, et al., 1994; Martin, 1996; Wu, 2007). Similarly, tourism scholars have examined the dyadic interface between visitors and employees (Solnet, 2007). In addition, research has examined visitor involvement and participation in tourism service delivery and customer-to-customer interaction (Wu, 2007). Yet, to the best of the current researcher's knowledge, how visitors interact with their companion visitors has not been explored. In addition, it would seem to be important to understand how visitors interact with local residents as local residents' attitude towards tourism and tourists has been found to be important for overall tourism development (Ap, 1990, 1992; Perdue, Long, & Allen, 1987). Previous literature shows local residents can contribute to creating a positive experience for tourism (Fick & Ritchie, 1991; LeBlanc, 1992). This study sets out to model an integrated social interaction in agrivisitors' service encounters including four distinctive relationships between visitors and: 1) service providers, 2) companion visitors, 3) local residents, and 4) other customers.

Social exchange theorists have suggested that successful relationships are characterized by reciprocity and unspecified obligation, and that it is likely that they are the keys to positive feelings about sustained social relationships (Blau, 1964; Homans, 1958). The notion of reciprocity in social exchange theory may have particular relevance to the study of interaction in tourism settings as it supports an active role of a customer in terms of delivering tourism services (Befu, 1980; Gouldner, 1960). Social exchange relationships evolve when an individual who supplies rewarding services to another obligates him/her. To discharge this obligation, the second person must in turn furnish

benefits to the first in turn (Blau, 1964); as there is an expectation of future return, although exactly when it will occur and in what form is unclear. To the extent that both parties apply the reciprocity norm to their relationships, favorable treatment by either party is reciprocated, leading to mutually beneficial outcomes (Rhoades & Eisenberger, 2002). As important as a person perceives the process and outcome of the relationship, he/she will accordingly devote him/herself to it. This is an important part of functional social exchange because it ensures that partners will put forth the effort necessary to produce mutually desirable outcomes.

Perhaps the most basic questions involving exchange, however, are concerned with what it is that people exchange with each other and what the effects of exchanging different kinds of resources are. For many years, psychologists and sociologists have assumed that much of human behavior can best be understood through studying the resources and benefits people give to and receive from others and the rules that govern such exchanges (Hinde, 1979; Tornblom & Fredholm, 1984). However, it is resource theory (U. G. Foa, 1971; U. G. Foa, Converse, Tornblom, & Foa, 1993; U. G. Foa & Foa, 1974) that has directly studied these issues and, surprisingly, few researchers have formally tested this theory for tourism and marketing phenomena (Morais, 2000).

Foa and Foa (1971) developed an exchange theory to attempt to categorize and identify the structures underlying what is exchanged between two social units as well as the patterns of exchange (i.e. functional relations). Their theory classifies six types of resources people exchange with one another including: love (i.e., an expression of affectionate regard, warmth, or comfort), status, information, money, goods and services

(E. B. Foa & Foa, 1976; U. G. Foa, et al., 1993). The theory further posits that some resources are perceived to be more particularistic than others. According to this theory, particularistic resource is more influential in deriving positive evaluations of events or experiences containing interpersonal interactions.

Farm visitors are typically encouraged to engage in interactions in order to better enjoy activities and services on farms (Lobo, et al., 1999). Resource theory should thus be useful in helping to understand how visitors direct their efforts into social interactions by identifying what kinds of resource they exchange during agritourism encounters. It is believed that this theory will also assist in explaining how the kinds of resources they exchange are affected by the nature of the relationship and what their reactions to receiving particular types of resources are.

While social exchange theory admittedly treats the rational choice propositions of actors who have information, cognitively process and make decisions concerning the pattern and nature of exchange with others, some exchange scholars have attempted to consider how the instrumental conditions of exchange foster expressive relations through emotional processes. Taking findings related to the conceptualization of satisfaction emphasizing an emotional aspect into account (Rust & Oliver, 1994), this study will evaluate the effects on satisfaction resulting from exchange relationships at agritourism encounters. Moreover, consistent with social exchange theories postulation that the social relationship context influences the satisfaction with the service a customer is provided (Molm, 1991b; Solomon, Surprenant, Czepiel, & Gutman, 1985), this study will examine the link between the exchange relationship and agrivisitors' behavioral

intentions to revisit the farm. It is further postulated that these relationships will be mediated by satisfaction as previous research suggested (Kozak, 2001b; Lee, Petrick, & Crompton, 2007; Um, Chon, & Ro, 2006). The proposed model is displayed in Figure 1-1.

It can further be argued that most visitors enjoy attractions and the outdoors in a group as the vast majority of leisure visitors do not travel solo. Since most tourism statistics indicate an average travel party over two, one's intentions to revisit an attraction/destination are not just a personal or intra-individual one. Instead, revisit intentions can be a social, collective or shared intention to visit again with their current or other travel companions (i.e., I intend we visit again). According to some philosophers and researchers (Bagozzi, Dholakia, & Pearo, 2007; Tuomela, 1995), there are at least two distinct types of behavior or intention to act: personal and group/social. The former indicates the situation when the individual may form intentions pertaining to act independent of any collective entity per se while the latter refers to when another person is taken into account in an individual's acts, action or practices (Rummel, 1975). In the latter case, the intentions are explicitly formed with reference to the collective, group or social entity, rather than the singular "self" and are based on the idea of a shared consciousness with other individuals that motivate such interactions. This concept of group or shared intentions has been variously labeled by philosophers and researchers as "collective intentions," "we-intentions," and "shared intentions" (Bagozzi, et al., 2007). Although not investigated in a tourism context, it is believed that the notion of social or shared action is well suited to the context of tourism behavior.

As the consequences of reciprocal interactions, the current research considers customer satisfaction and we-intentions to revisit. In agritourism, as with all aspects of tourism activity, visitors' satisfaction is important as there is increasing evidence that satisfied visitors have a high potential for return visit (Petrick, 2004b; Petrick & Backman, 2001; Petrick, Morais, & Norman, 2001) and word-of-mouth referrals (Pritchard, 2003; Simpson & Siguaw, 2008). As seasonal changes are part of nature and farming life, this creates the possibility to attract a high proportion of repeat visitors who would like to enjoy the dynamic activities and nature subject to a season or different seasons. This aspect is particularly important for agritourism where small-scale operations are pervasive, often multifaceted in nature and family owned (Wilson, 2007) as they commonly lack marketing resources to seek out new customers (Clarke, 1999).

Consequently, this study advances the current tourism research by applying resource theory to visitors (customers). Social exchange theory has been actively adopted from tourism scholars, but the vast majority of work has been applied to measuring residents' attitudes and perceptions towards tourism development. Thus, this study will use social exchange theory to explain visitors' behaviors in the field of tourism marketing. In addition, the research will identify the effects on visitors' satisfaction of the following social exchange relationships: farmers, local residents, travel companions and other customers.

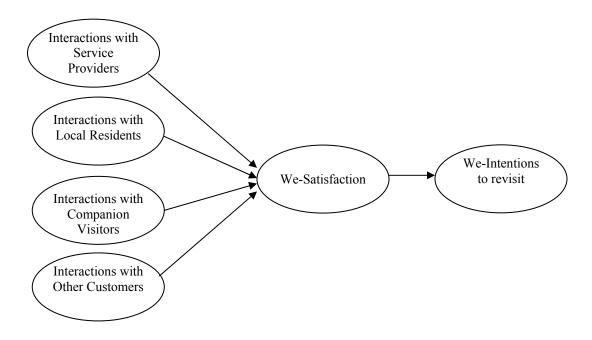


Figure 1-1. Social Exchange Relationships in agrivisitors' service encounter

Further, visitors' environmental beliefs (new ecological paradigm: NEP) will be examined as a potential moderator influencing the strength of these links. It is believed that this will be particularly important for tourism on organic farms as they typically help preserve natural habitats and reduce environmental impacts by utilizing no pesticides, artificial fertilizers or antibiotics in order to sustain the quality of the onsite natural and cultural resources (Frauman & Norman, 2004). Thus, it is believed to be relevant to examine the eco-awareness that agrivisitors have and how it changes the relative impact of each interaction on customer satisfaction. It is hoped that this study will provide marketing implications for developing tourism businesses on organic farms by seeking to improve the social exchange relationships with agrivisitors.

## **Research Questions**

The main research questions addressed in this study are what kinds of social interactions exist for agrivisitors' service encounters and how the individual relationships influence satisfaction and social or shared intentions to revisit? According to the resource theory of social exchange, exchange processes are affected by the nature of a relationship, the social context in which the exchange takes place, and the types of resources transacted between the exchange participants. Based on this, the question being addressed can be divided into the following sub questions. First, is social exchange theory an appropriate perspective for examining agrivisitors' service encounters? Second, how do the nature and types of relationships affect agrivisitors' satisfaction and behavior and which type of relationship is more influential on satisfaction and social or shared revisit intention? Third, which exchanged resources are most important for different relationship types?

The secondary question for this study is whether the social aspect of behavioral intention which is shared with other people who travel together or have potential to do so is a relevant concept to tourism behavior. Last, but not least, this study will examine how environmental beliefs of agrivisitors affect the social exchange framework of service encounters.

## Limitations

The proposed model and hypothesized relationships among the constructs of interest were tested with the data collected from visitors to organic farms located in

Texas. Therefore, the study results cannot be generalized to the entire U.S. population.

This study focused on understanding the revisit intentions of visitors to organic farms by examining the perception of social interactions. To the best of author's knowledge, there is no existing conceptual framework and empirical results on this topic in agritourism contexts. In addition, the measurement of social interactions using resource exchange is very beginning. Therefore, the findings are exploratory in nature.

### **Delimitations**

The study is subject to the following delimitations:

- 1. The study only included the U.S. populations who visited organic farms in Texas.
- 2. The study only included respondents who visited organic farms with one or more companion visitors. Respondents who visited alone were excluded from the study sample used for the detailed analyses.
- 3. Specific situational factors (e.g., seasons or locations of the organic farms) were not considered.
- 4. The study did not examine the influences of demographic characteristics (e.g., age, income, education, gender, and job status).

## **Definition of Terms**

The following are definitions of the terms and concepts used in the study. Revisit intentions refer to the likelihood of renewal of contracts, visit, or purchase from

the same providers. Revisit intentions were considered in two ways: social (We) and personal (I).

Satisfaction refers to an emotional state of mind which results from high quality experiences. Satisfaction was also considered in two ways: social (We) and personal (I).

Agritourism refers to the act of visiting a working farm or any agricultural, horticultural or agribusiness operation for the purpose of enjoyment, education, or active involvement in the activities of the farm or operation.

An agrivisitor refers to anyone who visits a farm for short periods of time for the purpose of participating in or enjoying farm activities and/or other attraction offered.

Social interaction refers to an exchange that is characterized by reciprocal stimuli or mutual reinforcements.

Service providers refer to persons who provide goods, services, or facilities to potential or current customers.

Local residents refer to residents or neighboring farmers who reside in the same city where the farms are located.

Travel companions refer to persons whom a visitor travels with.

Other customers refer to agrivisitors whom a visitor encounters at a farm except a visitor's companion(s).

Resource is "anything transacted in an interpersonal situation" (Foa &Foa, 1974:p. 78).

Organic farms refer to farms operated by a production system that sustains the health of soils, ecosystems and people. Organic farming relies on ecological processes,

biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects (IFOAM, 2008).

## **Anticipated Contributions of This Dissertation**

In answering the questions listed above, it is expected that this study will make contributions to the literature on tourism service encounters, social exchange theory, resource theory, satisfaction and the concept of social/shared behavioral intentions. Social exchange theory has been the subject of a significant amount of research in the sociology and social psychology disciplines. Despite its relatively recent development, this theory has now become a significant strand of sociological (Ritzer, 1988) and marketing theories (Bagozzi, 1975a, 1975b, 1977; Houston & Gassenheimer, 1987; Kotler, 1972). It appears though, that social exchange theory has not been explored to any great extent in the tourism behavior literature, with the exception being studies of resident attitudes towards tourism development. Yet, there are a number of questions that lend itself to the analytical framework in tourism interaction behavior.

By examining agrivisitors' service encounters from a social exchange perspective, the proposed model will hopefully provide a framework for understanding the role of reciprocity of social exchange relationships (Blau, 1964) in satisfaction and shared behavioral intentions formation, therefore contributing to the tourism marketing literature.

Yi and Gong (2009) conducted research in service marketing and provided an integrated model of customer social interactions for service encounters (Yi & Gong,

2009). By extending Yi and Gong's work regarding service encounters as a resource exchange process, the proposed model develops the integrated social interactions readily observable in the tourism context particularly for small-scale tourism operations on organic farms. Tourism service encounter settings may be found to be valuable areas for research for extending the understanding of social exchange theory and social interaction.

It may also be possible to use social exchange theory to help build a cumulative understanding of tourism behavior by examining possible links with other theoretical approaches including resource theory. This study will also hopefully contribute to the resource theory literature by increasing our understanding of how social processes depend on the nature of the resource being exchanged and how they lead to social behavior. Shared revisit intentions, which can be expressed as "I intend we visit again," is a newly introduced concept in tourism research, and may help capture the role which social aspects play in explaining tourism behavior which has traditionally only been considered in intraindividual or personal contexts (Bagozzi, 2000). Some scholars have wondered whether the use of collective concepts and their role as explanantia (explaining items) and explananda can be interpreted by, or reduced to, psychological concepts or whether there is some sense in which collective concepts require new conceptual frameworks to incorporate them into our theories and research concerning tourism behaviors (Bagozzi & Dholakia, 2003; S. H. Kim, 2007; Russell, Wesley, & Sutherland, 2008). In this sense, it is believed that this research will be the first to examine these types of social tourism behaviors.

Finally, by identifying the new ecological/environmental paradigm (NEP) of agrivisitors, this study will hopefully provide a way for examining how beliefs/attitudes toward the environment influence the relative impact of each social exchange relationship on agrivisitors satisfaction. Agritourism products and services are various in forms, but all are based on or tightly connected to nature on a farm. In particular, since organic farms which involve preserving natural habitats and reducing environmental impacts, the eco-sense of agritoursts will be expected to moderate the relationships between social interaction, satisfaction and shared intention.

## **Dissertation Organization**

In an attempt to make these contributions, this dissertation is presented as follows.

The current chapter has introduced the research and its relevance, provided an overview of the study and outlined the central questions and contributions of the study.

Chapter II will provide a review of the relevant literature and present the conceptual framework. Agritourism encounters via interpersonal interaction are considered in an exchange framework that integrates concepts from psychology, social-psychology and marketing. Four different types of social interactions at agritourism encounters are discussed in terms of principles from social exchange theory and resource theory. Customer satisfaction with agritourism encounters is then explained in terms of two complimentary paradigms – cognitive satisfaction and emotional satisfaction. In addition, satisfaction research in tourism and service marketing in general will be reviewed with the introduction of shared, social intention as an outcome variable.

Following the literature review, arguments for the social exchange relationship (i.e., social interaction) of agritourism encounters influencing emotional and cognitive aspects of satisfaction and behavioral intention will be presented along with a set of hypotheses related to the research questions presented earlier.

Chapter III will provide a detailed description of the research methodology.

Specifically, this chapter will explain the plan for the sampling strategy, research design, operationalization of dependent, independent, and moderating variables, and the justification for the statistical analysis that will be used to test the hypotheses.

Chapter IV will report the results of this study and will include the data analysis procedures, model estimation and the result of the hypotheses tests. Finally, chapter V will provide a discussion of the results and outline the contributions, implications and limitations of the study as well as directions for future research.

#### **CHAPTER II**

## LITERATURE REVIEW AND CONCEPTUAL MODEL

### **Overview**

Tourism has been conceptualized by different scholars in different ways.

However, the most common denominator in defining tourism research as a field of study is its preoccupation with nonpermanent movement (mobility) of people beyond their ordinary area (space) that encompasses their routine activities to a non-ordinary area (Hall, 2005). Tourism as a field of study has been seen largely as a social science, crossing many disciplines such as sociology and social-psychology, geography, anthropology, organizational and strategy research, and marketing and consumer research (Echtner & Jamal, 1997). Although some tourism scholars believe that the multifaceted nature of tourism might militate against establishing a more coherent, disciplinary approach (Dann, Nash, & Pearce, 1988; Jafari, 1990; D. G. Pearce & Butler, 1993), tourism studies, whatever their nature may be, are becoming increasingly accepted in academia.

Moreover, many tourism scholars assert that a great potential exists for diverse views on tourism by examining the merits of a multidisciplinary orientation. Dann and Cohen (1991) implied that tourism research is eclectic when they suggested that "there exists no all embracing theory of tourism, since tourism, like any other field of human

endeavor, is a target field, comprising many domains and focuses, to which various theoretical approaches can be appropriately applied."

The diversity of disciplines impacting tourism studies has led to tourism behavior being approached from various perspectives. This chapter commences with an overview of agritourism and then introduces a conceptual model of agritourism encounters involving satisfaction and social behavior based on an exchange framework. First, types of social interactions involved in agritourism encounters are identified and described using both resource theory and the exchange framework. Next, customer satisfaction judgments are examined as the results of types of social interaction. This is followed by a discussion of social or shared intention from the standpoint of a variety of behavioral science disciplines. Finally, an integrated model of customer satisfaction and social intention including social interaction at agritourism encounters is presented.

## **Agritourism**

Agricultural landscape and activities associated with it are rapidly evolving in the United States and around the globe as farmers are aggressively applying their resourcefulness and determination to meet the demands of a changing marketplace. No longer sustained by the sale of traditional crops and livestock that have provided a flat net income for the past 30 years, farmers have become entrepreneurs, generating additional income from second jobs known as "off-farm activities," which have been estimated to comprise about 75% of farm income (Kirschenmann, 2003). Of these activities, diversification into tourism has been one of the most prevalent due to both the

perceived extra benefits of working from home while being able to take care of children and the possibility of generating extra income (Sharpley & Vass, 2006). Thus, for many farmers, agritourism is the favored way to reduce the need for a second job away from home. It has been reported that farmers who have turned to agritourism could be as much as 40 percent more profitable than those who have not although not all of them have been successful (Mace, 2005). In three states that track the economic impact of agritourism, the annual agritourism revenue ranged from \$20 million in Vermont to \$26 million in New York in 2003 (Mace, 2005: 3). In Hawaii, revenues rose 30%, to \$34 million, from 2000 to 2003.

As such, the primary reason for the recent emergence of tourism as an important rural economic activity can be found from the supply side. Farm-based tourism has increasingly given farmers an opportunity to generate additional income (Knowd, 2006), to be, an avenue for direct marketing to consumers (Sonnino, 2004; Veeck, et al., 2006) and as a way to counteract social and economic problems—loss of income, increased expenses, globalization, and others—associated with the decline of traditional agriculture industries (McGehee, 2007).

However, the recent popularity of agritourism could not have occurred without market demand. Discretionary income and demand for more specialized forms of vacation experiences juxtaposed with reduced transportation costs have driven the growth of tourism and recreational activity in a farming environment (Tchetchik, Fleischer, & Finkelshtain, 2008). Agritourism also meets the needs of urban tourists who seek traditional hospitality, nature and cultural experiences, peace and tranquility,

thematic holidays, authenticity, healthfulness, and so on (Chang, 2003). These drivers, in combination with better access to rural destinations, have made agritourism popular for a growing number of farmers, the farming community, and the tourism industry.

Overall, rural tourism, where agritourism is a subset (McGehee & Kim, 2004; Nilsson, 2002), experienced an annual growth rate of 6% in North America as well as Europe from 2002 to 2004 (Andersson & Hoffmann, 2008). According to one nationwide study, 62 million Americans visited farms one or more times in 2000, which corresponds to almost 30% of the population (Barry & Hellerstain, 2004).

While the financial advantages with respect to employment and wages are clear, agritourism development can also enhance the local quality of life. It can serve as an important source of tax revenues, which may lead to higher public services and lower local tax rates. Tourism can also support conservation of local culture and traditions, helping to maintain the viability of small-scale agriculture (Veeck et al., 2006).

Nevertheless, agritourism development is admittedly accompanied by potential negative effects. Social and psychological costs can exist in that farmers and their families must open their doors to visitors, who could alter preexisting social relationships and the values of the local community (Veeck et al., 2007). Additionally, agritourism jobs are frequently seasonal or part-time and low-paying with limited benefits (Brown, 2008), and tourism can increase the cost of living for community residents and farmers because of inflated property, goods, and service costs (Williams, Paridaen, Dossa, & Dumais, 2001). Given these concerns, it is imperative that a proactive role be taken in planning this form of farm diversification. Sadowske and

Alexander (1992) argued that the key to success in agritourism often lies in farming communities striking a balance between the private and social costs and benefits of rural tourism development. In this sense, it is necessary to take a step toward addressing the requirements, gains and losses, and obstacles to success facing agritourism stakeholders. An agritourism system model recently suggested by McGehee (2007) identified the needs, motivations, characteristics, and best practices of the three primary stakeholders of agritourism—providers, Destination Marketing Organizations (DMOs), and agrivisitors. The model asserts that the conservation of traditional family farms can contribute to the conservation of communities, the landscape, and ecosystems.

Busby and Rendle (2000) asserted that farm tourism is a new form of tourism rather than just a supplementary commercial activity on a farm. According to Busby and Rendle (2000), as long as it forms a key component of both the accommodation supply and many of the day attractions available, it should be considered to be a sector of rural tourism in its own right. However, some tourism scholars and agriculturalists have viewed agritourism as a category of farm diversification (Clarke, 1995) since most farmers involved in tourism maintain their identity as farmers rather than as tourism businesspersons (Sharpley and Vass, 2006).

It should be noted that, regardless of how the agritourism phenomenon is positioned, it represents a symbiotic relationship for areas where neither farming nor tourism could be independently justified (Inskeep, 1991). Agritourism operations range from small operations that operate on a seasonal basis and offer limited consumer services to large operations that operate throughout the year and provide numerous

consumer services. Most agritourism operators hold an intrinsic value for keeping the farm as a farm (Sharpley & Vass, 2006). Therefore, the definition of agritourism operations in this study is "rural enterprises which incorporate both a working farm environment and a commercial tourism component" (Weaver & Fennell, 1997, p. 357).

Recently, some agritourism entrepreneurs have caught on to the value of conserving natural resources (Clarke, 1999; McGehee, 2007). It usually attracts a small number of tourists, there is no need for extensive infrastructure, and tourists often genuinely enjoy the local culture and attractions (Clarke, 1995, 1999; Gössling & Mattsson, 2002; D.G. Pearce, 1992; Ratz & Puczko, 1998). For this, the development of sustainability indicators specifically relevant to agritourism is vital. These indicators should help clarify areas where the links between the economy, environment, and society are weak in agritourism destinations, provide an alert to problems before they become too serious, and identify what must be done to solve the problem (McGehee, 2007).

The case study of one farm accommodation in the United Kingdom acknowledged the importance of sustainable marketing related to agritourism development (Clarke, 1999). In most cases, marketing of tourism poses special challenges for rural areas. However, this model emphasizes that marketing activities incorporate more than just a promotional function and move beyond the marketing activities of the individual tourism provider to investigate collaborative practices for more sustainable forms of development for agritourism (Clarke, 1999). In addition, there is an alternative form of non-commercial farm stay provided at WWOOF (World Wide

Opportunities on Organic Farms [also known as Willing Workers on Organic Farms] in New Zealand, an organization that facilitates the placement of volunteer workers on organic farms. The experience at WWOOF could be beneficial in improving care and concern for the natural environment, supporting the organic movement, and encouraging self-development among visitors (McIntosh & Bonnemann, 2006; McIntosh & Campbell, 2001).

For generations, some farmers have resorted to multiple strategies to enhance their agricultural options and the health of their communities. As a result, organic farms, where its agricultural practices engage in natural resource conservation, are an emergent part of a new economy in some rural areas. Tourism efforts have also been initiated on organic farms. Literature has revealed that a potential for a symbiotic relationship between organic agriculture and tourism is tightly related to the development of environmentally and socially responsible tourism in rural areas (Kuo, Chen, & Huang, 2006). Thus, conservation-oriented agricultural practices might be able to ensure more sustainable forms of tourism programs and activities on the farm.

As a new wave of environmental consciousness is sweeping over the U.S. (Holden, 2003), there seems to be an emerging opportunity for tourism occurring on organic farms. However, to the best of the current researchers' knowledge, no research has been conducted on small-scale, privately owned, organic farm tourism. This study will therefore explore this new phenomenon to hopefully contribute to better understanding visitors to organic farm tourism operations.

## **Conceptual Model for the Study**

The main purpose of this study is to examine the interpersonal interactions between customers, service providers, and other customers in small-scale agritourism environments. The service encounter literature is well established in the service marketing field, adopting theories from psychology and social psychology, and provides theoretical concepts to explore agritourism encounters in this study. As a framework to examine the interactions and exchanges at agritourism encounters, social exchange theory, resource theory, satisfaction theory, social intentions and the new ecological paradigm will be applied.

### **Service Encounters**

In the service marketing literature, service encounters are defined as any period of time during which a customer interacts with a service (Bitner, 1990; Shostack, 1985). This definition includes discrete, separate, and distinct events and behaviors, as well as customers' interactions with all the dimensions of a service, such as the physical environments, service contact employees, machines, automated systems, physical facilities, and other visible elements (Zeithaml & Bitner, 1996).

A majority of service encounter scholars believe that interpersonal interactions between customers and service providers during service encounters are very important because it is during this time when customers judge the services provided to them and most services involve at least one human being interacting with another (Czepiel, 1990;

Shostack, 1985). Hence, such an encounter has been the focus of service marketing research.

Some scholars (Czepiel, 1990; Lovelock, Paul, & Rhett, 1998) have taken an even narrower view, suggesting that a service encounter is a dyadic interaction.

Therefore, the use of the term "service encounter" has primarily focused on a dyadic interaction that occurs between a service provider and a service recipient, describing the service encounter as a social encounter (Czepiel, 1990; Suprenant & Solomon, 1987).

This dissertation follows the service marketing definition of Shostack (1985) and Bitner (1990) mentioned above, but the focus is narrower to the extent that we will only be taking into consideration face-to-face encounters.

However, service encounters often occur in the presence of multiple customers and service providers who share the servicescape with each other. So, it should be noted that service encounters involve a series of interactions and/or relationships. While different scholars have paid attention to specific types of interactions during service encounters (e.g., customer-to-customer, customer-to-employee), others have attempted to integrate the types of interaction existing at service encounters. Among those, Langeard and his colleagues (Langeard, Bateson, Lovelock, & Eigler, 1981) modeled the service delivery process as a system of customer interactions between the customer and service contact personnel, the service place environment, and other customers. Yi and Gong (2009) found three discrete relationships readily observable in service environments: customer-to-organization, customer-to-employee, and customer-to-customer interactions.

All of these interactions and relationships seem relevant to general tourism service encounters, but they are not necessarily the same for small-scale agritourism operations. Given the relationships that were theoretically identified in the literature mentioned above, this study will integrate interpersonal relationships relevant to small-scale tourism operations that are typically run by owner-operators and families.

Service encounter research has primarily focused on the interactions between customers and service providers (e.g., employees) (Solomon, et al., 1985) or between customers and organizations (e.g., company) (Bagozzi, 1995). Agrivisitors seem to not distinguish their interactions with organizations and with employees because farm owners themselves are service providers in many cases (Wilson, 2007). Therefore, this study will consider a visitor-to-service provider interaction, not distinguishing interactions with organizations and with employees or service providers. In addition, agrivisitors encounter local residents, although not on a regular basis. Local residents' behavior toward visitors can influence whether the experience of agrivisitors is pleasant. The role of local residents is frequently regarded as a key to sustainable development (Ap, 1990, 1992; Getz, 1994; Gursoy, Jurowski, & Uysal, 2002; Perdue, et al., 1987; Puczko & Ratz, 2000), yet these same residents are expected to be part of the tourism services or tourism environment. Therefore, it is believed to be important to examine how agrivisitors perceive interactions with local residents on the way to the farm or on site.

In tourism service contexts, visitors receive a service simultaneously while other customers are being served. Therefore, the presence of other customers can affect the

nature of the service outcome and process. Other customers may influence one another indirectly by being part of the environment or more directly through specific interpersonal encounters (J. Baker, 1987); and can dramatically influence customer satisfaction with the broader customer experience (Grove & Fisk, 1997; Martin & Pranter, 1989; Wu, 2007).

Last but not least, as the indigenous presence of social groups in the leisure activity has been recognized in the literature (Crompton, 1981), people usually travel in a group of some size. Thus, travel companions might influence the tourism experience, although this phenomenon has not been identified in tourism literature. In the leisure literature, this specific type of social relationship afforded by families and friends in shared leisure activities has been explored through the concept of leisure companionship (Iso-Ahola & Park, 1996; McCormick, 1999). The conceptualization of companionship primarily originated from the social psychology literature in some taxonomies of social support functions.

Some social support scholars have sought to differentiate companionship from other social relationships in terms of support derived from each relationship (Buunk & Verhoeven, 1991; Cheek & Burch, 1976; Coleman & Iso-Ahola, 1993; Duncan, 1978; Nias, 1977; Ritchie, 1975; Witt, 1971). Rook noted that social support and companionship make equally important, but complementary contributions to psychological well-being (1987a). Support can protect people from the debilitating effects of life stress, whereas companionship can protect people from the emptiness and despair associated with loneliness. Therefore, it is important to note that companionship

is commonly engaged in shared activities of exchanges that are undertaken primarily for the intrinsic goal of enjoyment (Rook, 1987). Consistent with this conceptualization in social psychology, the increased value placed on companionship is also empirically evident in the beneficial consequences of leisure participation for psychological well-being, health, and life satisfaction (Coleman & Iso-Ahola, 1993; Rook, 1987). Therefore, the concept of travel companionship as a more expressive aspect of social interaction may be worth scholarly attention as people seldom travel alone.

Travel companionship can also spontaneously connect one to shared activities and experiences during tourism service encounters. This basic distinction between general social interaction and companionship has received little or no attention by tourism researchers. In the present study, the concept of companionship and its shared behavior will be investigated.

In sum, this study suggests that at least four types of customer social interactions exist in agritourism—with service providers (farmers), companion visitors, other customers, and local residents. Of these interactions, the first interaction has been extensively examined with respect to its effect on positive post-purchase behaviors in various service marketing contexts as it is often deemed more controllable than other types of interactions (Moore, Moore, & Capella, 2005). Previous literature has emphasized that, to manage service encounters, managers must understand the interpersonal contacts between the provider and recipient that distinguish a highly satisfactory encounter from an unsatisfactory encounter. However, all interactions or relationships at service encounters can individually or in combination, positively

influence post-purchase behaviors, although it is often difficult to untangle their effects. By incorporating multiple observable relationships associated with service delivery specific to agritourism settings, this study will hopefully provide insight into service encounter research applicable to small-scale tourism enterprises. Next the four types of competing social interaction will be compared, contrasted, and integrated based on social exchange theory and resource theory.

# **Social Exchange Theory**

Social exchange theory, which grew out of the intersection of economics, psychology, and sociology, can be useful in explaining how interpersonal interactions are influential in customers' behaviors (Molm, 1991a). According to Homans (1958), social exchange is likened to transactions in the economic marketplace. Not only is the market permeated by exchange, but also by the non-economic realm—the social relations situated between individuals, groups, and organizations (Blau, 1964). Most social exchange models share the following basic assumptions: (1) social behavior is a series of exchanges;

(2) individuals attempt to maximize their rewards and minimize their costs; and(3) when individuals receive rewards from others, they feel obligated to reciprocate.These assumptions refer to general interpersonal transactions, and they can also be

applied to specific types of transactions, such as the exchange of agritourism services.

Given these assumptions, social exchange theory argues that as customers engage in more interactions, the opportunity exists for the bond between customers and other

parties to grow stronger and perhaps more personal (Liljander & Strandvik, 1995). As a result, customers may develop a more enhanced view of the relationship in much the same way that they do in personal friendships.

Social exchange theory suggests that satisfaction is influenced primarily by social and economic outcomes and the comparison of these outcomes to alternatives (Homans, 1958; Thibaut & Kelley, 1959). On the contrary, the expectancy-disconfirmation (or disconfirmation) paradigm, which is arguably the dominant satisfaction framework, suggests that satisfaction is formed by considering the actual performance of a product or service and the expected performance of a product or service (E. R. Anderson, 1973; Hovland, Harvey, & Sherif, 1957). While the expectancy-disconfirmation framework focuses on how satisfaction is formed based on internal processing, a key advantage of social exchange theory is that it considers the interpersonal variables influencing satisfaction. Research in this area has identified a number of antecedents that influence the satisfaction of an exchange partner, especially in relational service contexts. Using these theories together should enable one to better understand rational processing and identify the relational influences shaping customer satisfaction in agritourism encounters.

Research in social exchange has been concerned with enduring or recurring relations rather than one-time interactions, because this theory assumes that if a reciprocal social relationship develops between/among customers and service providers and organizations, then not only will the customers be satisfied, but the service providers and the organizations will also likely gain economic and social benefits now and in the

future (Sierra & McQuitty, 2005). Additionally, social exchange principles of fairness and the norm of reciprocity suggest that individuals who receive assistance from others are motivated to provide them something in return. Therefore, the following four hypotheses were derived.

*Hypothesis* 1: Interaction with service providers (farmers) will have a positive effect on satisfaction.

*Hypothesis* 2: Interaction with local residents will have a positive effect on satisfaction.

*Hypothesis* 3: Interaction with companion visitors will have a positive effect on satisfaction.

*Hypothesis* 4: Interaction with other customers will have a positive effect on satisfaction.

### **Resource Theory**

Resource theory is a social psychological framework for understanding social interactions and relationships. It is closely related to social exchange theory, and some researchers have suggested that resource theory and exchange theories are conceptually equivalent (e.g., McCloskey, 1996), while some scholars have described these frameworks as distinctly different (E. B. Foa & Foa, 1980; Kurst-Swanger & Petcosky, 2003).

A social exchange framework, very broadly, refers to any conceptual model or theoretical approach that focuses on the exchange of resources (material or symbolic, tangible or intangible) between or among people and/or refers to one of the major exchange concepts including: rewards, costs, and reciprocity. In this way, social interactions are seen as providing the means by which persons can obtain needed resources from others and, thus, gain satisfaction as a result of the effect these transactions have on them. Consequently, resource theory represents a broad conceptual framework that permits us to understand interpersonal behavior and the relationships between individuals in everyday life. In particular, this theory posits that the resources exchanged by those having relationships are expected to be qualitatively different as well as engaging in a greater quantity of exchanges, (E. B. Foa & Foa, 1976; E. B. Foa & Foa, 1980).

Foa (1971) presented the basis of his theory while Foa (1974) developed true theory further by bringing together psychological theory and economic theory into a single model. He theorized that the mind classified exchangeable resources into categories, the underlying structure that is exchanged between two social units, and the patterns of exchange. This classification of resources transacted pertains to the meanings assigned to interpersonal behavior rather than specific behavior used to convey meaning. It is often the case that the same behavior will vary in meaning across different contexts, although the success of any given exchange is predicted on a shred understanding and expectancy of appropriate exchange (Turner, Foa, & Foa, 1971). According to Foa et al. (1993: 3),

We refer to the behavior of another person as well as to our own behaviors, we describe its meaning rather than the action itself. For instance, when reflecting on an exchange of friendship, one is more likely to have the thought "I am letting John know how much I like him" rather than "I am opening my arms and clasping them around John."

Current cognitive models and some learning theories also take the position that a given behavior can be rewarding, punishing, or indifferent, depending on the meaning ascribed to it.

Resource theory (U. G. Foa & Foa, 1974) provides insight into types of resources that can satisfy customers in service delivery by classifying the rewards and punishments transmitted in interpersonal encounters. A resource is defined as anything of value that can be transmitted from one person to another (E. B. Foa & Foa, 1976). According to Foa and Foa (1976), resources are defined and categorized as follows:

- (1) Love—an expression of affectionate regard, warmth, or comfort;
- (2) Status—an evaluative judgment conveying high or low prestige, regard, or esteem;
- (3) Information –any advice, knowledge, opinions, instructions, or suggestions;
- (4) Money—any coin or token that has some standard of exchange value;
- (5) Goods—any tangible items that are exchanged (e.g., any products or objects);
  and

(6) Services—activities provided to or by an individual (e.g., help provided to a close friend.)

To organize these six resources into categories, two dimensions were hypothesized to underlie the six resource categories: particularism versus universalism and concreteness versus symbolism. The position of each one of the six resources plotted on the two-dimensional taxonomy is presented in Figure 2-1. The coordinate of particularism derives from the writings of Parsons (1951) and Longabaugh (1966) and is similar to Blau's notion of intrinsic and extrinsic rewards (1964). The particularism/universalism dimension indicates the extent to which the value of a given resource is influenced by the particular persons involved in exchanging it, by the relationship, or by particular circumstances of the exchange. The concreteness/symbolism dimension suggests the form (e.g., tangible versus abstract) or type of characteristics of the various resources (U. G. Foa, et al., 1993; U. G. Foa & Foa, 1974).

Based on this configuration, love and money are extreme and opposed on the particularistic coordinate. Love is a highly particularistic resource because people tend to be highly selective when choosing a person with whom to exchange tokens of love. In contrast, money is the least particularistic resource because, in general, it matters very little with whom we exchange it, and of all resources, money is most likely to retain the same value regardless of the relation between the giver and recipient. Services and goods are conceptualized as concrete, since they involve the exchange of something tangible. Services, however, are viewed as more particularistic than goods (Smith, 1997) because

the value of a service is more likely to be influenced by the individual who provides it (e.g., the value of socks is less likely to be influenced by the particular person from whom the purchase is made than is the value of tourism experience on a farm). Status and information are abstract resources and are typically exchanged by symbolic behavior (e.g., showing respect). As a result, the location of each resource class according to its degree of particularism and concreteness produces the following structure of resources:

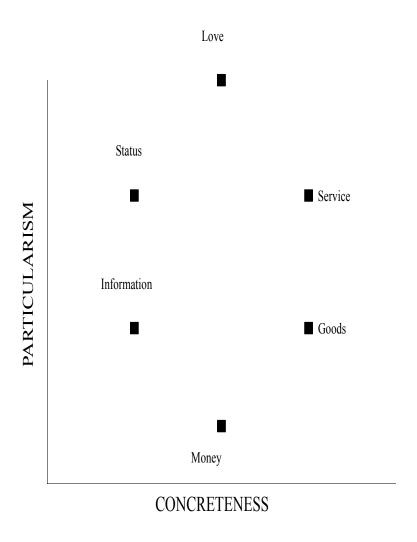


Figure 2-1. The cognitive structure of resource classes

Individuals satisfy personal needs through resource exchanges with others (Foa & Foa, 1980). Incorporating the material and non material needs of an individual with another, resource theory has the potential to assist in understanding satisfaction in an agritourism context where both material (i.e., agricultural produce) and non material exchanges are necessarily common. The probability of an interpersonal exchange taking place depends on the properties of the resources to be exchanged and the characteristics and types of relationships. In terms of the resource properties, resources in close proximity on the structural model are the most similar and are more likely to be substituted for one another in interpersonal interactions (Teichman & Foa, 1975; Turner, et al., 1971). Brinberg and Castell (1982) further tested this theory, specifically examining the two dimensional structure underlying the six categories and the functional aspects among resources (i.e., similar resources are more likely to be exchanged than dissimilar resources). For example, it has been found that money is more likely to be exchanged for goods than for love because money and love are far apart, whereas money and goods are close (Sell, Griffith, & Wilson, 1993).

The ordinal position of a resource on the particularism dimension influences the levels of satisfaction that are possible for interpersonal exchanges. The opportunity to exchange love with a highly valued particular person in repeated encounters over a period of time offers an opportunity for the highest levels of satisfaction (Rettig & Leichtentritt, 1998). According to Rettig and Leichtentritt (1998), the exchange of a particularistic resource requires personalized care, privacy of space, and repeated

encounters. These requirements are not necessary for the exchange of universalistic resources. The theory also specifies that the highest levels of satisfaction are possible for receivers of resources since the participant in an exchange gives what s/he has in abundance and receives what is scarce. Therefore, the marginal utility of the receiver of resources is higher than that of the giver (Foa & Foa, 1974). Previous research has established that personal feelings about a more particularistic resource received in the family environment than a universal resource can significantly contribute to explaining the variance in evaluations of satisfaction level in one's family life (Rettig & Bubolz, 1983a, 1983b). In Hypothesis 5, the level of satisfaction with the exchange of the particularistic resources will be compared to the level of satisfaction with the exchange of universal resources.

The type of relationship is another influential factor in resource exchanges, as previous research in social psychology has indicated that different kinds of social interaction have distinctly different effects on social well-being and life satisfaction. As mentioned above, some social psychologists differentiate companionships from general social relationships. Among them, Rook (1987a, 1987b) compared and contrasted the role of companionship and other social relationships on psychological well-being and life satisfaction, emphasizing the important nature of shared experience and activities associated with companionships. She found a strong and consistent effect of companionship support on the outcome variables while support derived from general social relationships showed more complex and conditional contributions. This indicates that companionships would appear more clearly to reflect liking, evaluations, or

expectations of enjoying one another's company in daily life and, therefore, may contribute more to satisfaction judgment about interpersonal experiences (Sorkin, Rook, & Lu, 2002).

This is consistent with the findings of some relationship scholars who have suggested that people in close and enduring relationships exchange more resources than do casual friends. For this reason, the former will more likelyhave a greater influence on evaluative judgment in the encounters that interaction was involved in. This is partly because exchanges and interactions in a close and enduring relationship satisfy a need of its intended people (Miller & Berg, 1982). In addition, more interpersonal orientations primarily toward persons in close and enduring relationships are evidenced by exchanging more particularistic resources rather than in casual relationships (Buunk & Verhoeven, 1991; Clark, 1981, 1984; Clark & Mills, 1979; Clark, Mills, & Powell, 1986). Accordingly, when the visitor-to-companion visitor interaction is compared with the visitor-to-other visitor interaction on satisfaction judgment, the effect of the former may be more significant than the latter in agritourism encounters (Hypothesis 6).

In a similar vein, how visitors interact with service providers (farmers) is hypothesized to be more prominent in their satisfaction judgment than their interaction with other local residents (maybe other local farmers). This does not mean the interaction with local residents is not important, but rather to understand how visitors' interactions with service providers and local residents influence together at agirourism encounters. Thus, the following three hypotheses will serve to test these claims.

*Hypothesis* 5: Visitors who receive particularistic resources via interaction will be more satisfied than those who received universal resources.

*Hypothesis* 6: The effect of visitors' interactions with their own companions on satisfaction will be stronger than the effect of visitors' interactions with other visitors on satisfaction.

*Hypothesis* 7: The effect of visitors' interaction with service providers on satisfaction will be stronger than the effect of visitors' interactions with local residents on satisfaction.

Although Foa's conceptualization of resource exchange was developed to encompass a broad variety of interpersonal behaviors, it is believed that the basic principles of the theory can be applied in a specific setting that occurs during agritourism encounters. The purpose of Foa's classification was to anticipate conditions under which certain resources will be valued and exchanged as well as to understand which resources have similar exchanges. It seems that one may describe the relationship in terms of a resource profile—that is, the resources that are typically provided by the source or involved in the exchange among participants.

Advantages of Resource Theory in Agritourism Encounters

Resource theory is the basis for assuming that service encounters can be examined with the six interpersonal resources that contribute to meeting customers' needs. This theory provides several benefits for measuring customer satisfaction. First,

the theory links the concepts of personal needs that are met through the interpersonal exchanges of resources, which lead to satisfaction (Rettig & Leichtentritt, 1998). Second, the theory assumes that humans have both economic and social psychological needs that cannot be satisfied in isolation, but require other individuals and groups (U. G. Foa, 1971). Third, the theory assumes that agritourism encounters are social contexts where a wide range of resource exchanges takes place and where there is a great potential for needs satisfaction (Rettig & Leichtentritt, 1998). Fourth, the theory recognizes that economic and psychological resources are interdependent and equally necessary in evaluating quality of life and satisfaction (Rettig & Bubolz, 1983a, 1983b). Fifth, the theory provides a means for studying the interaction of individuals and their near environments, providing an ecological view of social-psychological and economic wellbeing (Rettig & Bubolz, 1983). Sixth, the theory provides a classification of events and conditions that make agritourism encounters pleasant and worthy and offers parsimony, yet is specific enough to pinpoint essential differences among people (Foa & Foa, 1973). Seventh, the theory can be applied to different domains of interaction and to different institutional environments for interpersonal resource exchanges, including work, school, or the marketplace (Brinberg & Wood, 1983). Eighth, the theory clarifies the interpersonal dynamics and the reasons for diminished interpersonal satisfactions when material goods and money are substituted for needed highly valued particularistic resources of love and status (Rettig & Bubolz, 1983a, 1983b).

### Satisfaction

Satisfaction is one of the most heavily researched topics in consumer behavior and marketing. As the marketplace witnessed a substantial importance of customer satisfaction, it has served as a preliminary condition for long term success of organizations (Bearden, Ingram, & La Forge, 1998). As a means of successfully satisfying customers, researchers have applied a variety of social science concepts and theories to consumer behavior. This same attention to satisfaction has been found in the tourism literature (Kozak, 2001a).

The importance of understanding satisfaction is primarily based on its potential outcomes, such as: loyalty and commitment (Cronin & Taylor, 1992; Oliver, 1997; Yi, 1990; Yi & La, 2004), word-of-mouth (Huia, Wan, & Ho, 2006; Ladhari, 2007; Oliver, 1993), complaining behavior (Landon, 1977), repurchase intentions (Hu, 2003; Oppermann, 1997; Petrick, 2004b; Petrick & Backman, 2001, 2002; Petrick, et al., 2001; Petrick, Tonner, & Quinn, 2006), and share-of-wallet (Keiningham, Perkins-Munn, & Evans, 2003). Monitoring tourist satisfaction can also provide information related to dissatisfaction which can have a negative impact on revisit intention (Baker & Crompton, 2000).

Satisfaction is drawn from the Latin satis (enough) and facere (to do or make) (Oliver, 1997). Based on the etymology of this term, Oliver (1997) indicated that "satisfying services have the capacity to provide what is being sought to the point of being 'enough'.....", so satisfaction fundamentally implies a filling or fulfillment (p.11). Oliver further suggested that since satisfaction is explained with reference to

fulfillment, there exists a goal. Therefore, fulfillment and satisfaction can only be judged with reference to a standard, usually in the form of a comparison. "A fulfillment, and hence a satisfaction judgment, involves at the minimum two stimuli—an outcome and a comparison referent" (p. 14). Expectations can provide a baseline against which judgments of satisfaction or dissatisfaction can be made. If the expectations are met or exceeded, a customer is said to be satisfied. If the expectations are not met, dissatisfaction likely follows.

In terms of the comparison referent, numerous researchers have studied customer satisfaction and provided theories on tourism (Cronin, Brady, & Hult, 2000; Liljander & Strandvik, 1997). Parasuraman, Zeithaml, and Berry's (1985) expectation perception gap model, Oliver's expectancy-disconfirmation theory (Pizam and Milman, 1993), and Sirgy's congruity theory (Sirgy, 1982; Sirgy & Su, 2000) have been used to measure tourist satisfaction with specific tourism products and services. These researchers have also looked at comparison of standards used in satisfaction and have provided excellent discussion points on different measures of satisfaction (Ekinci, Riley, and Chen 2001; Liljander 1994). More recently, the debate has centered on a comparison of multiple construct measurements (i.e., expectation-performance and importance-performance models and single construct measurement, performance-only models). Some scholars have suggested that an approach based on measuring "performance only" satisfaction outperforms over the difference score measure between customers' expectations and the perceived performance in a service context (Fallon & Schofield, 2003; Petrick, 2004b; Yuksel & Rimmington, 1998).

Crompton and Love (1995) conceptualized satisfaction in the recreation and tourism context as tourists' quality of experience, which is a psychological outcome resulting from participation in recreation or tourism activities. This is consistent with Bultena and Klessig (1969) and Oliver's definition of satisfaction in that they recognize the comparison between the expected and the perceived experiences gained, and that it is the psychological end state of this process that is important. Although the expectancy disconfirmation paradigm (Anderson and Sullivan 1993; Churchill and Surprenant 1982; Oh and Parks 1997; Oliver 1980; Olshavsky and Miller 1972; Olson and Dover 1979; Tse and Wilton 1988) is relatively common in satisfaction literature in marketing and tourism, there are two types of definitions that differ in terms of emphasizing satisfaction as either an outcome or as a process. Some definitions of satisfaction as an outcome resulting from the consumption experience. In this case, satisfaction is roughly defined as customers' cognitive state and emotional response to a consumption experience (Oliver, 1997; Yi, 1990). Another definition suggests that an evaluative process is an important element underlying satisfaction (Hunt, 1977; Engel & Blackwell, 1982). This process-oriented approach, as compared to the outcome-oriented approach, seems useful in that it spans the entire consumption experience and points to an important component which may lead to satisfaction with unique measures capturing unique components of each stage (Tse & Wilton, 1988). The process approach has been adopted by researchers in both marketing (Day, 1977; Oliver, 1980) and tourism (W. Kim & Han, 2008).

Some service marketing scholar have pointed out that some definitions of satisfaction focus on the cognitive component of it (Cronin & Taylor, 1992; Oliver,

1997; Parasuraman, Zeithaml, & Berry, 1994). The attention to an emotional aspect in the conceptualization of satisfaction has been argued to be particularly important regarding tourism services due to its experiential nature (Wirtz, Doreen, & Khai, 2000). Recent analyses of service consumption experiences indicate that the post-purchase period involves a variety of emotional responses, including such affects as joy, excitement, pride, anger, sadness, and guilt (Westbrook & Oliver, 1999). Westbrook (1987) argued that satisfaction necessarily incorporates an evaluation of the emotional aspects of the consumption experience. It should also be noted that although the role of emotion is important, satisfaction has been argued not to be an emotion itself, but has been suggested to be the evaluation of an emotion. It is not just a pleasure resulting from consumption, but the evaluation that the experience is as pleasurable as it was expected to be.

This analysis is consistent with Baker and Crompton's (2000) definition of satisfaction in the tourism literature. They argued that satisfaction refers to an emotional state of mind after exposure to an opportunity, and pointed out that satisfaction cannot be controlled by management and may be influenced by extraneous events like climate or social group interactions or the tourists' moods, dispositions, or needs. These influences are generally outside the providers' control. Tian-Cole, Crompton and Willson (2002) concurred with Baker and Crompton's (2000) discussion of satisfaction, and differentiated quality of experience as a transaction level assessment and overall satisfaction as a global assessment. They argued that while perceptions of service quality

can be inferred without actually visiting a destination, satisfaction can only be derived from first-hand experience.

In this sense, some scholars have criticized a single global measure of satisfaction, suggesting the use of a multi-item scale (D. A. Baker & Crompton, 2000). Some studies have also used a global, single item to measure satisfaction (e.g., How satisfied were you with this visit?), although satisfaction is defined as "an emotional state of mind which results after a visitor's exposure to the attributes of a provider's service" (Um, et al., 2006). In this sense, a single item measure raised a question on the scale validity to capture this definition.

In summary, customer satisfaction has generally been conceptualized as a postpurchase evaluative judgment concerning a specific purchase choice (Westbrook &
Oliver, 1999). This view reflects the degree to which a consumer believes that the
possession and/or use of a service evokes positive feelings. Satisfaction draws even more
on feelings-based criteria than evaluation (cognitive) of the impact of outcomes, yet it
tends to relate as much to perception of the intermediate steps of personal exchange
during the process of service delivery as to its actual outputs (Nowak & Washburn,
1998). Satisfaction is further complicated by the influence of personal and social
variables such as needs, disposition, travelling companions and previous experience
which can accompany the customer in the service encounters (Crompton and Love,
1995; Meyer, 1997; Kozak, 2001). This suggests that the importance of examining
various antecedents of satisfaction, as many studies have established that consumer
satisfaction with various aspects of the purchase experience brings about desired

consumer behavior, such as repeat purchase/visit (Cronin and Taylor, 1992). In addition, satisfaction can be conceptualized in two ways: We-Satisfaction and I-Satisfaction.

Consistent with We-Intention which this study identifies (in the next section) (Tuomela & Miller, 1985), satisfaction has also been endorsed as we-concept. Thus, this study will examine the relationships between We-Satisfaction and We-Intentions and I-Satisfaction and I-Intentions, comparing these two.

Despite the potential importance of the topic, this relationship has not been tested in agritourism context. As revisit intention is also important to small scale agritourism operations, this study will hopefully contribute to enhancing our understanding of satisfaction in the agritourism context.

### **Intentions: We-Intentions vs. I-Intentions**

In general, satisfaction is posited to affect future judgment in a direct way (Cronin & Morris, 1989; Oh & Parks, 1997; Oliver, 1980; Tsiros & Mittal, 2000). That is, satisfaction judgments about individual encounters tend to shape judgments about more global evaluations of an organization. Therefore, this study postulates that interpersonal interaction will affect agrivisitors' overall satisfaction with the service rendered.

This study also considers the behavioral consequences of satisfaction. Research in this domain has primarily focused on the direct impact of satisfaction on repurchase intentions and Word-of-Mouth (WOM) communications. Findings are quite consistent in suggesting that satisfaction is positively related to repatronage intentions (Petrick,

2004b; Petrick & Backman, 2001; Petrick, et al., 2001) and positive WOM (Pritchard, 2003; Simpson & Siguaw, 2008). This study thus postulates that satisfaction will ultimately influence customers' intention to revisit the farm. In agritourism, as seasonal changes are part of nature and farming environment, this also creates the importance of attracting a high portion of repeat visitors (Wilson, 2007).

The concept of intentions is usually measured by one to four questions asking the likelihood the respondent will engaged in the behavior. It has been conceptualized as instructions people give to him/herself to behave in certain ways (Bagozzi, 1992) and indications of how hard people are willing to try in order to perform a behavior (Ajzen, 1999). In this study, intentions have been proposed to be a direct predictor of actual behavior as in other studies as the direct relationship between intentions and behavior has been theoretically and empirically supported in various studies of Theory of Reasoned Action and Theory of Planned Behavior (Ajzen, 1991b). Nonetheless, findings related to the explanatory power of intention on actual behavior are now arguable (Bagozzi, 1992; Bagozzi, 2000, 2006, 2007a, 2007b) in some behaviors such as habitual behavior (Kahle, Liu, & Watkins, 1992), environment-friendly products consumption behavior (Alwitt & Pitts, 1996), recycling behavior (Rise, Thompson, & Verplanken, 2003), regular exercise (Mohiyeddini, Paulia, & Bauer, 2009), and so on. Accordingly, some scholars have suggested that the predictive power of intentions with respect to actual behavior is limited to the situations where the behavior is largely under volitional control. However, consumer behavior is generally not fully under volitional control and its decision making is governed by not only personal reasons for acting but also social

determinants. Therefore, focusing more on social determinants for acting may help in better understanding the relationship of intentions to actual behavior.

In consumer behavior and marketing, repeat purchase or repatronage behavior has been a well-developed research area both theoretically (Ehrenberg & Goodhardt, 1979; Hu, 2003; Sichel, 1982) and empirically (Ehrenberg & Goodhardt, 1968; Goodhardt, Ehrenberg, & Collins, 1987). Recently, due to cost effectiveness (Haywood, 1989; Oppermann, 1998) and the potential market size of repeat travel markets (Meis, Joyal, & Trites, 1995), tourism researchers have become active in trying to understand repeat visitor behavior (Gitelson & Crompton, 1984; Hu, 2003; Petrick, 2004a, 2004b; Petrick & Backman, 2001, 2002; Petrick, et al., 2001; Petrick, et al., 2006). In particular, this study focuses on a social aspect of repeat visit behavior that has not yet been addressed in the tourism literature.

Leisure and tourism studies have examined social aspects as well as personal aspects (Cheek & Burch, 1976; Coleman & Iso-Ahola, 1993; Crompton, 1981; Duncan, 1978). In tourism, Crompton (1981) addressed the intrinsic importance of social groups in pleasure vacation experiences. He (1981: 552) suggested that the pleasure travel product/service appears to embrace the characteristics of products whose purchase decisions are strongly influenced by social groups since the product or service is expensive, risky, or purchased infrequently, and the product or service has a significant social as opposed to a private character. Several studies have furthered understanding into social aspects of tourism by addressing the role of social groups in travel decision making processes. Various types of predominant social groups such as family, children,

friends and relatives, and reference groups have been theoretically and empirically examined to identify the influence on individual's decision making (Gibson, Willming, & Holdnak, 2003; Gitelson & Kerstetter, 1994; Nichols & Snepenger, 1988).

In consumer behavior studies, social factors have also been examined in the context of group behavior (Bagozzi, 2000, 2006; Bagozzi & Dholakia, 2002, 2006; Dholakia, Baggozzi, & Pearo, 2004; Mandleburg, Doney, & Broistol, 2004). Bagozzi, in particular, introduced the concept of intentional social action or social intention, which is not identical to conventional intentions utilized in consumer behavior and marketing. The concept of intention to act, defined by Eagly and Chaiken (1993) as "a person's motivation in the sense of his or her conscious plan to exert to carry out a behavior," has long been used to predict an individual's immediate concept of real behavior in social psychology and consumer behavior (Ajzen, 1991b). However, it has been mainly considered as a personal process.

Examples of intentional social actions include: a couple speaking about "our intentions to see a Broadway show," football team members "cerebrating a victory by attending a party at a local restaurant," and a family "planning a summer vacation" (Bagozzi, 2006). The conceptualization of social intentions was initially made by philosophers who used such labels as "collective intentions," "we-intentions," "joint intentions," or "shared intentions" (Brattman, 1993; Searle, 1990; Tuomela, 1995; Velleman, 1997). According to these philosophers, shared intentions are different from personal intentions in at least two ways. First, "we" refers to a plural subject in the sense that a person includes himself or herself and at least one other person, where all are

considered together and all share in the action of doing something. Second, a shared intention consists of a joint commitment, but does not necessarily have restrictive force on the participants.

It would appear, at face value, that the characteristics of shared intentions to engage in some activity jointly would be pertinent to the study of tourism behavior. Almost every visitor enjoys tourism attractions in a group of some size, as the vast majority of leisure travelers do not travel solo. Preference studies of Hong Kong outbound leisure travel and college students markets in the US, South Africa, and Israel showed only a few respondents (5.5% and 5.6% respectively) of the respondentss preferred a party size of one (Shoham, Schrage, & Eeden, 2004; Zhanga, Qub, & Tang, 2004). In a travel-style study conducted in the U. S., all three groups segmented by the novelty/familiarity seeking tendency also indicated the mean of visit intention lowest for traveling alone among travel companion arrangements (Basala & Klenosky, 2001). Traveling alone (24% of all tourists) was also the least preferred travel arrangement of travel companion factors in a study of inbound overseas travelers to Europe, except for some specialized types of travel such as visiting friends and relatives (VFR) (Beckena & Gnoth, 2004). Among VFR tourists, which represent 19.1% of all tourists, 45% prefer traveling alone while 48% of backpackers, which represent 8.3% of all tourists prefer the same (Beckena & Gnoth, 2004: 379). This is consistent with many other leisure travel studies in the U.S. and Canada (CIC Research, 2006; Inc, 2005; Tourism Snapshot: 2006 Facts & figures year-in-review 2006). Additionally, a nationwide tourism survey in Texas (surveys about Texas travel marketing awareness and literature conversion) shows that less than ten percent of leisure visitors to Texas traveled without a travel party, while many tourism statistics from other states in the United States (CIC Research, 2006) and other countries also reveal a low percentage of single travelers.

It is therefore argued that the decision to intend to revisit is not just a personal or intra-individual one. Instead, revisit intentions could be a social, collective, or shared intention to visit again with current or other travel companions (i.e., I intend we visit again). It thus appears that current tourism marketing research could better understand revisit intentions if they were examined as collective/social instead of using traditional measures of repatronage intentions which have focused on individuals. It is further suggested that travel decisions are affected by external forces, especially social influences such as role and family influences, reference groups, social classes, culture and subculture (Gibson, et al., 2003; Gitelson & Kerstetter, 1994; Nichols & Snepenger, 1988). It could hardly be expected that an individual's attitudes, intentions, and other variables will always coincide or even be correlated very highly with those of other companion visitors, yet most of the research has implicitly made such an assumption. In this study, group intentions could be labeled as We-Intentions whereas conventional intentions will be termed I-Intentions.

In order to examine the mediating role of satisfaction bridging social interactions and intentions, measures of satisfaction also needs to be consistent with the conceptual characteristics of We-Intentions. Hence, satisfaction will be considered as We-Satisfactions which capture individual's post-experience evaluation involving his/her travel party rather than their own individual satisfaction. In addition, a competing model

comprising four types of social interactions, conventional satisfaction (called as I-Satisfaction in this study), and intention (called as I-Intentions in this study) will be also tested and compared with the primary model which will be called as We-Intention Model. This competing model will be called the I-Intention Model.

Therefore, the next sets of three hypotheses are:

*Hypothesis* 8: The We-Intention Model will fit the data better than the I-Intention Models.

*Hypothesis* 8-1: There will be a positive relationship between We-Satisfaction and We-intentions to revisit.

*Hypothesis* 8-2: There will be a positive relationship between I-satisfaction and I-intentions to revisit.

# New Ecological Paradigm

The new era of environmental concern is of immediate relevance to tourism as the tourism industry depends on a rich and diverse, natural and built environment for its economic well-being. As a resource dependent industry, tourism must hence recognize its responsibility to the environment (Horobin & Long, 1996).

Since the 1990s, studies of consumers' concerns have increasingly focused on the environmental values of consumers. One of the most widely acknowledged constructs for examining this subject is the New Environmental/Ecological Paradigm (NEP) scale. The NEP scale was originally developed by Dunlap and Van Liere (1978) in order to capture beliefs about humanity's ability to upset the balance of nature, the

existence of limits to growth for human societies, and humanity's perceived right to control nature. The conceptualization of the NEP was guided by the notion of a social paradigm forming the core of a society's values, beliefs, and culture. In line with Kuhn (1970), a paradigm is understood as a comprehensive worldview or system of beliefs through which people interpret the surrounding world which, consequently, guides their expectations in society.

Numerous early researchers of environmental problems argued that society's commitment to material wealth/economic growth, utilitarian views of the nature, progress and prosperity, and individualism have contributed to environmental problems and posed barriers to the effective solution of such problems (Caldwell, 1970; Campbell & Wade, 1972; Whisenhunt, 1974). Pirages and Ehrlich (1974) pointed out that a new worldview was beginning to challenge the Dominant Social Paradigm (DSP) consisting of the traditional values of anti-environmentalism noted above. According to Dunlap and Van Liere (1984), while the DSP assumes an idealistic future of continuous abundance and unlimited opportunities, the NEP is a more realistic worldview in that it addresses limits to growth, steady-state economies, and natural resource protection. Dunlap and Van Liere (1978) suggested that from the late 1970s, this alternative paradigm substituted the DSP (Dunlap & Van Liere, 1978), representing a fundamental shift in how society interacts with the natural environment.

Although several measures of general environmental concern have appeared in the literature, the NEP scale is arguably the most widely used (H. Kim, Borgesa, & Chon, 2006; Maloney & Ward, 1973; Maloney, Ward, & Braucht, 1975; Stern, Dietz, &

Guagnano, 1995; Weigel & Weigel, 1978) and has been subject to methodological assessment within quantitative research in psychology (Stern, et al., 1995), politics (Grendstad, 1999), sociology (Catton & Dunlap, 1980), pedagogy (Manoli, Johnson, & Dunlap, 2007), and so on. Many versions of the NEP scale have been used in different domains.

It was originally labeled as the New Environmental Paradigm, containing 12 Likert-type items that have consistently shown three factors—balance of nature, limits to growth, and human domination of nature (Dunlap & Van Liere, 1978). These items primarily tap into "primitive beliefs about the nature of the earth and humanity's relationship with it" (Dunlap et al., 2000). According to Rokeach (1968), primitive beliefs form the inner core of a person's belief system and "represent his/her basic truths about physical reality, social reality, and the nature of the self." Beliefs about nature and human beings' role in it as measured by the NEP scale appear to constitute a fundamental component of their belief systems regarding the environment (Dunlap et al., 2000).

The NEP scale has exhibited a good deal of internal consistency and has subsequently been applied by many other researchers and tested for reliability and validity and particularly for the dimensions of the scale (Albrecht, Bultena, & Novak, 1982; Uysal, Jurowski, Noe, & McDonald, 1994). The most recent version of the scale, termed the new ecological paradigm, includes 15 items (Dunlap, Van Liere, Mertig, & Enmmet Jones, 2000). This updated scale was intended to broaden the content of the scale beyond the original three facets of balance of nature, limits to growth, and anti-

anthropocentrism, to hopefully achieve a better balance between pro- and anti-NEP statements (Dunlap, et al., 2000). Many researchers have subsequently agreed that the NEP scale measures beliefs that people have toward nature, and it seems reasonable to regard these beliefs as constituting a paradigm that influences attitudes and beliefs toward more specific environmental issues (Dalton, Gontmacher, Lovrich, & Pierce, 1999; Doh, 2006).

Agritourism products and services vary greatly, but are all based on or tightly connected to the nature and culture of a farm. Tourism practices on a farm are hence subject to corresponding to the intrinsic characteristics of agricultural practice and philosophy (Kuo, et al., 2006). In particular, tourism on organic farms seems to focus on promoting nature conservation and educational resources relevant to environmental sustainability, constituting a less exploitive relationship with the natural and cultural environment (Choo & Jamal, 2007). Therefore, while visitors may enjoy typical farm tour activities such as walking trails, children's farmyards, inn, property tours, special events, and so on, they are also provided with a chance to learn conservation ethics and the importance of the agricultural practice of organic farming that removes artificial agrochemicals including herbicides, pesticides, fertilizers, and antibiotics.

Tourism on organic farms is often labeled agritourism or farm tourism, which commonly occurs on conventional farms that typically depend on agrochemicals. Little effort has been made to distinguish the label of tourism occurring at organic farms from conventional agritourism or farm tourism. Marketing farm resources can represent a substantial economic benefit for an organic farming community, but special attention

needs to be paid to the relationship between the natural and cultural resources and tourism products and services. In order to examine the conservation potential, it is important to consider how visitors perceive environmental issues and define their relationship to nature. It is believed that of importance to organic farm tourism operators is the ability to separate those who have high concerns for degradation of the environment from those who are less concerned. It is believed that the NEP scores of visitors may be related to the relative impact of each social exchange relationship on customer satisfaction. Specifically, NEP will be examined to determine if it is a moderator that influences the strength of the links between interpersonal interaction and satisfaction judgment during an organic farm visit (Figures 2-2 and 2-3). The specific hypothesis to be tested regarding NEP is:

Hypothesis 9: The effect of social interactions on satisfaction will be stronger for high NEP visitors than for low NEP visitors.

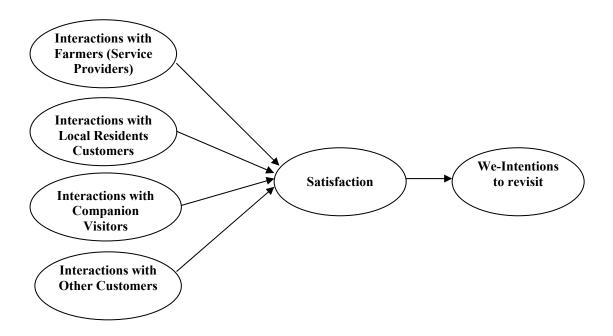


Figure 2-2: Social Exchange Relationships in Agrivisitors' Service Encounter for High NEP Group

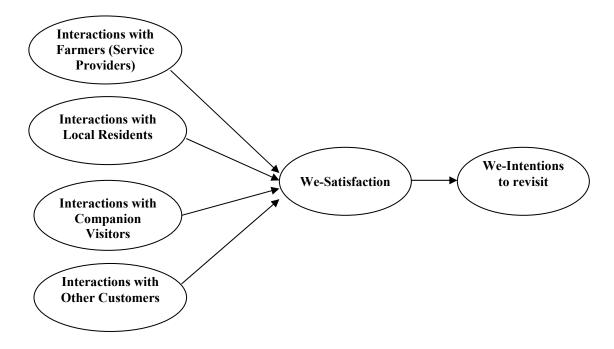


Figure 2-3: Social Exchange Relationships in Agrivisitors' Service Encounter for Low NEP Group

#### **CHAPTER III**

### **METHODOLOGY**

#### Overview

This chapter describes the methods used to conduct a survey interview to examine the relationships between agrivisitors' social interaction and social intention to revisit a farm. The first section overviews the proposed research design of this study. This is followed by a discussion of how the questionnaire used in the survey was developed, as well as the data collection procedures. The chapter ends with an explanation of the statistical techniques that will be used to analyze the data.

# **Research Design**

According to Groves *et al.* (2004), there are two major survey dimensions: measurement and representation. The former consists of what the survey is about; the latter deals with who the survey is about. The measurement dimension contains identification of construct measurement, development of survey measurements to gather information about constructs, data collection and response editing. The representation dimension is comprised of selection of the target population, development of sampling frame, choice of the sample, how non-responses will be handled, and post-survey adjustment. Each step inherent in the two dimensions will be interchangeably employed throughout this study.

A cross-sectional survey was used in this study for empirical, explanatory and descriptive purposes. A self-administered questionnaire survey, which has been deemed to be appropriate for measuring self-reported beliefs and behaviors (Dillman, 1998), was employed for data collection. Among three major survey methods (i.e., face-to-face, self-administered, and telephone interviews; Bernard 2000), it has been suggested that self-administered questionnaires are preferable to the other two when the researcher is: dealing with literate respondents, when the response rate is estimated to be high, and when the questions being asked do not require a face-to-face interview or visual aids. The present study meets these three conditions, which will be discussed in the next section. Other advantages of self-administered surveys can include comparatively lower costs than other types of surveys and a low level of intrusiveness.

# **Survey Instrument**

Measurement scales include the items designed to reflect the meanings of constructs of interest, with validity and reliability being two of the major concerns in scale development. While validity refers to the extent to which measurement scales are measuring the constructs of interest, reliability can be defined as the repeatability or consistency of a result using the same measurement (Aneshensel, 2002). This section will describe what will be done to increase and examine the validity and reliability of the study's scales. Due to a lack of research in agritourism, the measurements developed from other disciplines such as service marketing, and social psychology will be adopted.

The survey instrument is comprised of six sections including two sections (first and last section of the questionnaire) that ask for respondents' socio-demographic and background information (age, gender, education, occupation, residency, etc.). The first section asks residency to examine if there is a difference between local residents and tourists coming from other cities and questions regarding companion visitors (e.g., number of people in the travel party, type of relationships, their ages, and length of their relationship). Most of the questions are closed-ended, and participants were asked to respond to and indicate the degree to which they agreed or disagreed with each item. A pilot test was used: to determine approximately how long it would take to complete the resultant questionnaire: to help purify the measures: and to better understand if respondents are interpreting the desired meanings of the items used.

Following the conceptualization of social interaction drawn from social exchange and resource theory (U. G. Foa & Foa, 1974), 18 items (table on page 59) were included to measure the concept of interaction at agritourism encounters (Morais, Backman, & Dorsch, 2003). The items excluding six irrelevant items, were used to evaluate agrivisitors' interaction with service providers, local residents, companion visitors and other customers. This scale has been tested by several scholars in social psychology and psychology, and has been found to be reliable and valid. In tourism and leisure literature, 14-item modified resource scales with 4 dimensions (i.g., love, status, information, and money) have been developed by Morais et al. (2003), and tested to measure the influence of customer-provider resource investments on loyalty. This scale will be adopted for this study. Examples of questions include "The service provider treated me

an important customer", "The service provider is very fond of me", and "The service provider educated me about all aspects of enjoying farm activities. In following the literature, the scale was anchored with a 5-point Likert-type scale ranging from 1 (never) to 5 (always).

The third section included questions related to satisfaction with the farm visit experience. This study adopted the definition of satisfaction as "emotional state of mind which results after a visitor's exposure to the attributes of a provider's service" (D. A. Baker & Crompton, 2000). This construct was measured with four sets of polar items on a five-point modified semantic differential summation scale. This scale was originally developed by Crosby and Stephens (1987) in marketing as a nine-point semantic differential format, which has been adopted in previous research (D. A. Baker & Crompton, 2000; Childress & Crompton, 1997; R., 2007; Tian-Cole, Crompton, & Willson, 2002; Tomas, Scott, & Crompton, 2002). The four items are: dissatisfied to satisfied, displeased to pleased, unfavorable to favorable, and negative to positive.

Intentions was measured in section four in two ways: Personal and Social. The measure of social intention was adopted from Bagozzi and Dholakia (2006) in the service marketing literature. Items were revised to reflect the context of visiting farms. For social intentions, the items were "I intend that we (myself and companion) will visit the farm again", and "we intend to visit the farm again." Both used a five-point scale ranging from very strongly disagreed (1) to very strongly agreed (5). I-intention to revisit was adopted from Grewal, Monroe, and Krishnan (1998) and was measured with 5-point scale anchored by 1 very low, and 5 very high in the following two-item: "If I

were to visit a farm again, the probability that it would be this farm again is", and "the likelihood that I would consider visiting this farm again is."

In section five, agrivisitors' beliefs regarding nature was conceptualized as a level of commitment to or endorsement of ecocentric values and anti-anthropocentric values.

Based on the literature and modified from the original NEP scale, it was operationalized as expressed agreement with a set of 15 items measuring broad ecological beliefs (Dunlap & Van Liere, 1992; Dunlap et al., 2000). The 15-item revised NEP scale (Table 3-1) was developed to represent a number of potential facets of an ecological worldview. These include recognizing limits to growth, anti-anthropocentrism, fragility of the balance in nature, rejection of human exceptionalism from ecological constraints, and the possibility of an ecological crisis (Dunlap et al., 2000).

The NEP scale is comprised of eight items which were worded so that agreement with the statement indicated a pro-ecological view and seven which were written so disagreement with the statement indicated a pro-ecological worldview. This type of reverse coding is a standard technique to decrease response bias.

The statements used in the survey included "We are approaching the limit of the number of people the earth can support", "humans have the right to modify the natural environment to suit their needs", "when humans interfere with nature it often produces disastrous consequences", "Humans are severely abusing the environment", "The earth has plenty of natural resources if we just learn how to develop them", and so forth. The

scale for the items was a 5-point Likert-type scale anchored by 1 "strongly disagree" and 5 "strongly agree".

The final section intended to gather information about demographic characteristics of agrivisitors to examine if differences exist within the sample of respondents. Thus, the following questions were asked: age, gender, marital status, family organization, occupation, education level, ethnicity, and income. This section consisted of nine questions including one asking about their concerns and suggestions related to the farm that they visited.

The final version of instrument was reviewed by expert panels who assessed the face validity. These experts were mainly faculty members or Ph.D. students specializing tourism marketing who have extensive experience in quantitative research. A variety of comments and suggestions were collected regarding length and organization of the questionnaire, wording of specific statements, inclusion of open-ended questions, and design and format issues. For example, three experts commented that a list of examples should be provided to the one item ("Service Providers (Farmers) provided or shared good quality equipment to use in this visit"). Therefore, the example of "basket, bag, etc" was added into the question. Other than that, major changes would be made based on experts' suggestions in collaboration with the pilot test results (Table 3-1).

Table 3-1. Description of constructs and observed variables in the hypothesized model

Construct	Observed Variables	Survey Questions	Scale
SI	SI_S1, SI_R1, SI_C1, SI_O1	( ) were very fond of me.	1: Strongly disagree to 5: Strongly agree
	SI_S2, SI_R2, SI_C2, SI_O2 SI_S3, SI_R3,	<ul><li>( ) treated me as an important person.</li><li>( ) provided me with information on attraction, lodging,</li></ul>	1: Strongly disagree to 5: Strongly agree
	SI_S3, SI_R3, SI_C3, SI_O3 SI_S4, SI_R4,	or restaurant around the farm.	5: Strongly agree 1: Strongly disagree to
	SI_S4, SI_K4, SI_C4, SI_O4 SI_S5	<ul><li>( ) helped me greatly in this visit.</li><li>( ) offered discounts.</li></ul>	5: Strongly agree
	_		1: Strongly disagree to 5: Strongly agree
	SI_S6	( ) provided or shared good quality equipment to use in this visit (basket, bag, etc).	5: Strongly agree
	SI_S7, SI_R7, SI_C7, SI_O7	( ) treated me personally.	1: Strongly disagree to 5: Strongly agree
	SI_S8, SI_R8, SI_C8, SI_O8	( ) treated me with high esteem.	1: Strongly disagree to 5: Strongly agree
	SI_S9, SI_R9, SI_C9, SI_O9	( ) provided me with information about the problems.	1: Strongly disagree to 5: Strongly agree
	SI_S10, SI_R10, SI_C10, SI_O10	( ) assisted me in arranging the visit.	1: Strongly disagree to 5: Strongly agree
	SI_S11	( ) provided monetary benefits.	1: Strongly disagree to 5: Strongly agree
	SI_S12	( ) provided good quality products.	1: Strongly disagree to 5: Strongly agree
	SI_S13, SI_R13, SI_C13, SI_O13	( ) cared about me.	1: Strongly disagree to 5: Strongly agree
	SI_S14, SI_R14, SI_C14, SI_O14	( ) treated me special.	1: Strongly disagree to 5: Strongly agree
	SI_S15, SI_R15, SI_C15, SI_O15	( ) educated me about a farm.	1: Strongly disagree to 5: Strongly agree
	SI_S16, SI_R16, I took advantage of ( )' help. SI_C16, SI_O16	I took advantage of ( )' help.	1: Strongly disagree to 5: Strongly agree
	SI_S17	( ) provided or share a free stuff.	1: Strongly disagree to 5: Strongly agree
	SI_S18	( ) provided or shared souvenirs.	1: Strongly disagree to 5: Strongly agree
We-Satisfactio	nWe-SA1	We were satisfied with the farm and its service.	1:Dissatisfied to 5: Satisfied
	We-SA2	We were pleased with the farm and its service.	1: Displeased to 5: Pleased
	We-SA3	Our experience at the farm was	1: Unfavorable to 5: Favorable
	We-SA4	Our overall feelings about the farm were	1: Negative to 5: Positive
I-Satisfaction	I-SA1	I was satisfied with the farm and its service.	1:Dissatisfied to 5:
	I-SA2	I was pleased with the farm and its service.	Satisfied 1: Displeased to 5: Pleased

Table 3-1 Continued

Construct	Observed Variables	Survey Questions	Scale
	I-SA3	My experience at the farm was	1: Unfavorable to 5: Favorable
	I-SA4	My overall feeling about the farm was	1: Negative to 5: Positive
We- Intentions	We-I1	My intention that my companion travelers and I will visit this farm again is	1: Very low to 5: Very high
	We-I2	Our intentions to visit this farm again are	1: Very low to 5: Very high
	We-I3	The likelihood that we would consider visiting this farm again is	
I- Intentions	I-I1	If I were to visit a farm again, the probability that it would be this farm again	1: Very low to 5: Very high
	I-I2	The likelihood that I would consider visiting this farm again is	1: Very low to 5: Very high
New Ecologi	icalNEP1	We are approaching the limit of the number of people the	e 1: Strongly disagree to
Paradigm	NEP2	earth can support. Humans have the right to modify the natural environmento suit their needs.	5: Strongly agree t1: Strongly disagree to 5: Strongly agree
	NEP3	When humans interfere with nature it often produces disastrous consequences.	1: Strongly disagree to 5: Strongly agree
	NEP4	Human ingenuity will insure that we do NOT make the earth unlivable.	1: Strongly disagree to 5: Strongly agree
	NEP5	Humans are severely abusing the environment.	1: Strongly disagree to 5: Strongly agree
	NEP6	The earth has plenty of natural resources if we just learn how to develop them	
	NEP7	Plants and animals have as much right as humans to exist.	1: Strongly disagree to 5: Strongly agree
	NEP8	The balance of nature is strong enough to cope with the impacts of modern industrial nations.	1: Strongly disagree to 5: Strongly agree
	NEP9	Despite our special abilities humans are still subject to the laws of nature.	1: Strongly disagree to 5: Strongly agree
	NEP10	The so-called "ecological crisis" facing humankind has been greatly exaggerated.	1: Strongly disagree to 5: Strongly agree
	NEP11	The earth is like a spaceship with very limited room and resources.	1: Strongly disagree to 5: Strongly agree
	NEP12	Humans were meant to rule over the rest of nature.	1: Strongly disagree to 5: Strongly agree
	NEP13	The balance of nature is very delicate and easily upset.	1: Strongly disagree to 5: Strongly agree
	NEP14	Humans will eventually learn enough about how nature works to be able to control it	1: Strongly disagree to 5: Strongly agree
	NEP15	If things continue on their present course, we will soon experience a major ecological catastrophe.	1: Strongly disagree to 5: Strongly agree

Note: SI\_S indicates Social Interactions with Service Providers.
SI\_L indicates Social Interactions with Local Residents. SI\_C indicates Social Interactions with Companion travelers.
SI\_O indicates Social Interactions with Other Customers.
NEP indicates new ecological paradigm.

#### **Pre-tests**

The pretest was conducted to examine the questionnaires' clarity by obtaining suggestions for improving the items and wording, and to test the reliability of the measures for the study concepts such as social interaction, we/I-satisfaction, we/I-intention, and environmental beliefs.

In January 2009, 22 visitors to one organic farm located in Austin, TX were invited to conduct the pretest the instrument. The most common suggestion was related to the limited choice options for the frequency of visit to the farm question which was initially measured with ranges (i.e., 1-2 times a year). Accordingly, this question was revised to be open-ended for which respondents could write in their own frequencies. Another suggestion regarded the concept of environmental beliefs. Several respondents asked why these questions (i.e., "Humans are abusing the environment" and "if things continue on the present course, we will soon experience major ecological catastrophe") as they were concerned whether the answers of these questions would be used to judge personal information. Since this was adopted from Dunlap et al. (2000), the researcher checked the current literature again and consulted the experts on this concept in tourism field. In most cases, only slight rewording was made in the current literature and two experts did not suggest any change on the wording of these items. Therefore, the statement was only added in the front page of the survey as follows. "The identity of the participant cannot readily be determined by the investigator and the identity of the participant is not connected to information gathered."

Reliability, which is used to estimate the internal consistency of the scales was examined with Cronbach's coefficient alpha (Cohen, Cohen, West, & Aiken, 2003). The Cronbach's alpha for the 18 social interactions with Service Providers items was .92; 12 social interactions with Local Residents was.72; 12 social interactions with Companions was .87; 12 social interactions with Other Customers was .98.; for four items of We-/I-Satisfaction was .85 and .86 each; for three We-intention and two I-intention items was .92 and .66; as for the 15 items of environmental beliefs it was .65 (Table 3-2). Nunnally and Bernstein (1994) suggested that coefficients of 0.70 or higher were acceptable, while coefficients of 0.90 or above indicate good reliability. On the other hand, other researchers have argued that when the research is in the exploratory stage (Hatcher 1994) or when the number of items in a scale is less than six (Cortina 1993), Cronbach's alphas greater than 0.5 may be considered acceptable. With two exceptions, all constructs measured in the pilot survey had alphas greater than 0.7. Hence, all alpha coefficients of internal consistency reliability of each scale were deemed acceptable.

Table 3-2. Reliability of items of measurement scale

Construct	Cronbach's α	Construct	Cronbach's α
Social Interactions w/Service	.92	We-Satisfaction	.85
Providers			
Social Interactions w/Local	.72	I-Satisfaction	.86
Residents			
Social Interactions	.87	We-Intentions	.92
w/Companions			
Social Interactions w/Other	.98	I-Intentions	.66
Customers			
New Ecological Paradigm	.65		

# **Target Population and Sampling Frame**

Unit of analysis is defined as the entities under study (Singleton & Straits, 1999). In this study, the unit of analysis was an agrivisitor to an organic farm. The target population for the questionnaire was then agrivisitors visiting organic farms in Texas of February and March in 2009. It included agrivisitors who visited both with and without companions. A subsample of agrivisitors accompanying their companions was selected for the main analysis. This means respondents who visited organic farms without companions were excluded from the subsample for detailed analyses and only used to measure the percentage of single visitors out of all respondents.

Respondents younger than 18 years old were also automatically excluded. Once potential respondents were identified, they were asked to participate in this study. As the onsite survey was conducted at organic farms in Texas, the findings of this study should not be generalized to all organic farm tourisms operations. In other words, this study does not necessarily represent the opinions of the entire population of agrivisitors.

### **Study Site and Site Selection**

The population of interest consists of agrivisitors to organic farms. According to the 2004 Agricultural Resource Management Survey (ARMS), about 52,000 U.S. farms or 2.5 percent of the total farms in the U.S. earned income from tourism recreation in 2004 (Brown & Reeder, 2007). This is most likely a conservative estimate of the extent to which farmers benefit from agritourism because ARMS data on farm-based recreation do not describe onsite sales and hospitality services associated with local hotels, motels, and restaurants. Indeed, other sources such as Ference Weicker & Company (1999) and Eckert AgriMarketing (cited in Villano, 2007) estimate that about 4.5% of 2.1 million American farms engaged in some degree of agritourism activity in 1998. As of October 2008, certified organic cropland accounted for 0.5 percent of the whole U.S. cropland (*Organic Agriculture*, 2008), but, to the best of the current researcher's knowledge, no information is available related to the statistics related to organic farms engaged in tourism.

According to the National Agriculture Statistics Service (NASS) in 2008, Texas led the nation in number of farms (229,000), total land in farms (129 million acres), and livestock and product commodity sales (\$9.3 billion) in 2008. Texas is one of the top ten states for certified organic cropland and is one of four states which has more than 100,000 acres for organic pasture (*Organic Agriculture*, 2008). According to the Economic Research Service (ERS), small farms are identified as those with annual gross sales less than \$250,000 or with less than 250 acres (Brown & Reeder, 2007). Given this definition, about 91.0 percent of U.S. farms are qualified as small farms (*Farms, Land in* 

Farms, and Livestock Operations 2007 Summary, 2008). Small-scale farms are also predominant in Texas, as 95.4% of all farms are qualified as small scale operations. (Farms, Land in Farms, and Livestock Operations 2007 Summary, 2008). Although many state governments in the U.S. have realized the importance of agritourism for raising revenue for farmers, Texas was selected due to its significant contribution of agriculture to the whole country.

The data for this study were collected in two ways: (1) onsite survey at selected organic farms; and (2) an online survey of those who visited local organic farms in TX and visitors to selected farms through email addresses provided by the two farmers who allowed onsite survey. For the onsite survey, the list of organic farms engaged in tourism activities in Texas was developed through information found in the following multiple sources: (1) the Texas Nature Tourism Database; (2) Texas Department of Agriculture Website (http://www.agr.state.tx.us/go); (3) one comprehensive US agritourism web directory (http://www.ruralbounty.com); (4)Texas Organic Farmers and Gardeners Association (http://www.tofga.org); and (5) the official website of Texas Tourism (http://www.traveltex.com). From these sources, 19 organic farms were identified. Agricultural and tourism professionals in academics and practice helped identify organic farms suitable for this research. Out of 19 organic farms, 11 farms were identified relevant for this study in terms of the size, whether they were working farms, had seasonal operations during Christmas, and so on. Then, each owner of the 11 farms was contacted to see if they could help distribute survey questionnaires to their visitors. Out of 11 farms, five farms agreed to participate. The researcher visited these five farms a

few times to confirm the relevancy of the study site for the study. During this period, two farms were cancelled due to a long distance from the other three farms.

Relationships developed with the farmers through frequent visits were helpful in setting up onsite surveys to their visitors.

For the web survey, a local group who visit organic farms monthly and the members at two of the selected three farms for onsite survey were invited. The community group comprised "Locavores" in College Station, Texas. The term "Locavores" indicates someone who eats food grown or produced locally, and this group organizes monthly trips to local organic farms to learn and promote local food consumption for current and potential members. Email addresses of the members at the two farms were obtained from farmers and their responses were also included in the web survey.

#### **Data Collection**

The study used quantitative methods as it was believed to be an appropriate method to collect a large amount of information from agrivisitors in a very short period of time during and after their visit to a farm.

The data collection period took place over an 8-week period from February to March 2009. During this time period, the researcher visited three farms every weekend and joined Locavores' trips to local organic farms. For the onsite survey, respondents were approached when they were about to leave the farms and informed about the purpose of the survey before they were given the questionnaire. The researcher stayed

with the respondents, answering questions and encouraging completion of all questions. Personal observations revealed that visitors who were age 18 or older visited organic farms either individually or with their friends or families as groups; however, a vast majority of them visited with companions.

Most of the respondents were very cooperative and filled out the survey even if they were in a hurry to leave the farms. The response rate for the onsite survey was 78.4 percent as a total 345 people were approached and 286 returned the survey. While the average survey time was approximately 13 minutes, it was observed that a few respondents took more than 30 minutes to carefully enter open-ended as well as multiple choice questions. No particular attempt was made to apply a random sample or to select particular segments.

The web survey was conducted for the Locavores community members and members of two of three farms selected for onsite survey from February to March 2009. The invitation to survey was sent to all members who have ever participated in the monthly trip via emails (Appendix 2). The researcher's membership in the local Locavores group and the resulting friendship and trust developed with this community were helpful in corroborating the web survey responses. The instructions for the survey were provided along with an announcement of four prizes of \$50 gift certificate for organic products to encourage participation. For the respondents who did not complete the survey, an email was individually sent to ask to encourage them to do so with detailed instructions. In total, 145 responses returned from the web survey.

#### **Data Analysis Methods**

Step 1 to Step 3

The data were analyzed in six steps (Table on page 72). In step 1, the demographic profiles of subjects were provided. Descriptive analyses using SPSS 15.0 to: 1) identify the percentage of agrivisitor who visit farms with companions versus without companions, 2) examine trip characteristics of agrivisitors, and 3) describe the demographic characteristics (e.g., average age, gender, length of residency and so on) of agrivisitors.

Step 2 dealt with missing values. The pattern of missing values and nonresponse rate for each item were analyzed. Based on the results, the mean substitution method was used for further analysis in order to avoid a potential bias in the results resulting from listwise or pairwise case deletion of missing values.

The dimensionalities of the measures of this study were next examined. Churchill (1979) proposed that, to purify the measures, reliability analysis and factor analysis should be used. Accordingly, to assess the construct validity and to reduce the items into the four constructs (4 types of Social Interactions with Service Providers, Local Residents, Companions, and Other Customers), exploratory factor analysis (principal components analysis), Cronbach's alpha, alpha if item deleted and then confirmatory factor analysis were performed on the items for each construct. Factor analysis was also used the construct validity of a scale. Factor analysis groups items that are highly correlated with each other. If the grouping of items is measuring one underlying concept, then one factor should be extracted. The threshold level for unidimensionality has been

argued to be 50% of the variance explained (Hattie, 1985). Also, a factor loading score for each item should be greater than .40 (Hair, Anderson, Tatham, & Black, 1998) for it to be considered significant.

In step 3, the normality assumption in SEM was tested using Skewness and Kurtosis tests in SPSS 15.0.

### Structural Equation Modeling

Step 3 to 6 involved Structural Equation Modeling. Structural equation modeling (SEM hereafter) is a "statistical method that takes a confirmatory (hypothesis-testing) approach to the multivariate analysis of a structural theory bearing on some phenomenon" (Byrne, 2001). It is possible in SEM to specify a model that has a measurement component and a structural component. SEM is widely used in the social sciences as it combines confirmatory factor analysis (CFA) and regression analysis as a way to model various sociological and psychological relationships. During the past 25 years, SEM has become a powerful research tool for many social and behavioral scientists (Kline, 2005). In order to accomplish the study objectives and test the conceptual model fit, four data analysis steps were conducted (Step 3 to 6).

This study adopted a two-step approach introduced by Anderson and Gerbing (1988). The first step involved evaluating and refining the measurement model, and the second step tested the estimation of the structural model and hypotheses. The AMOS 7.0 statistical package program was used for SEM. A maximum likelihood estimation procedure which allows all model parameters to be simultaneously estimated was

adopted as the parameter estimation method in SEM. The measurement model in SEM specifies how factors are measured in terms of the observed variables, and factors describe the measurement properties of the observed variables. Confirmatory factor analysis (CFA) was used to evaluate the measurement model. It should be noted that CFA estimates only associations among factors, not direct casual effects. Next, if the proposed model was found to have a poor fit to the data, modification processes would be used to identify potential observed variables for deletion from the measurement model (Byrne, 1994). Once appropriate measurement model obtained, a structural model is tested. In assessing the path model, the hypothesized relationships were examined.

It is generally understood that SEM is a large-sample technique (Kline, 2005). Small samples with less than 100 subjects have the greatest potential to increase the likelihood of specification errors and produce biased goodness of fit indices. To ensure appropriate use of maximum likelihood estimation, the sample size should be more than 100 and sufficient to include five observations for each estimated parameter. According to Kline (2002), sample sizes that exceed 200 cases are optimal for SEM analysis. The number of subjects obtained for this study met both suggested criteria (N=400).

As SEM provides some measures of the overall fit of the measurement model and the structural model, there exist various model fit indices. Chi-square is commonly used to evaluate model fit, but it is very sensitive to sample size (Kline, 2005). Therefore, statisticians and scholars have suggested, in evaluating model fit, multiple indices including the chi-square statistic adjusted for the degree of freedom ( $\chi^2/df$ ), the comparative fit index (CFI), the nonnormed fit index (NNFI: Tucker Lewis Index), and

the root mean square error of approximation (RMSEA) (Kline, 2005: 133-145). A general rule of thumb for model fit is that  $\chi^2/df$  should be less than three, CFI and NNFI should be greater than .90, and RMSEA should not greater than .05 (Kline, 2005: 138). It is common that a  $\chi^2$  difference test is used when comparing fit of an appropriate model with another competing model. A significance test is used with the difference in  $\chi^2$  and degrees of freedom between the two competing models.

Multiple group analysis in structural equation modeling can be very useful because it allows researchers to compare multiple samples across the same measurement instrument or multiple population groups (e.g., males vs. females) for any identified structural equation model. AMOS allows to test whether the groups meet the assumption that they are equal by examining whether different sets of path coefficients are invariant. In other words, researchers will be testing whether path coefficients in the model are equal for the identified groups. Researchers can test the equalities of variables' variances, means, and intercepts, as well as the covariance between variables, and the equalities of path coefficients across two or more groups.

## Step 4 to Step 5

Step 4 is to assess the fit of the measurement model consisting of relevant factors using confirmatory factor analysis. In addition, a Chi-square difference test was used to determine if the fit of the revised model had significantly improved in comparison to the initial measurement model based on the modification indices. Then, a second order factor was added into each measurement model to examine and revise it. The second

order factor was relevant because resource theory (Foa and Foa, 1974) proposed that the six types of resources, or part of them are not mutually exclusive. Instead, the resources can be better represented in a circle with varying amounts of tangibility and particularism. Accordingly, an acceptable measurement model with the second order factor would support the principle that there exists an overall construct of visitors' social interactions with people. The final outcome of this step 4 process was three measurement models of each social interaction with a good fit data.

CFA was also used to examine the degree of convergent and discriminant validity of the measures as well as the levels of composite reliabilities of the measures. Convergent validity was assessed by evaluating the measures' factor loading sizes to each corresponding construct (J. C. Anderson & Gerbing, 1988) and discriminant validity among constructs was assessed by examining if correlations between constructs were smaller than 1.00 (Bagozzi & Yi, 1988).

In Step 5 (Table 3-3), the parameters of each construct were examined using structural equation models for the total sample and as well as the two groups. For the group analysis, this study used the analytic strategy of Bollen (1989). First, a baseline model was tested with a pooled sample, followed by separate group testing of this model. Then, the invariant test of path coefficient (Structure weight model test) was conducted across two groups. The moderating variable was the new ecological paradigm concept and its mean-split (a median-split was found same in this study) was used to divide into two groups: High NEP group and Low NEP group.

Table 3-3. Summary of Steps taken to refine the Social Interactions

	Step	Statistical Techniques
Step 1	Describe demographic profiles	Descriptive statistics and t- test in SPSS 15.0
Step 2	Examine missing value  -Missing data treatment to avoid a potential bias in the analysis  Examine the dimensional structure of scale  - Preliminarily examine reliability of measures  -Make revisions (delete items not loading on main factor)	Kaiser-Meyer-Olkin measure, Bartlett's test of sphericity, Exploratory factor analysis, Cronbach's alpha, Alpha if item deleted in SPSS 15.0
Step 3	Test model assumptions Normality test	SPSS 15.0
Step 4	Test Reliability & Validity of measures Consideration of: -Theories; -Reliability coefficients; -Inter-item correlations; -Item-factor loadings; -Chi-squire contributions to CFA model fit -Practical implications Add second order factor for each construct Decide items to exclude from structural equation modeling Assess the fit of the revised measurement model and the significance of its improvement	Confirmatory factor analysis and Chi-square difference test in AMOS 7.0
Step 5	Obtain the structural model for the total sample and examine and revise the measurement model Test Hypotheses Conduct multi-group analysis	Structural equation modeling using AMOS 7.0 Multi-group analysis using AMOS 7.0

#### **CHAPTER IV**

#### RESULTS

#### Overview

Study results are presented in this chapter. First, survey response information is presented. Second, descriptive statistics are reported including: sample characteristics, trip characteristics such as first visit or repeat visit and group composition of agritourits who visited organic farms with companions. Third, results of normality and reliability tests are presented prior to structural equation modeling (SEM). Fourth, confirmatory factor analysis results are presented to evaluate the validation of study measures used in subsequent SEM. Fifth, hypotheses-testing results are discussed to assess the quality of the proposed structural model derived employing SEM analysis procedures. Finally, multiple group analysis results are presented to identify possible moderating effects in the proposed structural model.

# **Survey Responses**

During an 8-week period, a total of 452 surveys were returned (Table 4-1). Of those, 21 incomplete or duplicate responses were identified and removed. Thus, 431 were kept in the final sample (onsite 268; online 163) for analysis. Response rate for onsite survey was 82.6%.

The organic farms where the onsite surveys were conducted and the local community had visited are presented in Table 4-2 which shows the number of responses from each farm. Boggy Creek Farm (41.8%) was used for the onsite survey, Home Sweet Farm with five neighboring family farms (8.4%), and the World Hunger Relief Farm (12.1%) were used for the onsite survey. In addition, from Home Sweet Farm and the World Hunger Relief Farm, 1.4% and 2.8% of the responses were collected via online while the other three farms (excluding the farms not specified by 17 respondents) were farms that the local Locavores community had visited.

Table 4-1. Summary of data collection: total sample, returned sample, invalid sample, and valid sample

	Onsite survey	Online survey	Total
Returned sample	283	169	452
Invalid sample <sup>a</sup>	15	6	21
Valid sample	268	163	431

Note: <sup>a</sup> Invalid sample refers to sample with incomplete or double responses

Table 4-2 Organic farms in which survey respondents visited (N=431)

Survey	Name of Farms	Location	Frequency	Percent
method				
Onsite	Boggy Creek Farm	Austin, TX	180	41.8%
survey	Home Sweet Farm	Brenham, TX	36	8.4%
	World Hunger Relief	Elm Mott (Waco),	52	12.1%
	Farm	TX		
Online	Millican Produce	Millican, TX	56	13.0%
survey	Leaning Tree Farm	Millican, TX	20	4.6%
	Wateroak Farm	Franklin, TX	52	12.1%
	World Hunger Relief	Elm Mott (Waco),	12	2.8%
	Farm	TX	6	1.4%
	Home Sweet Farm	Brenham, TX		
	Name unknown		17	3.9%

### **Study Subjects Selected from Survey Respondents**

Survey respondents included not only people who visited organic farms with their companions, the targeted study population, but also those who did without their companions. The sampling screening procedure resulted in a final sample of 400 respondents, representing 92.8% of the 431 survey respondents, who have visited organic farms with their companions.

## **Demographic Comparisons of Study Subjects**

Table 4-3 details the descriptive statistics for the 400 responses that were used in the analysis. Of the 400 responses, 61.4% were female and had an average age of 38.4 years old. Respondents' marital status comprised 28.5% single and 45.3% married, and 33.0% of all the respondents live with child(ren).

Of all the respondents, 49.9% said their highest level of education earned was a college degree and more than 31.7% of the respondents had engaged in graduate work or had a graduate degree. A majority (79.7%) were Caucasian, while 10.4%, 5.5% and 1.1% of the respondents considered themselves Asian, Hispanic or Mexican American and African American respectively. Total household income varied greatly among the respondents. The largest proportion of respondents (24.6%) reported incomes ranging between \$80,000 and \$100,000 while the smallest proportion of respondents (8.6%) cited income levels less than 19,999. A vast majority of the respondents (91.3%) resided in TX and 74.0% of them lived within the city where the farm was located.

Demographic characteristics of study subjects (N=400) were compared with subjects (N=31) excluded in the full study sample (they are called "other subjects below) to assess if there any differences existed. Results of this comparison are presented in Table 4-3. Participants' gender, age, education level, income level ethnicity and residency (state and city) did not differ significantly between study subjects and other subjects except a family status.

Table 4-3. Demographic characteristics of study subjects and other subjects for all survey respondents and study subjects and other subjects

	Study subject <sup>a</sup>	Other subject <sup>b</sup>	Test stati	istics <sup>c</sup>
	(N=400)	(N=31)	$\chi^2$	p
Gender			_	
Male	38.6%	56.0%	$\chi^2 = -1.7$	.086
Female	61.4%	44.0%		
Age				
18-29	27.9%	12.0%		
30-39	35.7%	12.0%		
40-49	18.7%	20.0%	$\chi^2 = 1.1$	
50-59	8.1%	40.0%		.291
60-74	8.9%	8.0%		
75+	0.8%	8.0%		
Income				
Less than 19,999	8.6%	16.7%		
\$20,000 to less than \$40,000	11.1%	16.7%		
\$40,000 to less than \$60,000	17.4%	20.8%		
\$60,000 to less than \$80,000	20.3%	16.7%	2	
\$80,000 to less than \$100,000	24.6%		$\chi^2 = -1.2$	.214
\$100,000 +	18.0%	6.9%		
Income Average Median	\$79,000/\$80,000	\$70,000/\$60,000		
Marital status				
Single	31.8%	44.0%		
Married	29.8%	44.0%		
Single parent w/child(ren)	16.2%		$\chi^2 = -2.1$	.035
Married w/child(ren)	20.6%	12.0%	70	
Other	1.7%			

Table 4-3 Continued

	Study subject <sup>a</sup>	Study subject <sup>a</sup> Other subject <sup>b</sup>		istics <sup>c</sup>
	(N=400)	(N=31)	$\chi^2$	p
Employment status				
Employed full-time	35.8%	38.1%		
Employed part-time	21.4%	23.8%		
Self-employed	5.7%	9.5%		
Full-time homemaker	11.9%			
Student	13.2%	4.8%		
Retired	7.5%	14.3%		
Not currently employed	4.4%	9.5%		
Education background				
Less than high school	0.3%	4.0%		
Some college, not completed	13.5%	12.0%		
Completed high school	4.7%	32.0%	$\chi^2 = 1.7$	.098
Completed college	49.9%	52.0%	,,	
Post graduate work started/completed	31.7%			

Note: Percentages are based on valid cases.

## **Profiling the Visitors to Organic Farms**

The majority of the survey respondents (54.5%) were repeat visitors although about one third (33.6%) were from the local Locavores group who organized trips to local farms that they had not previously visited. Except the Locavores group participants, 75.5% of respondents were repeaters. While previous research has found that the

<sup>&</sup>lt;sup>a</sup> Study subject refers to respondents who visited farms with their companions. This sample was used for main analyses, testing the proposed model and developing a profile of vacation trip market of agrivisitors to organic farms.

<sup>&</sup>lt;sup>b</sup> Other subject refers to respondents who visited farms alone and were excluded from the main analyses in this study

<sup>&</sup>lt;sup>c</sup> All demographic variables except marital status in the above table exhibit no significant differences between the two groups (p<.05).

average number of trips to farms by visitors is 10.3 per year in the US (Carpio, Wohlgenant, & Boonsaeng, 2008), more than 17.1 % of the respondents reported that they visited the farm almost every week over a year. Except those who stated that they routinely visited the farm every week, the average number of visit was 4.7 times among repeat visitors.

Among the study subjects who accompanied companions, the average party size was 3.8 ranging from 2 to 19, and their visit/s was/were mainly with their families (60.8%) or their friends (34.0%). These two groups included 19 respondents who visited the farm both with families and friends. Other companions included visitors' relatives (3.5%), partner (2.3%), families and relatives (2.8%), and friends and partner (2.8%).

# **Missing Values**

Missing data, although a common occurrence, can cause a serious problem in data analysis (Byrne, 2000). Three issues associated with missing data that should be taken into account to avoid bias in analysis include: the amount of data missing; the pattern of the missing data; and the reasons for the missing values.

With regard to the first issue, although there is no clear rule, some researchers have suggested that five to ten percent rate of missing data on a given variable may be considered small while others have designated that close to a 40% rate of missing data on a variable may be considered high (Cohen & Cohen, 1983; Raymond & Roberts, 1987). Therefore, an acceptable rate of missing data most likely lies somewhere between 10% and 40%.

The second issue is related to the pattern of the missing data. If the distribution of missing values is random, deletion of the cases with missing values does not have a great effect of the representativeness of the sample used (Allison, 2001). Missing completely at random (MCAR) can be confirmed by dividing respondents into those with and without missing data, then using t-tests of mean differences on demographic variables or other key variables to establish that the two groups do not differ significantly (Tabachnick & Fidell, 1996).

In this study, nonresponse rate for each item was calculated. It ranged from 0% to 8.1% except the 12 items for social interactions with local residents construct which was 35.1%. Although missing data for items can result from various reasons, this case was most likely due to the characteristics of the farms where the survey was conducted. Two of the farms are not typical rural farms connected with a group of farming communities. They are standalone farms without near farms or many neighbors, located within 20 miles from the downtown of Austin and Waco, Texas. Due to the peculiarity of the two farms, almost one third of the respondents (35.1%) did not answer the questions about social interactions with local residents since they were not able to identify who the local residents were. It should, however, be noted that all of out-of- residents respondents (8.7%) answered the same questions. Thus, due to a high item nonresponse rate, the items of social interactions with local residents construct were removed for further analysis to avoid bias to the dependent variable (Raymond & Roberts, 1987).

To examine the pattern of the missing data, a difference test was conducted. The result of this test are in Table 4-4, showing there were no significant differences (p>.05)

in all major variables tested between respondents who answered all relevant questions and those who did not. This suggests that missing data was randomly scattered throughout the groups and predictors.

An acceptable common method to handle missing data completely at random is the listwise or pairwise deletion of cases or the variables deletion with a high percentage missing values. However, researchers have argued that an appropriate method to handle missing values that avoids the loss of sample size is to estimate and replace the missing values (Little & Rubin, 1990; Tabachnick & Fidell, 1996). In addition, with the data having missing value, AMOS does not provide Modification Indices, which are necessary to achieve adequate models (Arbuckle, 2006). Therefore, the mean substitution method using SPSS 15.0 was applied since it has been deemed appropriate and convenient when patterns of missing data are random (Musil, Warner, Yobas, & Jones, 2002).

Table 4-4. Summary results of SPSS missing value analysis

Variable Name	t value	р
Missing data in social interactions with service providers	.434	0.65
Missing data in social interactions with companions	1.12	0.56
Missing data in social interactions with other customers	1.01	0.43
Missing data in We-Satisfaction	.234	0.26
Missing data in We-Intention	.165	0.43

### **Preliminary Data Analysis**

Since adopting resource theory to measure social interactions in tourism is in the very beginning stage (Morais, 2000), exploratory factor analysis was preliminarily conducted (Mulaik, 2004).

Before factor analysis, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was examined to evaluate if the sample size was appropriate for factor analysis (Kaiser, 1970). The results for variables ranged from 0.79 to 0.91, which indicates better than "meritorious (0.80's) and close to "marvelous (0.90's)" using Kaiser's (Kaiser, 1970) definition. Bartlett's test of sphericity (Bartlett, 1950), which assesses if the data contains significantly different factors given the relation between the number of observations and the number of variables, also found that the data were appropriate for factor analysis.

#### Social Interactions with Service Providers

Exploratory factor analysis (principal components analysis) was performed on the 18 items of Social Interactions with Service Providers to help determine if these 18 items reliably measure visitors' interactions with service providers (Table 4-5). A Varimax rotation method was selected after no difference was found in items' convergence when an oblique rotation method was used to allow items to load on multiple dimensions.

The three factors extracted accounted for 64.2% of the variance (Table 4-5) with 13 items, excluding five items Factors were labeled based on items that loaded high and

the common characteristics of grouped items. Thus, factors were labeled Love\_S (Factor 1), Money\_S (Factor 2), and Service\_S (Factor 3). The first dimension appears to represent visitors' perception of service providers' expression of regard and care. The second dimension represents monetary exchanges between service providers and visitors and the third dimension stands for service activities provided by service providers.

The three factors explained 42.7%, 15.5% and 6.0 % of the variance (64.2% total), respectively. Table 4-5 shows that factor loading scores on these factors ranged from .69 to .88, thus indicating good correlations between the retained items and the latent variable that represents them. Cronbach's  $\alpha$  coefficients were also analyzed to check the internal consistency of the scale. As shown in Table 4-5, each was above the satisfactory level (above .70) (Hair et al., 1998).

Six items (SI\_S5, SI\_S8, SI\_S9, SI\_S10, SI\_S12 and SI\_S14) were excluded due to either low factor loadings or cross loadings. After excluding these items, factor loadings for the retained items were increased by .04 on average and no significant change was found on Cronbach's  $\alpha$  coefficients.

Table 4-5. Factor Analysis of Social Interactions with Service Providers

	Factor	Eigen	% of	Cronbach's
	loading	value	variance	α
Factor 1: Love_S		7.26	42.71%	0.93
SI S1	.86			
SI S2	.88			
SI S3	.69			
SI_S5 (Dropped: Low	.49			
loading)	.87			
SI_S7	.49			
SI_S8 (Dropped: Low	.57			
loading)	.61			
SI_S9 (Dropped: Low	.86			
loading)	.88			
SI_S12 (Dropped: Dual				
loading)				
SI_S13				
SI_S14 (Dropped: Dual				
loading)				
Factor 2: Money_S		2.63	15.49%	0.83
SI_S4	.81			
SI_S11	.80			
SI_S15	.62			
SI_S17	.80			
SI_S18	.85			
Factor 3: Service_S		1.02	6.00%	0.73
SI_S6	.68			
SI_S10 (Dropped: Low	.86			
reliability)	.80			
SI_S16				

# Social Interactions with Companions

Exploratory factor analysis with a Varimx rotation was also performed on the 12 items of the Social Interactions with Companions scale for the purpose of data reduction. The 12 items from the questionnaire resulted in two factors and accounted for 68.8% of the variance (59.9% and 8.9% for each factor respectively) (Table 4-6). SI\_C4 and

SI\_C14 were dropped since they almost equally loaded on both factors and SI\_C8 and SI\_C10 were removed due to low factor loadings (lower than .60). Other than that, factor loading scores on the other items factors ranged from .64 to .84 and all loadings were greater than .60. Table 4-6 indicates a good correlation between the items and the factor they belong to. Factors were labeled based on common characteristics of items were grouped together. Thus, factors were labeled as Love\_C (Factor 1) and Information\_C (Factor 2). As shown in Table 4-6, Cronbach's α values were above satisfactory level (above .80) on both dimensions.

Table 4-6. Factor Analysis of Social Interactions with Companions

Tuote 1 0.1 uetoi 1 iliui ybis 01 bi	Factor	Eigen	% of	Cronbach's
	loading	value	variance	α
Factor 1: Love_C		7.19	59.88%	0.93
SI_C1	.84			
SI_C2	.83			
SI_C4 (Dropped: Dual	.79			
loading)	.84			
SI_C7	.30			
SI_C8_(Dropped: Low	.73			
loading)	.69			
SI_C13				
SI_C14(Dropped: Dual				
loading)				
Factor 2: Information_C		1.07	8.88%	0.82
SI_C3	.64			
SI_C9	.83			
SI_C10 (Dropped: Low	.43			
loading)	.76			
SI_C15	.74			
SI_C16				

#### Social Interactions with Other Customers

The structure of the scale measuring Social Interactions with Other Customers was also examined. Exploratory factor analysis revealed that 12 items loaded on three factors and captured 72.0% of the variance (Table 4-7).

Factor 1 explained 54.1% of the variance and factor 2 and 3 explained 9.45% and 8.46% of the variance respectively. While reliabilities for factor 1 and factor 3 were satisfactory (Cronbach's  $\alpha$ =.93 and .78 respectively), factor 2 presented a poor reliability (Cronbach's  $\alpha$ =.57). The factor loadings of SI\_O2 and SI\_O10 suggested that the item did not sufficiently contribute to the construct, and hence the two items were deleted. In addition, SI\_O15 item had a weak loading on the factor 3 and was deleted from the factor 3. According to reliability analysis, Cronbach's alpha of factor 3 would increase by .03 if SI\_O15 item was deleted. Therefore, it was determined that SI\_O15 should be deleted.

Table 4-7. Factor Analysis of Social Interactions with Other Customers

	Factor	Eigen	% of	Cronbach's
	loading	value	variance	α
Factor 1: Status_O		6.49	54.11%	0.93
SI_O1	.82			
SI_O2 (Dropped: Low loading)	.44			
SI_O4	.62			
SI_O7	.81			
SI_O8	.80			
SI_O13	.58			
SI_O14	.66			
Factor 2: Service_O		1.13	9.45%	0.57
SI_O10 ( Dropped: Low loading)	.39			
SI_O16 ( Dropped: Low reliability)	.83			
Factor 3: Information_O		1.02	8.46%	0.78
SI_O3	.85			
SI_O9	.63			
SI_O15( Dropped: Low loading)	.50			

A second exploratory analysis without three items (SI\_O10, SI\_O15, and SI\_O16), revealed that nine items represented two factors explaining 68.7% of the variance. Also, Cronbach's alpha revealed that two factors comprised of five and two items were reliable (.93 and .81). Therefore, two factors with nine items were retained for further analyses.

## Environmental Beliefs (New Ecological Paradigm)

There are ongoing debates regarding the dimensionality of the NEP scale (Dunlap, 1992). However, since the purpose of this study did not reside in examining the dimensionality of the NEP scale, but in measuring the level of visitors' environmental concerns, it was deemed to be desirable to treat it as one composite measure of

environmental concerns. As indicated in Table 4-8, the revised NEP scale contains seven items worded in a manner that disagreement indicates a high environmental belief. Thus, these seven items were reverse coded and summed with other eight items to create the composite scores.

The level of environmental concerns identified in this study was compared to the results of the previous studies that adopted the NEP scale in order to better understand organic farms visitors' environmental beliefs. To the best of the author's knowledge, no published research assessing organic farm visitors' environmental values using the NEP scale exists. Thus, several studies were used as alternative reference points in this study. Schultz and Zelezny (1999) showed that the mean rating of the NEP scale in the U.S. was 3.67. In tourism settings, one study for environmental film festivals had a NEP mean rating of 3.59 (Kim et al, 2005) and another study of tourism development in Texas found that the NEP mean rating of local residents was 3.63.

The mean rating (3.78) of the organic farm visitors was found to be a little higher than other tourism studies that used the scale. This result may be due to the research population of visitors to organic farms. One may therefore assume that the research population and research setting may have significantly affected the study results.

Table 4-8. Descriptive statistics for New Ecological Paradigm scale

Table 4-6. Descriptive statistics for New Deological Laradight scale								
Do	you agree or disagree that:	SD <sup>a</sup> (%)	D <sup>b</sup> (%)	N° (%)	A <sup>d</sup> (%)	SA <sup>e</sup> (%)	Me an	$\mathrm{SD}^{\mathrm{f}}$
1.	We are approaching the limit of the number of people the earth can support.	6.4	10.2	15.0	29.9	37.2	3.6 5	1.44
2.	Humans have the right to modify the natural environment to suit their needs.	22.0	31.5	25.3	16.8	4.3	2.4 0	1.22
3.	When humans interfere with nature it often produces disastrous consequences.	3.5	7.3	22.3	36.6	29.8	3.6 7	1.28
4.	Human ingenuity will insure that we do NOT make the earth unlivable.	15.1	24.9	31.3	20.7	9.5	2.7	1.29
5.	Humans are severely abusing the environment.	2.1	6.7	15.8	27.5	47.1	3.9 5	1.31
6.	The earth has plenty of natural resources if we just learn how to develop them.	14.0	18.5	25.8	21.8	19.4	3.0 1	1.43
7.	Plants and animals have as much right as humans to exist.	4.8	2.4	20.5	23.9	47.3	3.9 1	1.35
8.	The balance of nature is strong enough to cope with the impacts of modern industrial nations.	25.1	39.6	16.6	10.7	6.7	2.2	1.24
9.	Despite our special abilities humans are still subject to the laws of nature.	1.6	1.6	14.4	26.9	54.0	4.1 2	1.26
10.	The so-called "ecological crisis" facing humankind has been greatly exaggerated.	38.8	25.8	18.4	8.5	7.4	2.1	1.30
11.	The earth is like a spaceship with very limited room and resources.	2.7	6.9	20.7	38.6	30.1	3.7 1	1.25
12.	Humans were meant to rule over the rest of nature.	31.3	11.8	26.2	11.5	18.4	2.6	1.54
13.	The balance of nature is very delicate and easily upset.	1.6	10.9	26.3	27.9	32.2	3.6	1.29
14.	Humans will eventually learn enough about how nature works to be able to control it.	22.7	25.1	30.0	18.6	3.2	2.4 4	1.22
15.	If things continue on their present course, we will soon experience a major ecological catastrophe.	6.6	8.7	16.7	32.0	34.7	3.6 5	1.40

 $SD^a$  = Strongly Disagree,  $D^b$  = Disagree,  $N^c$  = Neutral,  $A^d$  = Agree,  $SA^e$  = Strongly Agree,  $SD^f$  = Standard Deviation

# Satisfaction

Respondents were asked whether they had satisfying experiences in two ways: We-Satisfaction and I-Satisfaction. Both satisfactions had four items. Table 4-9 shows that visitors had relatively satisfying experiences at the farms (means from 4.33 to 4.43).

Table 4-9. Mean and Standard Deviation scores for Satisfaction

Items	Mean	Standard Deviation
We-Satisfaction		
We were satisfied with the farm and its service.	4.39	1.05
We were pleased with the farm and its service.	4.34	1.07
Our experience at the farm was	4.33	1.04
Our overall feelings about the farm were	4.41	1.05
<u>I-Satisfaction</u>		
I was satisfied with the farm and its service.	4.38	0.92
I was pleased with the farm and its service.	4.39	0.89
My experience at the farm was	4.43	0.85
My overall feeling about the farm was	4.43	0.91

## **Intentions**

Similar to satisfaction, visitors' intentions were also measured in two ways: We-Intentions and I-Intentions. We-Intentions had three items and I-Intentions had two items. Table 4-10 shows that visitors had relatively high intentions (means from 4.33 to 4.43).

Table 4-10. Mean and Standard Deviation scores for Intentions

Items	Mean	Standard Deviation
We-Intentions		
Our intentions that my companion travelers and I will	4.15	1.15
visit this farm again		
is		
Our intentions to visit this farm again	4.14	1.14
are		
The likelihood that we would consider visiting this	3.99	1.14
farm again		
is		
<u>I-Intentions</u>		
If I were to visit a farm again, the probability that it	4.13	1.03
would be this farm again		
is		
The likelihood that I would consider visiting this farms	4.06	1.07
again		
is		

### **Test of Modeling Assumptions**

SEM is sensitive to distributional characteristics of data, and maximum likelihood estimation (MLE) used in SEM. Normality for each variable in the proposed model was examined to determine if the data met the normality assumption for the MLE method as a preliminary analysis step. Skewness and Kurtosis tests were performed to evaluate normality. Table 4-11 shows that the absolute value for univariate skewness and kurtosis ranged from 0.03 to 2.09 and from 0.01 to 3.79 respectively. Values for all variables in the model for univariate skewness and kurtosis were found to fall within conventional criteria (Kline, 2005) of normality (i.e., -3 to 3 for skewness and -10 to 10 for kurtosis).

Table 4-11. Normality test results of observed variables included in the proposed model

Table 4-11. Normality test r Constructs	Variable	Skewness	Kurtosis
Constructs	names	(> 131=extremely	(>110l=extremely
	names	skewed)	peaked)
Social Interactions with	SI S1	-1.38	1.76
Service Providers	SI S2	-1.62	2.32
	SI S3	-1.23	-0.20
	SI S4	0.41	-0.69
	SI S6	1.20	0.77
	SI S7	-1.63	1.94
	SI_S8	-1.35	1.54
	SI_S10	0.31	-0.67
	SI_S13	-1.54	1.88
	SI_S15	-1.68	2.11
	SI S16	-0.05	-1.32
	SI_S17	-1.02	0.68
	SI_S18	0.27	-0.79
Social Interactions with	SI_C1	-1.45	1.63
Companions	SI_C2	-1.17	0.59
-	SI C3	-0.54	-0.14
	SI <sup>-</sup> C7	-1.15	0.43
	SI_C9	-0.59	0.07
	SI C10	0.21	-0.75
	SI_C13	-0.97	-0.09
	SI C15	-0.53	-0.01
	SI_C16	-1.02	0.68
Social Interactions with	SI_O1	-1.21	1.81
Other Customers	SI_O2	-1.23	1.85
	SI_O3	-0.57	-0.23
	SI_O4	-1.16	1.54
	SI_O7	-1.09	0.86
	SI_O8	-1.31	1.86
	SI_O9	-0.85	1.14
	SI_O13	-0.95	1.00
	SI_O14	-0.94	0.87
We-Satisfaction	WS1	-1.77	1.99
	WS2	-1.70	1.76
	WS3	-1.73	1.94
	WS4	-1.82	2.09
I-Satisfaction	IS1	-1.98	3.20
	IS2	-2.00	3.33
	IS3	-2.09	3.79
	IS4	-2.07	3.47

Table 4-11 Continued

Constructs	Variable names	Skewness (> 131=extremely skewed)	Kurtosis (>l10l=extremely peaked)
We-Intentions	WI1	-1.26	0.25
	WI2	-1.26	0.27
	WI3	-1.26	0.37
I-Intentions	II1	-1.58	1.73
	II2	-1.36	1.14
new ecological paradigm	NEP1	-1.03	0.13
(NEP)	NEP2	0.16	-0.60
	NEP3	-1.14	0.89
	NEP4	-0.16	-0.61
	NEP5	-1.41	1.42
	NEP6	-0.26	-0.87
	NEP7	-1.34	1.13
	NEP8	0.56	-0.19
	NEP9	-1.82	2.92
	NEP10	0.70	-0.32
	NEP11	-1.18	1.04
	NEP12	0.15	-1.08
	NEP13	-0.98	0.65
	NEP14	-0.03	-0.81
	NEP15	-1.05	0.21

Note: Normality was examined in terms of skewness and kurtosis.

# **Confirmatory Factor Analysis**

Social Interactions with Service Providers

The measurement model of Social Interactions with Service Providers was represented by three factors. In the first order measurement model (Figure 4-1), three manifest variables explained "Love\_S" latent variable, four manifest variables explained "Money\_S" latent variable, and two manifest variables explained Service\_S. Based on the modifications conducted using exploratory factor analysis, a refined overall

measurement model was created. The units of measurement of the latent variables in this model were established by setting them to be equal to the most representative item of the scale (Pedhazur & Schmelkin, 1991). The units of measurement were set through fixing the factor loading to one factor for the item in each scale that had the highest loading according to the exploratory factor analysis results described in step two (Pedhazur & Schmelkin, 1991).

Confirmatory factor analysis revealed that the modified scale presented a less than a desirable fit with the data ( $\chi^2 = 431.4$ , df=62; NFI=.83; CFI=.85; GFI=.87; NNFI=82; RMSEA=.12). Consequently, the results of CFA were examined to determine the most appropriate modification that needed to be conducted to improve the fit.

The first modification was made on the model was the deletion of the items (i.e., SI\_S3 & SI\_S15) having large residuals or low factor loading. Specifically they seemed to be correlated with multiple factors (i.e., SI\_S3 was correlated with Love\_S and Service\_S factors. SI\_S15 was correlated with Money\_S and Service\_S factors.). Cross loadings of these two items are rarely defensible theoretically and tchnically. In addition, an examination of the wording of SI\_S3 and SI\_S15 revealed that they might not be clearly associated with the current factor (Love\_S and Money\_S respectively). A Chisquare difference test revealed that the model's fit significantly improved with the deletion of the items in the model (Table 4-12). A second modification was adding a path between items. The path between the error term of SI\_S5 (Service Providers offer discounts.) and SI\_S11 (Service Providers offer monetary benefits.) was freed for estimation because discounts and monetary benefits could be considered to be same.

Adding the path between these error terms resulted in a decrease of 28.0 in  $\chi^2$  while not losing any degrees of freedom.

The next step was to add a second-order factor into the current first-order measurement model. In order for a CFA model with a second-order factor to be identified, there must be at least three-first order factors (Byrne, 2005). A three-factor structure of Social Interactions with Service Providers met such requirement. The results of the second-order measurement model analysis indicated that the three latent variables in the first-order measurement model were further predicted by a higher order latent variable (Figure 4-2). The fit indices ( $\chi^2 = 88.4$ , df=33; NFI=.95; CFI=.97; GFI=.97; NNFI=96; RMSEA=.06) suggested that the model had a good fit to the data (Table 4-12).

Table 4-12. Estimation of fit indices of Social Interactions with Service Providers

Model	$\chi^2(df)$	RM SEA	NFI	CFI	GFI	NNFI (Rho)	$\Delta \chi^2$
First-order							
Model 1	431.5 (62)	.12	.83	.85	.87	.82	
Model 2: Deletion of SI_S3&	144.5 (31)	.10	.92	.94	.93	.92	287.0
SI_S15							20.0
Model 3: Covariance e5 &	88.4 (31)	.06	.95	.97	.96	.96	28.0
e11							
Second-order	88.4 (33)	.06	.95	.97	.97	.96	

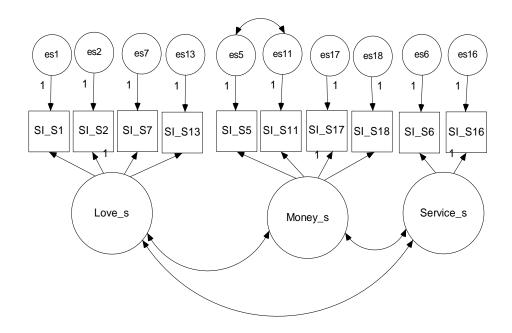


Figure 4-1. First-order measurement model of Social Interactions with Service Providers

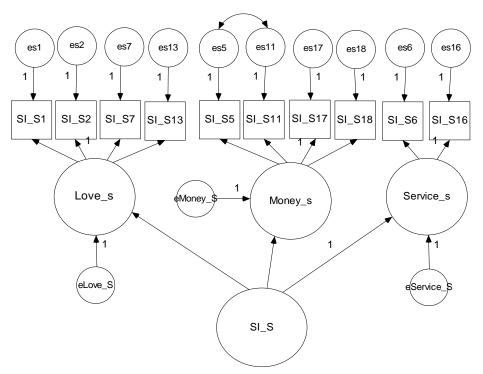


Figure 4-2. Second-order measurement model of Social Interactions with Service Providers

## Social Interactions with Companions

The measurement model of Social Interactions with Companions was represented by two factors. In the first order measurement model, four manifest variables were explained by the "Love\_C" latent variable and five manifest variables by the "Informaton\_C" latent variable. Based on the modifications conducted using exploratory factor analysis, a refined overall measurement model was created. The fit of this model with the data was less than a good fit to the data ( $\chi^2$ =64.0, df=19; NFI=.93; CFI=.94; GFI=.89; NNFI=92; RMSEA=.09). The first modification made on the model was the deletion of SI\_C2 item from factor 1 (Love\_C) because this item showed low factor loadings. A Chi-square difference test revealed that the model's fit significantly improved with the deletion of these items ( $\chi^2$  =35.7, df=13; NFI=.96; CFI=.97; GFI=.87; NNFI=95; RMSEA=.06) (Table 4-13) (Figure 4-3).

The second-order factor measurement model for this scale was not able to be identified for this scale because the first-order measurement model only contained two factors (Byrne, 2005). Although the second-order factor was deemed to be acceptable, the requirement for a standard single-factor CFA model is that it have at least three indicators. Otherwise, the direct effects of the second order factor on the first-order factors or the disturbance variances may be underidentified (Byrne, 2005: 199).

Table 4-13. Estimation of fit indices of Social Interaction with Companions

Model	$\chi^2(df)$	RMSE A	NFI	CFI	GFI	NNFI (Rho)	$\Delta \chi^2$
Model 1	64.0(19)	.09	.93	.94	.89	.92	-
Model 2: Deletion of SI_C2	35.7(13)	.06	.95	.97	.98	.95	29.5

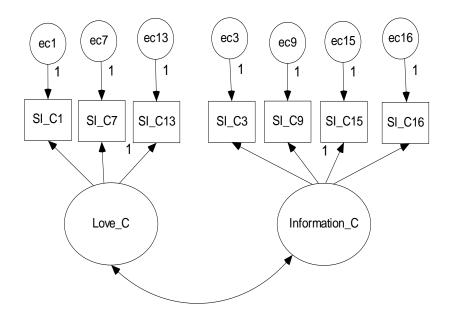


Figure 4-3. Measurement model of Social Interactions with Companions

### Social Interactions with Other Customers

There were two factors (i.e., Status\_O and Information\_O) comprised of eight items for the measurement model for Social Interactions with Other Customers (Table 4-14) which was derived from preliminary factor analysis. CFA revealed a significant Chi-Square and low fit indices ( $\chi^2$  =121.2, df=19, RMSEA= .17, NFI =.83, CFI =.84, GFI =.87, and NNFI =.81). These findings suggested that the model had a poor fit to the data. Accordingly, the results of CFA were examined to determine the most appropriate modifications that should be executed to improve the fit. According to Bentler and Chou (1987), model refinement should begin with the deletion of insignificant paths and deletion of items associated with large residuals without violating the theoretical meaningfulness.

The first modification made on the model was the deletion of SI\_O1 and SI\_O13. These items were associated with large normalized residuals and had weak factor loadings with Status\_O (factor 1). The deletion of these items resulted in a significant improvement of the model fit to the data (Table 4-14).

The second modification was made by adding an additional path to correlate the error terms between SI\_O8 and SI\_O14. The correlation between these error terms might be because these two items measured how other customers treated the respondent as they were worded similarly. This additional path resulted in a significant improvement of the model fit to the data, in a decrease of 25 in  $\chi^2$ . Table 4-14 indicates that all fit indices provided evidence of the good fit to the data (RMSEA= .06, NFI=.97, CFI=.98, GFI=.98, and NNFI=.95) (Figure 4-4).

The second-order measurement model of Social Interactions with Other

Customers was not able to be identified due to the insufficient number of factors as in
the case of Social Interactions with Companions construct.

Table 4-14. Estimation of fit indices of Social Interactions with Other Customers

Model	$\chi^2(df)$	RM	NFI	CFI	GFI	NNFI	$\Delta \chi^2$
		SEA				(Rho)	70
Model 1	121.2 (19)	.17	.83	.84	.87	.81	
Model 2: Deletion of SI_O1 &	45.4 (9)	.10	.93	.94	.96	.90	46.0
SI_O13							
Model 3: Covariance eo8 &	17.7(8)	.06	.97	.98	.99	.97	25.0
eo14							

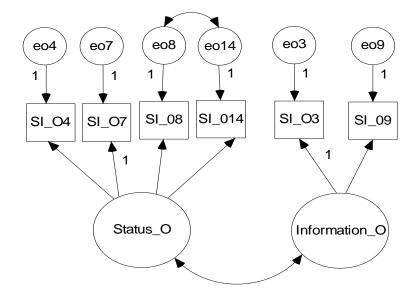


Figure 4-4. Measurement model of Social Interactions with Other Customers

## Satisfaction

Satisfaction scales used to operationalize mediating variables in the overall model of the study were adopted from previous research. As revisit intention was considered as We-Intention instead of individual intention, satisfaction was also considered as We- and I-Satisfaction. For We-Satisfaction (Figure 4-5), while RMSEA (.11) didn't indicated an acceptable model fit, all other indices (NFI =.99, CFI =.99, GFI =.96, and NNFI =.97) suggested that the measurement model for we-satisfaction had a good fit to the data (Table 4-15).

Similarly, the fit indices for I-Satisfaction (Figure 4-5) indicated that NFI (.97), CFI (.99) and GFI (.96) showed a good fit to the data while RMSEA and NNFI did not suggest a good fit to the data for I-Satisfaction.

Tuble 1 13. Estimation of ht marces of we und I satisfaction									
Model	$\chi^2(df)$	RMSEA	NFI	CFI	GFI	NNFI (Rho)			
We-Satisfaction	28.0 (2)	.11	.99	.99	.96	.97			
I-Satisfaction	69 6 (2)	22	97	98	91	93			

Table 4-15. Estimation of fit indices of We- and I-Satisfaction

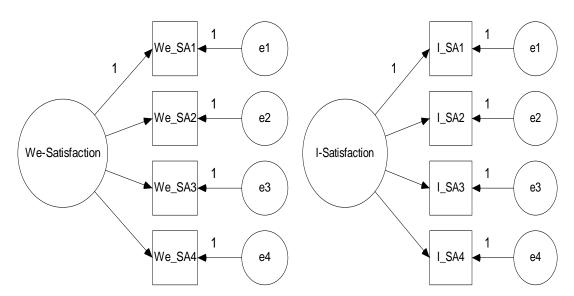


Figure 4-5. Measurement Models of We- and I-Satisfaction

## **Intentions**

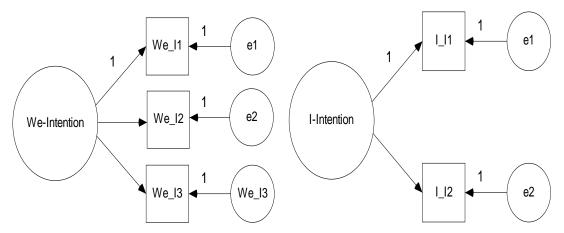
Intentions was also considered in two types: We-Intentions and I-Intentions

These two constructs are unidimensional with three and two indicators (Figure 4-6),
causing identification issues.

Identification concerns the correspondence between the information to be estimated- the free parameters- and the information from which it is to be estimated-the raw data, or more precisely the observed variances and covariances in the data- (Bollen,

1989). More specifically, identification concerns whether a single unique value for each and every free parameter can be obtained from the observed data. For one factor model, CFA requires at least 4 indicators to be overidentifified (Kline, 2005). If there are three indicators or less, a CFA model is just-identified or underidentified.

AMOS 7.0 performs an identification check as part of the model fitting process. Results of identification check indicated that the We-Intention model was a just-identified model that does not perfectly fit the data having zero Chi-square with a zero degree of freedom (Kenny, 2003) while the I-Intention model was under-identified. Thus, no further analysis was conducted.



Note: We-Intention model was just-identified. I-Intention model was under-identified.

Figure 4-6. Measurement models of We- and I-Intentions

### Assessment of Reliability and Validity of Measurement Scale

The reliability and validity of measures were examined next. To examine the

the latent variables (i.e., constructs) were related to each other, a reliability test was conducted. The composite reliability (reliability coefficient ρ) of the factors for each construct which also refers to the internal consistency of indicators measuring the underlying factors (Fornell & Larcker, 1981), was examined based on CFA results in this analysis (Kano & Azuma, 2003; Raykov, 1997). A factor displays its composite reliability, which takes into account the actual factor loadings, if composite reliability is greater than .6 (Baagozzi & Kimmel, 1995).

According to Hatcher (1994), composite reliability is obtained by calculating  $\rho = (\Sigma \lambda_i)_2 / ((\Sigma \lambda_i)_2 + \Sigma \theta_i)$ , where  $\lambda_i$  is the ith standard factor loading and  $\theta_i$  is the ith error variance. The results of reliability test are displayed in the Table 4-16.

Table 4-16. Factor loadings and composite reliabilities of retained items of measurement scale

	Factor loading	t- Value	Composite reliability $(\rho)$
Love_S			.750
<ul> <li>Service providers were very fond of me (SI_S1).</li> </ul>	.794	21.509	
<ul> <li>Service providers treated me as an important person (SI_S2).</li> </ul>	.749	-	
<ul> <li>Service providers treated me personally (SI_S7).</li> </ul>	.717	16.625	
<ul> <li>Service providers cared about me (SI_S13).</li> </ul>	.747	16.367	
Money_S			.777
<ul> <li>Service providers offered discounts (SI_S5).</li> </ul>	.846	12.292	
<ul> <li>Service providers provided monetary benefits (SI_S11).</li> </ul>	.747	11.594	
<ul> <li>Service providers provided or shared a free stuff (SI_S17).</li> </ul>	.810	-	
<ul> <li>Service providers provided or shared souvenirs (SI_S18).</li> </ul>	.857	15.333	
Service_S		.701	.701
<ul> <li>Service providers provided or shared good quality equipment to use</li> </ul>			
in this visit (basket, bag, etc) (SI_S6).	.710		
<ul> <li>I took advantage of service providers' help (SI_S16).</li> </ul>	.727		

Table 4-16 Continued

Table 4-10 Continued	Factor loading	t- Value	Composite reliability (ρ)
Love C			.736
• Companion traveler(s) was/were very fond of me (SI C1).	.823	12.494	.730
• Companion traveler(s) treated me personally (SI C7).	.615	10.826	
• Companion traveler(s) about me. (SI C13).	.701	-	
Information O	.701		.775
<ul> <li>Other customer(s) provided me with information on attraction,</li> </ul>			.775
lodging, or restaurant around the farm. (SI O3).	.890	_	
• Other customer(s) provided me with information about the	.644	.935	
problems (SI O9).	.011	.,,,,	
Status O			.709
• Other customer(s) helped me greatly in this visit (SI O4).	.779	12.196	., 05
• Other customer(s) treated me personally (SI O7).	.766	-	
• Other customer(s) treated me with high esteem (SI O8)	.556	9.501	
• Other customer(s) treated me special (SI O14).	.636	10.894	
We-Satisfaction			.978
• We were satisfied with the farm and its service (We-SA1).	.973	_	
• We were pleased with the farm and its service (We-SA2).	.981	18.121	
• Our experience at the farm was(We-SA3)	.939	12.434	
• Our overall feelings about the farm were(We-SA4)	.948	13.976	
I-Satisfaction			.978
• I was satisfied with the farm and its service (I-SA1).	.963	-	
• I was pleased with the farm and its service (I -SA2).	.977	16.721	
• My experience at the farm was(I-SA3)	.931	8.434	
• My overall feelings about the farm were(I -SA4)	.958	11.976	
We-Intentions			.988
• My intention that my companion travelers and I will visit this farm			
again is (We-I1).	.976	-	
• Our intentions to visit this farm again are(We-I2)	.980	18.211	
• The likelihood that we would consider visiting this farm again is	.990	21.020	
(We-I3)			
I-Intentions			.971
• If I were to visit a farm again, the probability that it would be this			
farm again (I-I1)	.966	-	
• The likelihood that I would consider visiting this farm again is (I-	.980	17.545	
I2)			

Based on the theoretical guidelines, decisions to exclude some items were also based on the general guideline for acceptable item-factor loading of 0.60, cross loadings and large residuals (Bagozzi & Yi, 1988). Although some excluded items were

significant, their exclusion was deemed appropriate for "the interest of parsimony" of CFA and SEM (Byrne, 2001) and a lack of definitive criteria for inclusion or exclusion of items in the context of agritourism.

The measurement model specifies how factors are measured in terms of how the observed variables, and factors describe the measurement properties of the observed variables. The measurement model was evaluated with CFA. There are two types of measurement models: first-order and second-order (Bollen, 1989). First-order models depict the relationship between latent variables and observed variables. Second-order models represent a higher level of analysis in which the latent variables in first-order models are further predicted by another factor. In this step of analysis, second-order factor (i.e., Social Interactions with Service Providers) was included because resource theory (Foa and Foa, 1974) proposed that the six types of resources exchanged should not be placed in mutually exclusive categories. Instead, the resources can be better represented in a circle with varying amounts of particularism and tangibility.

Accordingly, an acceptable measurement model with the second order factor would support the principle that there was an overall construct of social interaction of resource exchange.

Table 4-17 displays all the retained items from the measurement model of each construct, which were statistically significant (p < 0.05). Validity refers to the extent to which the items measured what they were designed to measure. Convergent validity is used to determine if different observed variables used to measure the same factor are highly correlated. In SEM, convergent validity can be assessed by examining the t-test

for the factor loadings (Hatcher, 1994). As can be seen in Table 4-16 on page 101, all factor loadings for the observed variables were statistically significant, indicating that all observed variables effectively measured their corresponding factors, thereby supporting the convergent validity of the results. Most retained observed variables that were specified to measure their hypothesized factors in the revised final model, had relatively high factor loadings (r >.60 and statistically significant at p<.05), which also provides evidence of convergent validity. One exception was SI O8 having a factor loading of .56.

Discrminant validity refers to the extent of the dissimilarity between the intended measure and the measures used to indicate different constructs (Clark-Carter, 1997).

According to Fornell and Larcker (1981), discriminant validity can be achieved when the squared root of the average variance of the factors are greater than their square correlations with other factors (Fornell & Larcker, 1981). The CFA results indicated that all factors excluding the Information\_C factor, included in the final measurement model met this requirement (Table 4-17). The correlation between Information\_C and Wesatisfaction was higher (.642) than the average variance extracted of Information\_C (.594). Although no adequate reason for such correlation was found, it was decided that these measures should be included in testing the Model for theoretical and practical purpose. The other scales in the current study were deemed to have discriminant validity (Table 4-17).

Table 4-17. Correlations in the Final Model for examining Discriminant Validity (N=400)

	Love_S	Money_S	Service_S	Love_C	Information_ C
Love_S	.642				
Money_S	.172	.544			
Service_S	.762	.476	.650		
Love_C	.597	.172	.631	.717	
Information_C	.549	.485	.643	.702	.594
Information O	.012	.032	.018	.075	.051
Status O	.103	.158	.158	.175	.223
We-Satisfaction	.568	.315	.665	.614	.642
We-Intentions	.447	.251	.451	.487	.458
	Information _O	Status_O	We-SA	We-I	
Love_S					
Money_S					
Service_S					
Love_C					
Information_C					
Information _O	.498				
Status_O	.482	.465			
We-Satisfaction	.080	.254	.914		
We-Intentions	.024	.160	.756	.902	

Note: The diagonal entries (in bold) represent the average variance extracted by the factors.

The correlations between constructs are shown in the lower triangle.

## **Structural Equation Models**

In the previous section in chapter IV, due to the complexity of the framework, the measurement models for the three social interaction constructs were examined separately. In this section, these three measurement models are combined with dependent variable (i.e., We-Intentions) and mediating variable (i.e., We-Satisfaction).

Thus, structural equation modeling was used to examine the relationships among all variables in the Model at once.

Overall fit indices for the proposed and modified models after modification procedure are presented in Table 4-18. In step one, although all assumptions for SEM were met, the results were first examined for offending estimates, which are coefficients that exceed acceptable limits. In the initial analysis, a negative estimate of the variances of errors was found on the error term of SI\_O9. This offending estimate, called an Heywood case (Bollen, 1989; Heywood, 1931), was changed to a very small positive value (i.e., .005) as suggested in the previous SEM literature (K. Kim, 2007; Reisinger & Turner, 1999).

According to the overall fit indices, the proposed model failed to provide an acceptable fit with the data,  $\chi^2(338)$  =975.0, p<.001 (CFI=.91; NNFI=.90; NFI=.87; GFI=.86; and RMSEA=.70). Therefore, the proposed model needed further modification. As the minimum cut-off, it has been suggested again that a standard factor loading should be greater than .50, and each modification indices (MI) should not exceed 100 (Kline, 2002).

The first modification was made on the model was the deletion of two items in Social Interaction with Companions. SI\_C9 and SI\_C16 loaded on Information\_C factor seemed to be correlated with multiple factors, having large residuals. Specifically SI\_C9 (The companion travelers provided me with information about problems) and SI\_C16 (I took advantage of companion travelers' help) showed high correlations with Information factor of Social Interactions with Other Customers. Among the factors included in the

model, Information factor corresponds to a less particularistic resource whose value is less influenced by the particular person involved in the exchange (Converse & Foa, 1993). This means that respondents might thus have been less accurate answering with whom they exchanged a less particularistic resource. This might have resulted in high correlations with multiple factors of these two items in the structural model. A Chisquare difference test revealed that the model's fit significantly improved with the deletion of these two items in the factor (Table 4-19).

The second modification made on the model was the deletion of SI S7 item. This item was associated with a large residual and cross-loaded on Love S and Service S. An examination of the wording of the item revealed that it might not clearly been associated with exchange of love particularly with service providers. A Chi-square difference test revealed that the model's fit was significantly improved with the deletion of these three items in each factor. The Chi-square statistic was still significant ( $\chi^2 = 544.2$  (263), p<.000), however, this test is very sensitive to a sample size. On the other hand, some scholars defend that a better indicator of fit is the size of the Chi-square divided by the number of degree of freedom (Hatcher, 1994; Kline, 2005). According to Kline (2005),  $\chi^2/df$  smaller than three is an acceptable fit. The ratio between the Chi-square value and the number of degree of freedom of this test was 2.07. All other fit indices (RMSEA=.05; NFI=.91, CFI=.95; GFI=.90; NNFI=.95) also indicated that the modified model had an acceptable fit to the data. The modified model exceeded the proposed model on all fit criteria, which confirmed that the modification was empirically meaningful and appropriate.

During the analysis process, a total of 22 observed variables were removed and the details of this information are provided in Table 4-18. Every factor in the final measurement model was measured using at least two observed variables as shown in Figure 4-7.

Table 4-18. Variables removed from EFA, CFA and the proposed measurement model based on the examination of low factor loading, multiple loadings and large residuals

				<u> </u>	
	_	Reasor	ns for removing from p	proposed model	
Analysi	# of	Low factor	Multiple loadings	Large residuals	Low
S	Variable	loadings	(MI of regression	(MI for	Reliab
Step	removed	(Standardized	weight >50 in CFA	covariance of	ility
		loading <.50)	and SEM)	error terms>100)	
Step 2	11	SI_S5, SI_S8,	SI_S12, SI_S14,		SI_O
EFA		SI_S9, SI_S11,	SI_C4, SI_C14		16
		SI C8, SI C10,	<u> </u>		
		SI_O2, SI_O10,			
		SI_O15			
Step 4	8	SI S15, SI C2,		SI S3, SI O1,	
CFA		SI_O2		_SI_O13	
Step 5	3		SI S7, SI C9,		
Propose			SI C16		
d			_		
model					

Table 4-19. Comparison of overall fit indices for proposed and modified full measurement models (N=400)

Model	$\chi^2$ (df)	RMS EA	NFI	CFI	GFI	NNFI (Rho)	$\Delta \chi^2$
Proposed Model Modified Model 1	939.0 (338)	.07	.87	.91	.86	90	
(Deletion of 2 items)	649.2 (289)	.06	.89	.93	.89	.94	289.8
Modified Model 2 (Deletion of 1 item)	544.2 (263)	.05	.91	.95	.90	.95	105.0

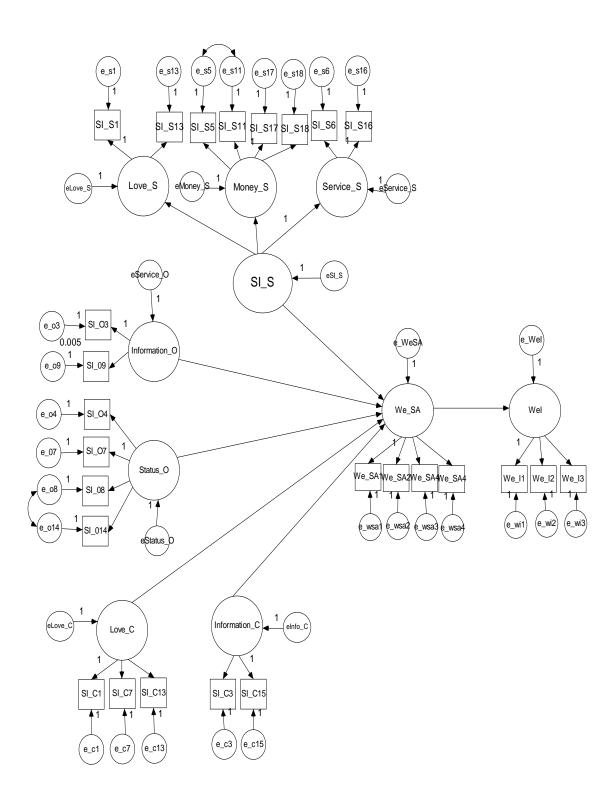


Figure 4-7. Final modified model for this study (N=400)

## **Hypothesis Testing**

## Hypothesis 1 to 7

Path coefficients estimated by SEM and results of hypotheses 1 to 4 are presented in Table 4-20. The path coefficient from Social Interactions with Service Providers to We-Satisfaction was significant at the .001 level, indicating a positive relationship ( $\beta$  Service Providers=.438, p<.001).

The path coefficients from the two factors of Social Interactions with Companions to We-Satisfaction also were significant at the .001 level, indicating a positive relationship ( $\beta_{Love-Companions}$ =.390, p<.001,  $\beta_{Information-Companions}$ =.139, p<.05). But, for the path coefficients between two factors of Social Interactions with Other Customers and We-Satisfaction, only one path coefficient from Status\_O factor to We-Satisfaction was positive and statistically significant ( $\beta_{Status-Other customers}$ =.183, p<.05). The path coefficient from Information\_O factor to We-Satisfaction was negative and statistically insignificant ( $\beta_{Information-Other customers}$ =-.06, p>.05). Therefore, while Hypothesis 1 and 3 were supported, Hypothesis 4 was only partially supported. For Hypothesis 4 addressing Social Interactions with Local Residents, as explained in the previous, due to a high nonresponse rate of the items belonging to this construct and its low reliability, this concept was removed from the final measurement model.

Although Hypothesis 7 again was not able to be examined, Social Interactions with Service Providers ( $\beta$  Service Providers=.438) had the highest explanatory power for We-Satisfaction among all types of social interactions, based on the relative values of the

path coefficients t shown in Figure 4-8. These three factors explained 52% of the variance in We-Satisfaction. The effect of Social Interactions with Companions on We-Satisfaction was higher than that of Social Interactions with Other Customers ( $\beta_{Love-Companions}$ =.139, p<.05,  $\beta_{Information-Companions}$ =.390, p<.001);  $\beta_{Status-Other customers}$ =.183, p<.05,  $\beta_{Information-Other customers}$ =-.06, p>.05). Therefore, hypothesis 6 was supported.

Table 4-20. Path coefficients in the hypothesized structural model (hypothesis 1 to 4)

Path	Standardized Coefficient	t-value	Standard Error	Hypotheses testing results
Hypothesis 1				
SI_S→We-SA	.438**	4.759	.176	Supported
Hypothesis 2		1	VA	
SI_L→We-SA		1	NA.	
Hypothesis 3: SI_C				
Love_C $\rightarrow$ We-SA	.390**	4.211	.109	Supported
Information_C $\rightarrow$ We-SA	.139*	1.990	.066	
Hypothesis 4: SI_O				Partially
Status_ $O \rightarrow We-SA$	.183*	1.855	.178	•
Information_ $O \rightarrow We-SA$	06	466	.001	supported

<sup>\*</sup>Significant at p<.05

<sup>\*\*</sup>Significant at p<.001

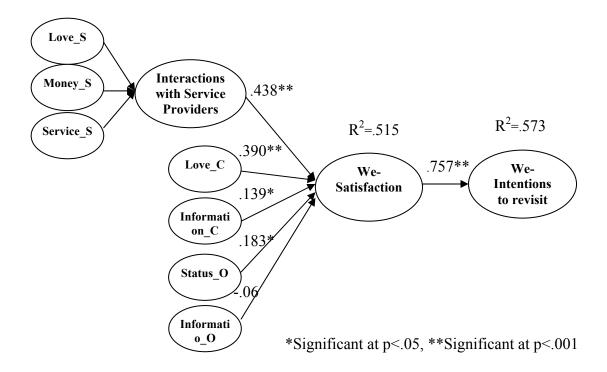


Figure 4-8. Test results for the proposed structural model: standardized path coefficients and squared multiple correlations  $(R^2)$ 

In order to test Hypothesis 5 which states that particularistic resources exchanged via social interaction will influence satisfaction more than universal resources, analysis needed to be done to compare the effect of the factors representing particular and universal resources respectively on We-Satisfaction. To do this, path coefficients of particularistic and universal resources to We-Satisfaction were compared.

As resource theory identifies (Foa & Foa, 1980), Love\_S and Love\_C factors correspond to the most particularistic resources and Money\_S is the most universal resource while Service\_S and Information\_C reside in between. The factors residing in Social Interactions with Other Customers (i.e., Status\_O and Information\_O) were not

considered because the path coefficient from Information\_O to We-Satisfaction was not statistically significant. Therefore, examination focused on the path coefficients of the factors in the first-order model only including factors in the two constructs (i.e., Social Interactions with Service Providers and Social Interactions with Companions) (Table 4-21). Results from the SEM revealed that the path coefficient of Love\_S ( $\beta_{Love\_S}$ =.753, p<.001) was greater than that of Money\_S ( $\beta_{Money\_S}$ =.406, p<.05). Similar to this finding, the path coefficients of Love\_C ( $\beta_{Love\_C}$ =.390, p<.001) of Social Interactions with Companions to We-Satisfaction was greater than that from Information\_C ( $\beta_{Information\_C}$ =.139, p<.001). Thus, "Love" was found to be the better predictor in both interactions, supporting Hypothesis 5.

Table 4-21. Path coefficients in the hypothesized structural model (hypothesis 5)

Path	Standardized Coefficient	t-value	Standard Error	Hypotheses testing results
Social Interactions with S	ervice			
<u>Providers</u>				
Particular resources				Supported
: Love_S→SI_S	.753**	-	-	Supported
Universal resources				
: Money_S→SI_S	.406**	.157	.147	
Social Interactions with C	<u>Companions</u>			
Particular resources				
: Love_C→We-SA	.390**	2.955	.178	
Universal resources				Supported
: Information_ $C \rightarrow We$ -	.139*	466	.001	
SA				

<sup>\*</sup>Significant at p<.05

<sup>\*\*</sup>Significant at p<.001

### *Hypothesis* 8, 8-1 and 8-2

The measurement models respectively composed of We-Satisfaction/We-Intentions and I-Satisfaction/I-Intentions were compared to test hypothesis 8. In order to examine which model performs better, the path coefficients from one second-order factor and four first-order factors to We-Satisfaction and I-Satisfaction, the amount of variance explained by the endogenous variables, and the model fit indices were compared.

The standard path coefficients are displayed in Table 4-22 and Figure 4-9. Analysis of the t-values associated with the null hypothesis that each of the coefficients are equal to zero revealed that all path were significant, except one path between Service\_O to We-and I-Satisfaction, suggesting that most paths are assisting in the prediction of We-and I-Intentions to revisit. However, it should be noted that, in the I-Intention Model, while Social Interactions with Service Providers had the highest standardized path coefficient (.508) the same as in We-Intention Model, the path from Love C (.236) was smaller than that (.390) in the We-Intention Model.

Table 4-23 shows the amount of variance explained by each of the endogenous variables. The amount of variance explained for We-Satisfaction was 54.4%, for We-Intentions it was 56.2%, for I-Satisfaction it was 45.6%, and for I-Intentions it was 52.5%. Accordingly, the We-Intention Model explained more of the variance in each of endogenous variables than the I-Intention Model.

In terms of the model fits, while the We-Intention Model fits the data well as noted previously, the fit indices of I-Intention model provided invariable statistics

(NFI=.91; NNFI=.94; CFI=.95; RMSEA=.05; and GFI=.89). As in Table 4-24, GFI and NNFI estimates were not above acceptable criterion levels of .90 and .95 respectively. Thus, the modification indices were checked to examine if further modification could be conducted. The result of examination showed that neither did the modification indices exceed 50 nor was the modification suggestion on adding paths between variables or covariance between error terms theoretically meaningful (Kline, 2006). Bentler and Chou (1987) proposed that models with five factors and more than 25 items tended to have an inability to fit the model well to the data. The I-Intention model consisted of one second-order factor, nine first-order factors and 25 items. Hence, the model was deemed complex according to Bentler and Chou's standard (1987). Although the fit of I-Intention model was not as good as that of the We-Intention model, it was considered moderate and acceptable.

The results of analysis specified above suggested that Hypothesis 8 was supported and We-Intention Model explains the relationship between social interaction and revisit intention better than I-Intention Model.

Table 4-22. Performance of factors in We- and I-Intention Models

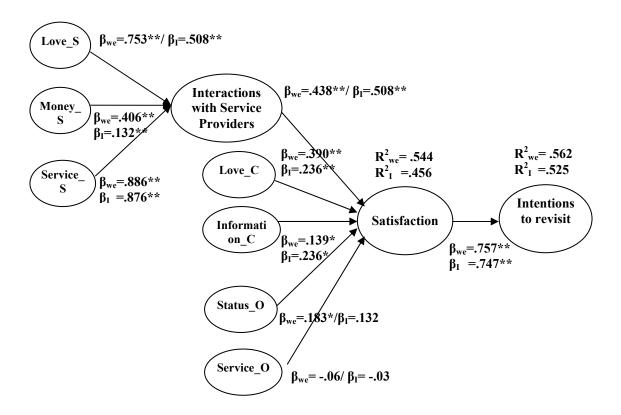
Paths	Standard Path Coefficient	Standard Error	t-value	p	Squared Multiple Correlatio ns (R <sup>2</sup> )
We Intentions Model					
$Love_S \rightarrow SI_S$	.753	-	-	-	.568
Money_S→SI_S	.406	.157	6.267	p<.001	.165
Service_S→SI_S	.886	.144	10.698	p<.001	.893
SI_S→We-SA	.438	.164	5.097	p<.001	
Love_C→We-SA	.390	.178	2.955	p<.001	
Information_ $C \rightarrow We-SA$	.139	.073	10.061	p<.05	
Information $O \rightarrow We-SA$	06	.001	466	p>.05	
Status_ $O \rightarrow We-SA$	.183	.178	1.855	p<.05	
We-SA→We-I	.757	.043	19.769	p<.001	.562
I_Intentions Model					
$Love_S \rightarrow SI_S$	.713	-	-		.508
Money_S→SI_S	.473	.181	6.432	p<.001	.224
Service_S→SI_S	.876	.223	7.716	p<.001	.892
SI_S <b>→</b> I-SA	.508	.111	7.383	p<.001	
Love_C→ I-SA	.236	.113	2.482	P<.05	
Information_C $\rightarrow$ I-SA	.153	.058	2.992	P<.05	
Information_O→I-SA	03	.081	604	p>.05	
Status_O→ I-SA	.132	041	2.657	p<.05	
I-SA <b>→</b> I-I	.747	.051	15.794	p<.001	.525

Table 4-23. Explained variance of endogenous variables

Variables	We-Intention Model	I-Intention Model
Satisfaction (We/I)	.544	.456
Intentions (We/I)	.562	.525

Table 4-24.	Fit indiaga	of tha	Waand	I Intention	Madala
1 abie 4-24.	rit maices	or me	we-and	1-Intention	wiodeis

Model	$\chi^2$ (df)	$\chi^2/df$	RMSE A	NFI	CFI	GFI	NNFI (Rho)
We-Intention Model	544.2 (263)	2.06	.05	.91	.95	.90	.95
I-Intention Model	554.4 (261)	2.12	.05	.91	.95	.89	.94



<sup>\*</sup>Significant at p<.05

Figure 4-9. Test results for the proposed structural model: standardized path coefficients and squared multiple correlations (R<sup>2</sup>) for We- ad I-Intention model

<sup>\*\*</sup>Significant at p<.001

Hypothesis 8-1 and 8-2 state that there would a positive relationship between We-/I-satisfaction and We-/I-intentions to revisit. In support of both hypotheses, the result of the analysis showed that the standard path coefficients from We-Satisfaction to We-Intentions and I-Satisfaction to I-Intentions were positive and significant ( $\beta_{we}$ =.757, t=19.769, p<.001,  $\beta_{I}$ =.747, t= 15.794, p<.001).

## Hypothesis 9

The role of visitors' environmental belief as a moderator of the relationships in the proposed structural model was assessed with multiple group analysis in SEM. To determine the moderating influence, the three step procedures discussed in Chapter 3 were adopted.

Based on the composite mean score (3.78) of visitors' environmental beliefs (new ecological paradigm), data were divided into two groups – one, visitors showing a relatively higher environmental belief (NEP mean score  $\geq$  3.78, N<sub>High</sub>=221) and the other, visitors indicating a relatively lower environmental belief (NEP mean score  $\leq$  3.78, N<sub>Low</sub>=179). The indicators retained in both groups were identical to conduct a comparison.

The structural model, as a baseline model, was tested with the pooled sample. The fit indices (RMSEA=.04; NFI=.90; CFI=.94; GFI=.91; NNFI=.96) indicated that this model had an acceptable fit to the pooled data. This baseline model was then tested separately with the High and Low NEP groups. The fit indices of both groups suggested an acceptable fit to the data, implying a similar factor structure across the groups (High

NEP group: RMSEA=.05; NFI=.90, CFI=.94; GFI=.89; NNFI=.95; Low NEP group: RMSEA=.06; NFI=.90, CFI=.95; GFI=.90; NNFI=.94) (Table 4-25).

The  $\chi^2$  difference test was used again to test for the moderating effects on individual paths. Table 4-26 presents Chi-square difference results for path coefficients between the high and low NEP groups. The results indicate that the paths from Status\_O and Information\_O to We-Satisfaction were significantly different between the two groups in the following:  $(\Delta\chi^2$  Information\_O (1) =10.41, p <.05;  $\Delta\chi^2$  Status\_O(1) =9.64, p <.05. But, no statistically significant differences were found in other paths across the groups.

The significant Chi-square change indicated that the two paths were not equivalent across groups, as was the variance extracted for We-Satisfaction. However, in the invariant test of the path from Information\_O, the variance extracted was greater in High NEP group ( $R^2_{High}$ = .82;  $R^2_{Low}$  = .67) while the variance extracted was greater in Low NEP group in the path from Status\_O to We-Satisfaction ( $R^2_{High}$ = .64;  $R^2_{Low}$ = .78) (Table 4-27). Based on these results specified above, Hypothesis 9 was not supported.

Table 4-25. Estimation of fit indices of baseline model

	$\chi^2(df)$	RMSEA	NFI	CFI	GFI	NNFI (Rho)
Baseline Model	1,714.4(705)	.04	.90	.94	.91	.96
High NEP Group	1,205.6(452)	.05	.90	.94	.90	.95
Low NEP Group	1.156.6(452)	.06	.90	.95	.90	.94

Table 4-26. Multiple group path analysis: comparison of path coefficients and t value for the proposed model

	High Environmental		Low Enviro	High		
Paths _	Concern (	N=221)	Concern (	Concern (N=179)		
1 40110	Standardized Coefficient	t-value	Standardized Coefficient	t-value	Low	
SI_S→We-SA	.594	.215	.511	.598	H = L	
Love_C→We-SA	.280	.234	.291	.794	$H = \Gamma$	
Information_C→We-SA	.020	.316	.001	.216	H = L	
Information_O→ We-SA	.152	3.176*	.003	2.100*	$H > \Gamma$	
Status_O→ We-SA	.112	.099	.116	1.099	$H = \Gamma$	

Note: H: visitor group with high environmental concerns, L: visitor group with low environmental concerns.\* significant at p<.05

Table 4-27. Results of testing for moderating effects based on the proposed model: test of invariance for path coefficients

Path	Unconstrained (df=398)	Partially constrained (df=399)	R <sup>2</sup> We-SA High NEP	R <sup>2</sup> We-SA Low NEP	$\Delta\chi^2$
SI_S →We-SA	846.69	848.49	.60	.68	1.79
Love_C →We-SA	846.69	846.84	.35	.67	.143
Information_ $C \rightarrow We$ -	846.69	847.07	.62	.67	.381
SA					
Information O→We-	846.69	857.11	.82	.67	10.41
SA					*
Status_O →We-SA	846.69	848.33	.64	.78	2.34*

<sup>\*</sup> The significance difference (at p<.05) indicates a difference in path coefficient across groups.

#### **CHAPTER V**

### **DISCUSSION AND CONCLUSIONS**

#### Overview

This chapter commences with a summary of key findings generated from the previous chapters. Then, theoretical and managerial implications are discussed. Finally, the limitations of the current study and directions for future study are addressed.

## **Summary of Key Findings**

The purposes of this study were to: (1) integrate observable interpersonal interactions between service providers, local residents, companion visitors, and other customers in small-scale organic farms involved in tourism; (2) examine the relationship between those interactions and revisit intentions mediated by satisfaction; and (3) identify the role of visitors' environmental beliefs moderating such relationship.

A conceptual model was developed based on various models and theories that could be synthesized via interconnecting concepts. These included social exchange theory (Blau, 1964; Homans, 1958), resource theory (E. B. Foa & Foa, 1976), satisfaction theory (E. R. Anderson, 1973), social intention theory (Bagozzi, 2000; Tuomela & Miller, 1985), and new ecological paradigm (Dunlap, et al., 2000). Eleven hypotheses were developed within the literature review (Table 5-1).

Table 5-1. Summary of Hypothesis Testing

Hypothesis	Result of Testing
Hypothesis 1: Interaction with service providers (farmers) will	Supported
have a positive effect on satisfaction.	
Hypothesis 2*: Interaction with local residents will have a	NA
positive effect on satisfaction.	
Hypothesis 3: Interaction with other customers will have a	Partially
positive effect on satisfaction.	supported
Hypothesis 4: Interaction with companion visitors will have a positive effect on satisfaction.	Supported
Hypothesis 5: Visitors who receive particularistic resources via interaction will be more satisfied than those who received universal resources.	Supported
Hypothesis 6: The effect of visitors' interaction with their own companions on satisfaction will be stronger than the effect of visitors' interaction with other visitors on satisfaction.	Supported
Hypothesis 7*: The effect of visitors' interaction with service providers on satisfaction will be stronger than the effect of visitors' interaction with local residents on satisfaction.	NA
Hypothesis 8: We-Intention Model will fit the data better than I-intention models.	Supported
<i>Hypothesis</i> 8-1: There will be a positive relationship between we-satisfaction and we-intention to revisit.	Supported
<i>Hypothesis</i> 8-2: There will be a positive relationship between I-satisfaction and I-intention to revisit.	Supported
<i>Hypothesis</i> 9: The effect of social interactions on satisfaction will be stronger for high NEP visitors than for low NEP visitors.	Not supported

<sup>\*</sup> Couldn't be tested as social interactions with local residents was excluded from the final model due to high item nonresponse.

# Characteristics of Visitors to Tourism Operations on Organic Farms

The data were collected onsite and online from visitors to local organic farms.

Analyses were then conducted in five steps using SPSS 15.0 and AMOS 7.0. In step one, descriptive analyses were provided for the study subject (N=400) and other subject (N=31) in terms of demographic profiles. It was found that visitors to organic farms

mostly accompanied their travel companions (92.8% of the all respondents) rather than visited alone. Their main companions on their visit were either their families (60.8%) or friends (34.0%). These results supported previous studies that have found that companion involvement is one of the most common characteristics in tourism behavior and decision-making (Crompton, 1981; Gitelson & Kerstetter, 1994; Nichols & Snepenger, 1988; Russell, et al., 2008; Sirakaya & Woodside, 2005). While the average size of the trip party was reported to be about four people, the most common travel party arrangement was a family with children (40.1%).

In step two, the dimensionality of the constructs and preliminary reliability of measures were examined using exploratory factor analysis. In this step, one construct (Social Interactions with Local Residents) was removed from the analysis because the nonresponse rate for the items (item nonresponse) belonging to this construct was particularly high (35.1%).

In step three, the data were tested for modeling assumptions and were treated for missing values. In step four, the degree of reliability and validity of measures were tested using confirmatory factor analysis. Due to the complexity of the constructs of interest, the dimensionality of the constructs was reexamined to determine the items to exclude and develop the second-order factor models of the constructs of interests.

In step five, Hypotheses 1 to 9 were tested using structural equation modeling.

While Hypotheses 1 to 8 were supported, except Hypotheses 2 and 7, which included the Social Interaction with Local Resident construct, Hypothesis 9 was not supported. This

means the moderating role of environmental beliefs for the relationship between social interactions and satisfaction was not sustained.

This study extends three types of social interactions from the visitors' standpoint. Although the literature on customers' interpersonal interactions in service encounters has recently accumulated in tourism, considerable room for development remains. One area for further study is to integrate social interactions with different parties: service providers, local residents, companions, and other customers. Although interactions with local resident were not included in the analysis due to item nonresponse, this study integrated these observable interactions by modeling three types of social exchange relationships perceived by visitors in service encounters. The integrated model indicated that social interactions with service providers through love, money, and service exchange and those with companions through love and information exchange positively affected satisfaction with the farm visit. For the effect of interactions with other customers, exchange of status resources was positive, but the link between interactions through exchange of information resource was neither positive nor statistically significant. In fact, the path coefficient linking interactions of Information resources exchanged was negative and almost approached zero ( $\beta = -.06$ ), indicating there is almost no relationship between these two variables. A possible explanation of this finding might be the characteristics of the target sample, which only considered respondents accompanying companions. For them, interactions with other customers may be relatively small compared to interactions with their companions, who could require less attention than interactions with other customers. Thus, an examination

including respondents who did not accompany companions might lead to a different outcome in revealing the strength of the relationship between interpersonal interactions and satisfaction for agritourism encounters.

Additionally, this study demonstrated that social interactions of particular resources (i.e., love) contributed more toward satisfaction than those of universal resources (i.e., money). This is similar to previous literature which has suggested that the characteristics of resources exchanged influence the post-experience evaluation (Rettig & Bubolz, 1983a, 1983b). The types of relationships were also important indicators in comparing the effects of interactions on satisfaction, as interactions with companions influenced satisfaction more than those with other customers. Although the tourism literature has not paid attention to the relationships between visitors and their companions associated with service experiences, this study revealed an important role of travel companions in visitors' overall experience.

## Moderating Role of the Environmental Beliefs

This study did not provide empirical evidence that the effects of social interactions on satisfaction vary according to the level of visitors' environmental beliefs. The environmental beliefs measured by the revised new ecological paradigm (NEP) scale showed that the visitors to organic farms indicated a relatively high score (average 3.78). Previous research in nature-based tourism has suggested that those who hold positive environmental beliefs are more likely to have a desire to learn and experience nature (cf. Eagles & Higgins, 1998) and also to have a positive evaluation judgment

guided by the experience and service suitable to their eco-sense (Orams, 1997). Such a relationship was not found in this study setting. Since the NEP for the study population was fairly high, the mean rating of the high-NEP (mean rating of NEP<sub>High</sub> = 4.06) group and the low-NEP group (mean rating of NEP<sub>Low</sub> = 3.49) as a single indication of a proenvironment and anti-environment stance, respectively, oversimplified the analysis. Hence, it should be noted that the insignificant (p<.05) moderating role of NEP in the current study does not mean that visitors' environmental beliefs are not important for understanding satisfaction associated with an organic farm visit. Rather, environmental concern is prerequisite to understand visitors to organic farms as this

### Valid Measurement Model

After exploratory factor analysis of the three major social interactions scales, confirmatory factor analysis was used to test measurement validity. Modification procedures were performed since the proposed measurement model for structural equation modeling did not adequately fit the data. The standardized factor loadings, normalized residuals, and modification indices were used in determining variables that were removed. The modified measurement model was found to fit the data well. CFA results established evidence of reliability, convergent validity, and discriminant validity in the modified measurement model.

The factor structure of social interactions with service providers was inconsistent with the literature, showing a second-order three-factor structure. The second-order three-factor model of social interactions with service providers consisted of three

resource constructs—love, money, and service, which were separate, but related. For social interactions both with companions and with other customers, the first-order two-factor models were developed based on resource theory of social exchange. The measurement models of these three types of social interactions indicated how visitors' perceptions of three specific forms of social interactions influence their satisfaction with the service experience and their revisit intentions. In particular, results of interactions with service providers were consistent with those from other studies in tourism and service marketing (Coulter & Ligas, 2004; Czepiel, 1990; Grove & Fisk, 1997; Moore, et al., 2005; Noe & Uysal, 2003; Rosenbaum & Massiah, 2007; Sierra & McQuitty, 2005; Wu, 2007; Yi & Gong, 2009; Yoon, Seo, & Yoon, 2004).

Finally, the final model containing We-Intentions as an outcome variable and We-Satisfaction as a mediating variable was compared with the model with I-Intentions and I-Satisfaction. The analysis of these competing models of two kinds of interactions and satisfaction confirmed that the We-Intention model performs better. This indicates the importance of companion involvement in the relevance of We-Intentions in tourism behavior and decision making.

### Item Nonresponse

Due to a high nonresponse (i.e., missing data) in the items related to the social interactions with local residents construct, the construct was removed from the final measurement model to avoid misleading conclusion (Chapman, 1991). The occurrence of item nonresponse in this study resulted from the location-specific characteristics of the

two major onsite survey farms as specified in Chapter 4. While resident respondents at these two farms tended to leave the questions unanswered (i.e., 35.1% of the all respondents did not answer the questions for social interactions with local residents), all nonresidents completed the same questions. It was found that a lack of clear definition of local residents was drawn from visitors' perspective in this study. Moreover, the definition of "local residents" should address both resident and nonresident visitors in tourism literature as their definition might not be identical.

## **Theoretical Implications**

The service encounter literature is well established in the service marketing field, adopting theories from psychology and social psychology, and provides theoretical concepts that can be used to explore agritourism encounters in this study. As a framework to examine the interactions and exchanges at agritourism encounters, social exchange theory, resource theory, satisfaction theory, and the social intention concepts were applied. In particular, this study investigated the utility of resource theory linking to social exchange theory to examine the relationships between social interactions and social intention to revisit (called We-Intentions) mediated by satisfaction in a tourism context.

This study proposed and tested alternative factors and measure of social interactions with three discrete parties hypothesized to contribute to We-Intentions to revisit agritourism encounters. This study contributed to the repeat visit and satisfaction literature because it examined an alternative theoretical explanation focusing on social

examine social interactions with service providers, companions, and other customers simultaneously in the visitors' domain. Although there are different types of social interactions that can play a critical role in tourism service encounters, previous research has focused mainly on those interactions between service providers and customers. By integrating observable social interactions at agritourism encounters, this study provides a framework for understanding the contribution of different types of social interactions to satisfaction and revisit intention that are grounded in social exchange theory and resource theory. In general, relationships between customers and tourism operations are based on repetitive interactions over time, which provide opportunities for customers to develop an enduring, positive relationship with service providers, companions, and other customers. This implies the importance of examining the role of social interactions from a customer perspective drawn from social exchange theory, which only has been applied to local residents in the tourism literature.

Overall, these findings support the proposed structural model for relationships between perceptions of social interactions experienced with service providers, companions, and other customers. As predicted, perceptions of particularistic resources (i.e., Love) were associated with higher levels of satisfaction than universal resources (i.e., Money and Information). This finding is consistent with Morais (2000) who utilized resource theory and found that social interactions via particularistic resources are associated with enduring, intimate, and satisfying relationships. Therefore, the study provided empirical support to the hypothesized influence of Social Interactions on

satisfaction and to the usefulness of resource theory as an alternative theoretical framework to explain satisfaction and revisit intentions. In addition, different from previous studies on customers' social interactions with service providers and other customers, this study adopted resource theory, which suggests multidimensional constructs of social interactions. The usefulness of resource theory in measuring customers' social interactions is manifest in important contributions to the research (Berg, Piner, & Frank, 1993).

The study also provided insight into intentions. Traditional revisit intentions in tourism have emphasized individual travelers' repeat visit intention. In this study, as a dependent variable, intentions was conceptualized as a shared, joint, social, or collective intention (called We-Intentions), instead of personal intention. In the service marketing literature, Bagozzi (2000) defines this particular type of intention as intentional social action and addressed its importance in consumer behavior.

In this study, the conceptualization of We-Intentions was found to be applicable to explaining revisit intention in small-scale agritourism where a vast majority of its customers visited with their companions. Consistent with the We-Intention concept, satisfaction was also considered as We-Satisfaction. Not only were the measures of We-Satisfaction and We-Intention in this study found to be reliable and valid, but also the We-Intention model, in overall, outperformed I-Intention Model. This also indicates the importance of the unique sociological nature of tourism behavior. Some scholars have wondered whether the use of collective concepts and their role as explanantia (explaining items) and explananda can be interpreted by, or reduced to, psychological

concepts, suggesting new conceptual frameworks to incorporate them into theories and research concerning tourism behaviors (Bagozzi & Dholakia, 2003; S. H. Kim, 2007; Russell, et al., 2008).

Applying social intention concept to the current study, it was found that visitors' intentions to revisit is a joint intention that relies on some underlying mutually accepted conceptual and situational presuppositions, but does not require agreement making or joint intention.

As this study context is agritourism operations on organic farms, which are all environment-friendly natural areas, visitors' environmental beliefs were proposed as a moderator of the relationship between their social interactions and satisfaction with their experience. For a deeper understanding of those environment-friendly visitors, the concept and theory addressing a behavior itself might be better indicators rather than merely a perception or an attitude. For example, the concept of socially responsible behavior defined as "one who purchases products and services perceived to have a positive influence on the environment or who patronizes businesses that attempt to effect related positive social change" (Roberts, 1993:140) would be one possible option.

## **Managerial Implications**

Despite the growing interest by U.S. customers and farmers to participate in agritourism activities, the literature review indicated a paucity of studies dealing with the demand for these activities. As repeat visits have been increasingly recognized for its great potentials in terms of size and economic contribution in recent tourism research,

this would be particularly important for the economic sustainability of small-scale agritourism operations that lack marketing resources to search for new customers.

This study indicates that successful customer relationships are a function of not only successful completion of the core service being offered, but also the personal aspects of the relationship with the customers. A primary managerial implication of agritourism operations results from the findings that each type of social interaction has been shown to positively influence satisfaction and revisit intention indirectly.

Regarding social interaction with service providers (farmers in this study), steps should be taken to encourage customer–service provider interactions, which would be a clear benefit to customer perceptions. Customer–service provider dynamics during service encounters are likely to give clues to the service providers about the customers' perceptions of the relationships that are inherently interpretive and subjective. This means that interactions can provide an opportunity to decipher customers' perception and to adjust their own role to ensure that the customers' perceptions of the relationship are intact. Personalization and impression management, which can establish and maintain a relationship with customers (Bolino, 1999; Price, Arnould, & Tierney, 1995), can be applied when service providers communicate their intentions for delivering the service. For this to happen, developing effective two-way communication tools for ensuring care of customers is a prerequisite.

In terms of the dimensions of social interaction with service providers, an important tenet can be suggested. As the theoretical framework suggested that particularistic resources exchanged may help increase customers' satisfaction with their

experience, this study provides evidence that providers who wish for their customers to return should exchange love and services. For example, providers could create personalized interactions to let their customers know how they are cared for and how important they are. On the other hand, monetary benefits such as price discounts did not sustain customer satisfaction as highly as care and personal relationship did. The value associated with a price discount is just a cheaper price that is applicable to all customers, so offering a price discount was the least valuable resource that customers are looking for. In order to provide universal resources more effectively, they needs to be designed to convey personal care and attention towards individual tourists rather than just being monetary benefits. In this way, tourists can perceive universal monetary benefits as more particularistic resources to them.

Regarding customer—to—other customer interactions, status exchanged were found to be important aspects. It is thus advisable to encourage agritourism operations to consider various ways in which they might be able to nurture customer abilities to develop their own networks of reciprocal exchanges. Agritourism operators could organize informal communities to share information and reward such activities. A community that shares advice and information about organic food and health and/or a parental community that discusses healthy food for childrearing could be examples. As in some other service contexts, standing in line at the farmer's market, which is a common aspect of agritourism, is a serious challenge. However, one's wait in line could be managed as a satisfying experience by creating a socializating environment. For family visitors with children, standing in line can be a challenging task. To make their

waiting in line more comfortable and entertaining, farmers could arrange play areas with farm entertainment (e.g., henhouses) for children whom parents bring them close to their farm stand. Watching their children playing would most likely be more enjoyable and allow an opportunity for relaxed talking with others, while also waiting in line.

Socializing with other customers in line could also beneficial. However, satisfying all customers with the same service delivery is virtually impossible. Educating customers is also important in the types of behavior expected of them.

For farm visitors, it was found that families, friends, and relatives play important roles as travel companions who exchange care and warmth through shared experience as well as being a source of information related to farm visits. Accordingly, when developing marketing programs, operators should emphasize the wants and needs of travel groups as well as those of individual travelers. Although interaction with companions is not only controllable, agritourism services could provide a context for mutual enjoyment and shared experience, leading to a couple-, family-, and group-friendly environment. As a majority of respondents accompanied their family to the farms, service providers should emphasize in their advertising the family-friendly environmental characteristics that could enhance satisfaction in the travel party with whom a visitor will visit.

This study reveals that the vast majority of visitors are loyal customers (in terms of number of visits) who hold a relatively high level of environmental concern. Having high concerns about the environment could make them more susceptible to marketing programs that address environmental issues. To make social encounters at organic farms

into a more meaningful experience, service providers could address the environmental issues that customers are interested in through educational programs and events. For example, programs and events could include the topics of food safety, healthy living, environment-friendly agricultural practice, and so on. Educational programs could offer garden-based cooking lessons, hands-on classes on organic gardening, and so on. For organic farmers who consider adopting tourism into their farm operations, a group of communities identified as high environmental concerns of food and health segments could be the primary target.

#### **Limitations and Future Research**

Despite its theoretical and practical contributions to the field of current agritourism marketing and agritourism consumer behavior, several limitations of the current study exist.

Combining social exchange theory and resource theory, this study adopted existing scales to measure social interactions. However, the process of developing this scale in the tourism field is still in its beginning. Consequently, additional efforts in scale development need to be done to ensure the validity and reliability of the scales used. One challenge associated with social interactions with service providers was product dimension. Due to dual factor loading and insufficient factor loading score issues, all items belonging to this dimension were not included in the final model. Therefore, the influence of product resource exchange could not be tested in this study although it is believed to be theoretically and practically important to this study context. Given the fact

that this study context is organic farms and its visitors and that one of the visitors' one of the main purposes was to purchase the farm's products, the importance of the product dimension should not be ignored. Subsequent efforts in scale formation addressing this dimension should be made for more theoretical completeness.

Another scale that requires further attention is the NEP scale. Although previous research suggested multiple dimensions of this scale, dimensionality was not examined in this study. Further analysis of the dimensionality of the NEP scale and the influence of its individual factors on satisfaction could provide more information on how visitors' environmental concerns play a role in their post-experience evaluation of organic farms.

A high item nonresponse rate of social interaction with local residents resulted in the deletion of this concept from the final model for this study. The characteristics of study farms and the lack of a concrete definition of "local residents" from the visitors' perspective are potential reasons for the high item nonresponse rate. Moreover, the lack of a precise, commonly applied definition to various visitor types (i.e., local visitors, out-of-state visitors) might have caused a misunderstanding for some questions, although some respondents completed the questions. A more specific definition of "local resident" relevant to the various types of visitors needs to be determined for future research.

Some scholars adopting the theory of reasoned action suggest that behavioral intentions are better indicators of actual behavior than are attitudes because intentions also consider how others think about the behavior (i.e., subjective norms) (Ajzen, 1991a). However, it has been repeatedly demonstrated that positive intentions are not always reflected in consumers' corresponding behaviors in various fields (Bagozzi, 2007b;

Sinehotta, Scholz, & Schwarzer, 2005; Sutton, 2008; Vermeir & Verbeke, 2008). To help better understand visitors to organic farms, research needs to be done to find out what actually motivates people to visit organic farms and buy organic products while there. In addition, research can be advanced by understanding the importance of companion travelers (visitors) in tourism behavior since travel usually involves a group of people. The focus of companion travelers (visitors) for this study was on the current travel partners and not on potential partners. However, a comparison of current and future companion travelers (visitors) associated with We-Intentions to revisit could be very relevant. It is quite possible that people would have an intention to visit with different travel companions.

This study confined the consequences of social interactions on satisfaction and revisit intention. However, service marketing literature extends its consequences to various outcomes such as commitment, citizenship behavior, and loyalty. Loyalty, in particular, can be examined at least two ways in a service intensive industry: brand loyalty and personnel loyalty (Bove, 2006). In some contexts of marketing, loyalty to any one service worker has been generally discouraged by management due to the vulnerability of customer retention in situations where key employees leave the firm. However, in the pervasive small-scale operations of agritourism, personnel loyalty is likely a very suitable from of loyalty that agritourism operators could apply to their customers. Some researchers have suggested that personal loyalty, because it is built on foundations of trust and commitment, has a greater influence on desirable customer behaviors such as positive word of mouth (Ghingold & Maier, 1987; Reynolds &

Arnould, 2000) than other forms of relationships or loyalty that can develop. Therefore, future research could be usefully directed toward exploring how interpersonal interactions contribute to personnel loyalty and its positive effects.

To determine the generalizability of the model and identify the boundary conditions, the model should be tested in a range of service delivery environments. Key distinguishing features of such a setting are the type of service, degree of customer contact required in service delivery, and the types of relationships between the operations and customers. The study could be replicated in different settings of those conditions to enhance the external validity. Also, given an increasingly global market and the importance of cultural difference on relational behavior (Zhang, Beatty, & Walsh, 2008), a test of the model outside a Western context should be considered to compare and contrast the effects of social interactions.

This study provided some evidence that customers' social interaction of resource exchange may provide an explanation for their revisit intentions. Nevertheless, additional studies are still needed to improve adequate measures of social interaction of resource exchange. In addition, it is necessary to further examine in which contexts this framework holds valid and in which context it does not. It should also be noted that the results of path coefficients in the structural models represent relationships of the variables based on previous models and theories, but not causality, although they were treated so due to the nature of SEM. Since this study is not experimental, causality statements cannot be taken for granted. Although the results are consistent with the proposed model, an experimental design examining the causal relationship between

social exchange of resources and customer satisfaction would be beneficial.

The study context was agritourism operations among organic farms, which have recently appeared in tourism literature (Choo & Jamal, 2009). Literature has highlighted that a potential for a symbiotic relationship between organic agriculture and tourism is tightly related to the development of environmentally and socially responsible tourism in rural areas (Kuo, et al., 2006). As there is growing awareness worldwide of the health risks of foods with pesticides, some consumers prefer to purchase organic products, perceiving organic products to be safer, healthier, or better for the environment than nonorganic ones. Although agritourism commonly targets people who like to visit natural environments, there seems to be little effort made in agritourism to address the needs and wants of more environmentally-friendly people among agrivisitors. By addressing this group of consumers and agrivisitors, an opportunity for a niche market exists for a current conventional agritourism operators and farmers who consider diversifying into tourism. Tourism on organic farms may increase the potential to develop a specific form of agritourism that contributes to building an environmentally and socially friendly tourism attraction and behavior. Thus, in future studies, attention needs to be paid on this new, emerging form of agritourism on organic farms. These could include aspects from both the supply and the demand side including: 1) comparison between visitors of organic farms to those of conventional farms; 2) branding of tourism on organic farms; 3) organic farmers' motivation of diversifying into tourism; and 4) a theoretical definition of tourism on organic farms.

Finally, this study suggests that the success of green marketing on farms is

derived from the integration of the social encounters into a meaningful experience developing trust and attachment to current visitors. Understanding tourist behavior on small-scale tourism operations that has been scarcely examined might not only broaden the horizons of theoretical advancement for tourist behavior, but also help small-scale tourism operations develop marketing strategy and define their own markets specific to them for a more successful future.

#### REFERENCES

- Ajzen, I. (1991a). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I. (1991b). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Albrecht, D., Bultena, G., & Novak, P. (1982). The new environmental paradigm scale. *Journal of Environmental Education*, 13(3), 39-43.
- Allison, P. D. (2001). Missing data. Thousand Oaks, CA: Sage Publications.
- Alwitt, L. F., & Pitts, R. E. (1996). Predicting purchase intentions for an environmentally sensitive product. *Journal of Consumer Psychology*, *5*(1), 49-64.
- Anderson, E. R. (1973). Consumer dissatisfaction: The effect of disconfirmed expectancy on perceived product performance. *Journal of Marketing Research*, 10, 38-44.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
- Andersson, H., & Hoffmann, R. (2008). *Spatial competition and farm tourism A hedonic pricing model*. Paper presented at the the American Agricultural

  Economics Association Annual Meeting, Orlando, FL.
- Aneshensel, C. (2002). *Theory-based data analysis for the social sciences*. Thousand Oaks, CA: Pine Forge Press.

- Ap, J. (1990). Residents' perceptions research on the social impacts of tourism. *Annals of Tourism Research*, 17(4), 610-616.
- Ap, J. (1992). Residents' perception on tourism impacts. *Annals of Tourism Research*, 19(4), 665-690.
- Arbuckle, J. L. (2006). *Amos 7.0 user's guide*. Spring House, PA: Amos Development Corporation.
- Baagozzi, R. P., & Kimmel, S. K. (1995). A comparison of leading theories for the prediction of goal-directed behaviours. *British Journal of Social Psychology 34*, 437-461.
- Bagozzi, R. P. (1975a). Marketing as exchange. Journal of Marketing, 39, 32-39.
- Bagozzi, R. P. (1975b). Social exchange in marketing. *Journal of the Academy of Marketing Science*, 3(4), 314-327.
- Bagozzi, R. P. (1977). Is all social exchange marketing?: A reply. *Journal of the Academy of Marketing Science*, 5(4), 315-326.
- Bagozzi, R. P. (1992). The self-regulation of attitude, intentions, and behavior. *Social Psychology Quarterly*, 55(2), 178-204.
- Bagozzi, R. P. (1995). Reflections on relationship marketing in consumer markets. *Journal of the Academy of Marketing Science*, 23(4), 272-277.
- Bagozzi, R. P. (2000). On the concept of international social action in consumer behavior. *Journal of Consumer Research*, 27, 388-397.

- Bagozzi, R. P. (2006). The role of social and self-conscious emotions in the regulation of business-to-business relationships in salesperson-customer interactions. *Journal of Business & Industrial Marketing*, 21(7), 453-457.
- Bagozzi, R. P. (2007a). Explaining consumer behavior and consumer action: From fragmentation to unity. *Seoul Journal of Business*, *12*(2), 111-143
- Bagozzi, R. P. (2007b). The legacy of the technology acceptance model and a proposal for a paradigm shift. *Journal of the association for the Information System*, 8(4), 244-254.
- Bagozzi, R. P., & Dholakia, U. M. (2002). Intentional social action in virtual communities. *Journal of Interactive Marketing*, *16*(2), 2-20.
- Bagozzi, R. P., & Dholakia, U. M. (2003). Intentional social action in virtual communities. *Journal of Interactive Marketing*, *16*(2), 2-21.
- Bagozzi, R. P., & Dholakia, U. M. (2006). Antecedents and purchase consequences of customer participation in small group brand communities. *International Journal of Research in Marketing*, 23, 45-61.
- Bagozzi, R. P., Dholakia, U. M., & Pearo, L. R. K. (2007). Antecedents and consequences of online social interactions. *Media Psychology*, *9*, 77-114.
- Bagozzi, R.P. & Kimmel, S.K. (1995). A comparison of leading theories for the prediction of goal-directed behaviors." *British Journal of Social Psychology*, *34*, 437-461
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models.

  \*\*Journal of Academy of Marketing Science, 16, 74-94.

- Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions. *Annals of Tourism Research*, 27(3), 785-804.
- Baker, J. (1987). The role of the environment in the marketing service: The consumer perspective. In J. A. Czepiel, C. J. Congram & J. Shanahan (Eds.), *The service challenge: Integrating for competitive advantage*. Chicago: American Marketing Association.
- Barry, J. J., & Hellerstain, D. (2004). Farm recreation. In: *Outdoor recreation for 21st* century America a report to the nation: The national survey on recreation and the environment: (pp. 149-167). State College, PA: Venture Publishing, Inc.
- Bartlett, M. S. (1950). Test of significance in factor analysis. *The British Journal of Psychology & Marketing*, 3, 77-85.
- Basala, S. L., & Klenosky, D. B. (2001). Travel-style preferences for visiting a novel destination: a conjoint investigation. *Journal of Travel Research*, 40(2), 172-182.
- Bearden, W. O., Ingram, T. N., & La Forge, R. W. (1998). *Marketing principles and perspectives* (2nd ed.). Boston, MA: Irwin McGraw Hill.
- Beckena, S., & Gnoth, J. (2004). Tourist consumption systems among overseas visitors:

  Reporting on American, German, and Australian visitors to New Zealand. *Tourism Management*, 25(3), 375–385.
- Befu, H. (1980). Structural and motivational approaches to social exchange In K. J. Gergen, M. S. Greenberg & R. H. Willis (Eds.), *Social exchange: Advances in theory and research*. New York Plenum Press

- Berg, J. H., Piner, K. E., & Frank, S. M. (1993). Resource theory and close relationships.

  In U. G. Foa, J. Converse, K. Y. Tornblom & E. B. Foa (Eds.), *Resource theory:*Explorations and application San Diego, CA: Academic Press, Inc.
- Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing*, *54*(4), 69-82.
- Bitner, M. J., Booms, B. H., & Mohr, L. A. (1994). Critical service encounters: The employee's viewpoint *Journal of Marketing*, 58(4), 95-106.
- Bitner, M. J., Booms, B. H., & Tetreault, M. S. (1990). The service encounter:

  Diagnosing favorable and unfavorable Incidents. *Journal of Marketing*, *54*(1), 71-84.
- Blau, P. M. (1964). Exchange and power in social life. New York: Wiley.
- Bolino, M. C. (1999). Citizenship and impression management: good soldiers or good actors? *Academy of Management Review*, 24(1), 82-98.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: John Wiley & Sons, Inc.
- Bove, L. L. (2006). Customer loyalty to one service worker: Should it be discouraged? International Journal of Research in Marketing, 23(1), 79-91.
- Bowers, M. R., Martin, C. L., & Luker, A. (1990). Trading places: Employees as customers, customers as employees. *Journal of Services Marketing*, 4(2), 55-69.
- Brattman, M. E. (1993). Shared intention. Ethics, 104, 97-113.
- Brinberg, D., & Wood, R. (1983). A resource exchange theory analysis of consumer behavior. *Journal of Consumer Behavior*, 10, 330-338.

- Brown, D. M. (2008). *Rural tourism: An annotated bibliography*. Economic Research Service, U.S. Department of Agriculture.
- Brown, D. M., & Reeder, R. J. (2007). Farm-based recreation: A statistical profile.

  Economic Research Service, U.S. Department of Agriculture.
- Busby, G., & Rendle, S. (2000). The transition from tourism on farms to farm tourism. *Tourism Management*, 21, 635-642.
- Buunk, B. P., & Verhoeven, K. (1991). Companionship and support at work: A microanalysis of the stress-reducing features of social interaction. *Basic and Applied Social Psychology*, 12(3), 243-258.
- Byrne, B. M. (2001). Structural equation modeling with AMOS: Basic concepts, applications, and programming. Hillsdale, NJ: Erlbaum.
- Caldwell, L. K. (1970). Authority and responsibility for environmental administration.

  Annals of the American Academy of Political and Social Science, 389, 107-115.
- Campbell, R. R., & Wade, J. L. (1972). Value systems. In R. R. Cambell. & J. L. Wade (Eds.), *Society and environment: The coming collision* (pp. 337–345). Boston: Allyn and Bacon.
- Carpio, C. E. (2006). Two-constraints models of consumer demand: An application to the demand for agritourism in the United States. Unpublished Ph.D. dissertation. North Carolina State University, Raleigh.
- Carpio, C. E., Wohlgenant, M. K., & Boonsaeng, T. (2008). The demand for agritourism in the United States. *Journal of Agricultural and Resource Economics*, 33(2), 254-269.

- Catton, W. R., Jr., & Dunlap, R. E. (1980). A new ecological paradigm for post-exuberant sociology. *American Behavioral Scientist*, 24(1), 15-47.
- Chang, T.-C. (2003). Development of leisure farms in Taiwan, and perceptions of visitors Thereto. *Journal of Travel and Tourism Marketing*, 15(1), 19-41.
- Chapman, D. (1991). Reporting complete nonresponse in a sample survey: Survey research methods. Paper presented at the American Statistical Association Conference.
- Cheek, N. H., & Burch, W. R. (1976). *The social organization of leisure in human society*. New York: Harper & Row.
- Childress, R. D., & Crompton, J. (1997). A comparison of alternative direct and discrepancy approaches to measuring quality of performance at a festival. *Journal of Travel Research*, 26, 43-57.
- Choo, H., & Jamal, T. B. (2007). Organic farm tour as a potential new form of "ecotourism" in South Korea. Paper presented at the the13th International Symposium on Society and Resource Management (ISSRM), Park City, UT.
- Choo, H., & Jamal, T. B. (2009). Tourism on organic farms in South Korea: A new form of ecotourism? *Journal of Sustainable Tourism*, 17(4), 431-454.
- CIC Research, I. (2006). *Overseas and Mexican visitors to California*. Sacramento, CA: California Tourism.
- Clark-Carter, D. (1997). Doing quantative psychological research: From design to report. East Sassex, UK: Psychology Press Ltd.

- Clark, M. S. (1981). Noncomparability of benefits given and received: A cue to the existence of friendship. *Social Psychology Quarterly*, 44, 275-381.
- Clark, M. S. (1984). Record keeping in two types of relationships *Journal Personality* and *Social Psychology*, 37, 549-557.
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, *37*, 12-24.
- Clark, M. S., Mills, J., & Powell, M. C. (1986). Keeping track of needs in communal and exchange relationships. *Journal of Personality and Social Psychology*, *51*, 333-338.
- Clarke, J. (1995). The effective marketing of small-scale tourism enterprises through national structure: Lessons from a two-way comparative study of farm tourism accommodation in the United Kingdom and New Zealand. *Journal of Vacation Marketing*, *1*(2), 137-153.
- Clarke, J. (1999). Marketing structuring for farm tourism: Beyond the individual provider of rural tourism. *Journal of Sustainable Tourism*, 7(1), 26-48.
- Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation: Analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple*regression/correlation analysis for the behavioral sciences (3rd edition).

  Mahwah, NJ: Lawrence Erlbaum Publishers.
- Coleman, D., & Iso-Ahola, S. E. (1993). Leisure and health: The role of social support and self-determination. *Journal of Leisure Research*, 25(2), 111-128.

- Converse, J., & Foa, U. G. (1993). Some principles of equity in interpersonal exchanges.

  In G. F. Uriel, J. Converse & B. F. Edna (Eds.), *Resource theory: Explorations*and applications. San Diego, CA: Academic Press, Inc.
- Coulter, R. A., & Ligas, M. (2004). A typology of customer-service provider relationship: The role of relational factors in classifying customers. *Journal of Service Marketing*, 18(6), 482-493.
- Crompton, J. L. (1981). Dimensions of the social group role in pleasure vacations. *Annals of Tourism Research*, 8(4), 550.
- Cronin, J. J., Jr., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218.
- Cronin, J. J., Jr., & Morris, M. H. (1989). Satisfying customer expectations: The effect on conflict and repurchase intentions in industrial marketing channels. *Journal of the Academy of Marketing Science*, 17, 41-49.
- Cronin, J. J., Jr., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, *56*(July), 55-66.
- Czepiel, J. A. (1990). Service encounters and service relationships: Implications for research, *Journal of Business Research*, 20, 13-21.

- Dalton, R. J., Gontmacher, Y., Lovrich, N. P., & Pierce, J. C. (1999). Environmental attitudes and the new environmental paradigm. In R. J. Dalton, P. Garb, N. P. Lovrich, J. C. Pierce & J. M. Whitely (Eds.), *Critical masses: Citizens, nuclear weapons production, and environmental destruction in the United States and Russia* (pp. 195-230). Cambridge, MA: MIT Press.
- Dann, G., Nash, D., & Pearce, P. (1988). Methodology in tourism research. *Annals of Tourism Research*, 15, 1-28.
- Day, R. L. (1977). Extending the concept of consumer satisfaction. In W. D. Perreault (Ed.), *Advances in consumer research*. Atlanta: Association for Consumer Research.
- Dholakia, U. M., Baggozzi, R. P., & Pearo, L. R. K. (2004). A social influence model of consumer participation in network-and small-group -based virtual communities.

  International Journal of Research in Marketing, 21, 241-263.
- Dillman, D. A. (1999). Mail and other self-administered surveys in the 21st century: The beginning of a new era. *The Gallup Research Journal*, 2(1), 121-140
- Doh, M. (2006). Changing through tourism: Resident perceptions of tourism development. Unpublished Ph.D. dissertation. Texas A&M University, College Station, TX.
- Duncan, D. J. (1978). Leisure types: Factor analyses of leisure profiles. *Journal of Leisure Research*, 10, 113-126.

- Dunlap, R. E., & Van Liere, K. D. (1978). The "new environmental paradigm": A proposed measuring instrument and preliminary results. *Journal of Environmental Education*, *9*, 10-19.
- Dunlap, R. E., & Van Liere, K. D. (1984). Commitment to the dominant social paradigm and concern for environmental quality. *Social Science Quarterly*, 65, 1013-1028.
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Enmmet Jones, R. (2000). Measuring endorsement of the new ecological paradigm: A revised NEP scale. *Journal of Social Issues*, 56(3), 425-442.
- Echtner, C. M., & Jamal, T. B. (1997). The disciplinary dilemma of tourism studies. *Annals of Tourism Research*, 24(4), 868-883.
- Ehrenberg, A. S. C., & Goodhardt, G. J. (1968). A comparison of American and British repeat-buying habis. *Admap*, *9*, 157-168.
- Ehrenberg, A. S. C., & Goodhardt, G. J. (1979). *Understanding buyer behavior*. New York: J. Walter Thompson.
- Fallon, P., & Schofield, P. (2003). "Just trying to keep the customer satisfied": A comparison of models used in the measurement of tourist satisfaction. *Journal of Quality Assurance in Hospitality & Tourism*, 4(3/4), 77-96.
- Farms, Land in Farms, and Livestock Operations 2007 Summary (2008). Agricultural Statistics Board, US Department of Agriculture & National Agricultural Statistics Service.
- Fick, G. R., & Ritchie, J. R. (1991). Measuring service quality in the travel and tourism industry. *Journal of Travel Research* 30(1), 2-9.

- Fleischer, A., & Pizam, A. (1997). Rural tourism in Israel. *Tourism Management*, 18(6), 367-372.
- Foa, E. B., & Foa, U. G. (1976). Resource theory of social exchange. Morristown, NJ.: General Learning Press.
- Foa, E. B., & Foa, U. G. (1980). Resource theory: Interpersonal behavior as exchange. InK. J. Gergen, M. S. Greenberg & R. H. Willis (Eds.), *Social exchange: Advances in theory and research*. New York: Plenum Press.
- Foa, U. G. (1971). Interpersonal and economic resources. *Science*, 171, 345-351.
- Foa, U. G., Converse, J., Tornblom, K. Y., & Foa, E. B. (1993). *Resource theory: Explorations and applications*. San Diego, CA: Academic Press, Inc.
- Foa, U. G., & Foa, E. B. (1974). Societal structures of the mind. Springfield, IL: Thomas.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research*, 18, 39-50.
- Frauman, E., & Norman, W. C. (2004). Mindfulness as a tool for managing visitors to tourism destinations. *Journal of Travel Research*, 42(May), 381-389.
- Getz, D. (1994). Resident's attitudes towards tourism development: A longitudinal study in Spey Valley, Scotland. *Tourism Management*, 15(4), 274-258.

- Ghingold, M., & Maier, K. C. (1987). Questioning the unquestioned importance of personal service in services marketing: Discussion and implications. In J. A. Czepiel, C. A. Congram & J. Shanahan (Eds.), *The services challenge:*Integrating for competitive advantage (pp. 45-49). Chicago: American Marketing Association.
- Gibson, H. J., Willming, C., & Holdnak, A. (2003). Small-scale event sport tourism: Fans as tourists *Tourism Management*, 24(2), 181-190.
- Gitelson, R. J., & Crompton, J. L. (1984). Insights into the repeat vacation phenomenon. *Annals of Tourism Research*, 11(2), 199-217.
- Gitelson, R. J., & Kerstetter, D. (1994). The influence of friends and relatives in travel decision-making. *Journal of Travel & Tourism Marketing*, 3(3), 59-68.
- Goodhardt, G. J., Ehrenberg, A. S. C., & Collins, M. A. (1987). *The television audience:*Patterns of viewing. Aldershot Hamshire, UK: Gower Press.
- Gössling, S., & Mattsson, S. (2002). Farm tourism in Sweden: Structure, growth and characteristics. *Scandinavian Journal of Hospitality and Tourism*, 2(1), 17-30.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161-178.
- Grendstad, G. (1999). The new ecological paradigm scale: Examination and scale analysis. *Environmental Politics*, 8(4), 197-205.
- Grove, S. J., & Fisk, R. P. (1997). The impact of other customers on service exchange: A critical incident examination of "getting along." *Journal of Retailing*, 73(1), 63-85.

- Gummesson, E. (1998). Implementation requires a relationship marketing paradigm. *Journal of the Academy of Marketing Science*, 26(3), 242-249.
- Gursoy, D., Jurowski, C., & Uysal, M. (2002). Resident attitudes: A structural modeling approach. *Annals of Tourism Research*, 29(1), 79-105.
- Hair, J., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data* analysis with readings. Upper Saddle River, NJ: Prentice-Hall.
- Hall, C. M. (2005). *Tourism: Rethinking the social science of mobility*. Harlow, England: Pearson Education Limited.
- Hatcher, L. (1994). A step-by-step approach to using the SAS system for factor analysis and structural equation modeling. Cary, NC: SAS Institute Inc.
- Hattie, J. (1985). Methodology review: Assessing unidimensionality of tests and items. *Psychological Measurement*, *9*(2), 139-164.
- Haywood, K. M. (1989). Managing word-of-mouth communications. *Journal of Services Marketing*, 3(2), 55-67.
- Heywood, H. B. (1931). *On finite sequences of real numbers*. Paper presented at the Proceedings of the Royal Society of London.
- Hinde, R. A. (1979). Toward understanding relationships. New York: Academic Press.
- Holbrook, M., B (1994). The nature of customer value. In R. T. Rust and R. L. Oliver (Ed.), *Service quality: New directions in theory and practice* (pp. 21-71). Thousand Oaks, CA: Sage Publications.
- Holden, A. (2003). In need of new environmental ethics for tourism? *Annals of Tourism Research*, 30(1), 94-108.

- Holt, D. B. (1995). How consumers consume: A typology of consumption practices. *Journal of Consumer Research*, 22(June), 1-16.
- Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, 63(597-606).
- Hong, S.-k., Kim, J.-h., & Kim, S.-i. (2003). Implications of potential green tourism development. *Annals of Tourism Research*, 30(2), 323-341.
- Horobin, H., & Long, J. (1996). Sustainable tourism: The role of the small firm.

  International Journal of Contemporary Hospitality Management, 8(5), 15-19.
- Houston, F. S., & Gassenheimer, J. B. (1987). Marketing and exchange. *Journal of Marketing*, 51, 3-18.
- Hovland, C. I., Harvey, O. J., & Sherif, M. (1957). Assimilation and contrast effects in reactions to communication and attitude changes. *Journal of Abnormal Psychology*, 55, 244-252.
- Hu, B. (2003). *The impact of destination involvement on travelers' revisit intentions*.

  Unpublished Ph.D. dissertation. Purdue University, West Lafayette, IN.
- Huia, T. K., Wan, D., & Ho, A. (2006). Tourists' satisfaction, recommendation and revisiting Singapore. *Tourism Management*, 28(4), 965-975.
- IFOAM (2008). *Definition of organic agriculture* (Vol. 2009): International Federation of Organic Agriculture Movements: Bonn, German.
- Inskeep, E. L. (1991). *Tourism planning: An integrated and sustainable development approach*. New York: Van Nostrand Reinhold.

- Iso-Ahola, S. E., & Park, C. J. (1996). Leisure-related social support and self determination as buffers to stress-illness relationship. *Journal of Leisure Research*, 28, 169-187.
- Jafari, J. (1990). Research and scholarship: The basis of tourism education. *Journal of Tourism Studies*, 1, 33-41.
- Jolly, D. A., & Reynolds, K. A. (2005). Consumer demand for agricultural and on-farm nature tourism. *UC Small Farm Center Research Brief*. Retrieved from http://www.sfc.ucdavis.edu/agritourism/agtourbrief0601.pdf
- Kahle, L. R., Liu, R., & Watkins, H. (1992). Psychographic variation across the United States geographic regions. *Advances in Consumer Research*, 19, 346-352.
- Kaiser, H. F. (1970). A second generation Little Jiffy. Psychometrika, 35, 401-415.
- Kano, Y., & Azuma, Y. (2003). Use of SEM programs to precisely measure scale reliability. In H. Yanai (Ed.), *New developments in psychometrics*. Tokyo: Springer Verlag.
- Keiningham, T. L., Perkins-Munn, T., & Evans, H. (2003). The impact of customer satisfaction on share-of-wallet in a business-to-business environment *Journal of Service Research*, 6(1), 37-50.
- Kenny, D. (2003). Structural equation modeling. Retrieved March, 26, 2009, from http://davidakenny.net/cm/causalm.htm
- Kim, H., Borgesa, M. C., & Chon, J. (2006). Impacts of environmental values on tourism motivation: The case of FICA, Brazil. *Tourism Management*, 27, 957-967.

- Kim, K. (2007). AMOS 7.0 structural equation model analysis. Seoul, Korea: Hannarae
- Kim, S. H. (2007). The group vacation market (college students): A social psychological approach. Unpublished Ph.D. dissertation. Michigan State University, East Lansing, MI.
- Kim, W., & Han, H. (2008). Determinants of restaurant customers' loyalty intentions: A mediating effect of relationship quality. *Journal of Quality Assurance in Hospitality & Tourism*, 9(3), 219-239.
- Kirschenmann, F. (2003). *New seeds and breeds for a new revolution in agriculture*.

  Paper presented at the Seeds and Breeds Conference, Washington, DC.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: Guilford.
- Knowd, I. (2006). Tourism as a mechanism for farm survival. *Journal of Sustainable Tourism*, 14(1), 24-41.
- Kotler, P. (1972). A generic concept of marketing. *Journal of Marketing*, *36*(April), 46-54.
- Kotler, P. (1997). *Marketing management analysis, planning*, *and control*. Englewood Cliffs, NJ: Prentice Hall Inc.
- Kozak, M. (2001a). A critical review of approaches to measure satisfaction with tourist destinations. In J. A. Mazanec, G. I. Crouch, J. R. B. Ritchie & A. G. Woodside (Eds.), *Consumer psychology of travel, hospitality and leisure* (pp. 303-320). Oxfordshire, UK: CABI Publishing.

- Kozak, M. (2001b). Repeaters' behavior at two distinct destinations. *Annals of Tourism Research*, 28(3), 784-807.
- Kuo, N.-W., Chen, Y.-J., & Huang, C.-L. (2006). Linkages between organic agriculture and agro-ecotourism. *Renewable Agriculture and Food Systems*, 21(4), 238–244.
- Kurst-Swanger, K., & Petcosky, J. L. (2003). *Violence in the home: Multidisciplinary perspectives*. New York: Oxford University Press.
- Ladhari, R. (2007). The effect of consumption emotions on satisfaction and word-of-mouth communications. *Psychology and Marketing*, 24(12), 1085-1108.
- Landon, E. L. (1977). A model of consumer complaint behavior. In R. L. Day (Ed.),

  \*Consumer satisfaction, dissatisfaction and complaining behavior (pp. 31-35.).

  \*Bloomington, IN: Indiana University School of Business.
- Langeard, E., Bateson, J. E. G., Lovelock, C. H., & Eigler, P. (1981). *Marketing services: New insights from consumers and managers*. Cambridge, MA: Marketing Science Institute.
- LeBlanc, G. (1992). Factors affecting customer evaluation of service quality in travel agencies: An investigation of customer perceptions. *Journal of Travel Research* 30(4), 10-16.
- Lee, S. Y., Petrick, J. F., & Crompton, J. L. (2007). The roles of quality and intermediary constructs in determining festival attendees' behavioral intention. *Journal of Travel Research*, 45(4), 402–412.
- Liljander, V., & Strandvik, T. (1995). The nature of customer relationships in services.

  \*Advances in Service Marketing and Management, 4, 141-167.

- Liljander, V., & Strandvik, T. (1997). Emotions in service satisfaction. *International Journal of Service Industry Management*, 8(2), 148-169.
- Little, R. L., & Rubin, D. B. (1990). Statistical analysis with missing data. New York: Wiley.
- Lobo, R. E., Goldman, G. E., Jolly, D. A., Wallace, B. D., Schrader, W. L., & Parker, S. A. (1999). Agritourism benefits agriculture in San Diego County. Retrieved from http://www.sfc.ucdavis.edu/agritourism/agritourSD.html
- Lovelock, C., & Gummesson, E. (2004). Whither services marketing? In search of a new paradigm and fresh perspective. *Journal of Service Research*, 7(1), 20-40.
- Lovelock, C., Paul, P., & Rhett, W. (1998). Services marketing Australia and New Zealand. Sydney, Australia: Prentice Hall.
- Maloney, M. P., & Ward, M. P. (1973). Ecology: Let's hear from the people. *American Psychologist*, 28, 583-586.
- Maloney, M. P., Ward, M. P., & Braucht, G. N. (1975). A revised scale for the measurement of ecological attitudes and knowledge *American Psychologist*, *30*, 787-790.
- Mandleburg, T. F., Doney, P. M., & Broistol, T. (2004). Shopping with friends and teens' susceptibility to peer infouence. *Journal of Retailing*, 80(2), 101-116.
- Manoli, C., Johnson, B., & Dunlap, R. E. (2007). Assessing children's environmental worldviews: Modifying and validating the new ecological paradigm scale for use with children. *Report & Research*, 38(4), 3-13.

- Martin, C. L. (1996). Customer-to-customer relationships: Satisfaction with other customers' public behavior. *Journal of Consumer Affairs*, 30(1), 146-169.
- Martin, C. L., & Pranter, C. A. (1989). Compatibility management: Customer-to-customer relationships in service environments. *Journal of Service Marketing*, *3*, 6-15.
- McCormick, B. (1999). Contribution of social support and recreation companionship to the life satisfaction of people with persistent mental illness. *Therapeutic Recreation Journal*, *33*(4), 320-332.
- McGehee, N. G. (2007). An agritourism system model; a Weberian perspective. *Journal of Sustainable Tourism*, 15(2), 111-124.
- McGehee, N. G., & Kim, K. (2004). Motivation for agri-tourism entrepreneurship. *Journal of Travel Research*, 43, 161-170.
- McIntosh, A., J., & Bonnemann, S., M. (2006). Willing Workers on Organic Farms (WWWOF): The alternative farm stay experience. *Journal of Sustainable Tourism*, 14(1), 82-99.
- McIntosh, A., J., & Campbell, T. (2001). Willing Workers on Organic Farms

  (WWOOF): A neglected aspect of farm tourism in New Zealand. *Journal of Sustainable Tourism*, 9(2), 111-127.
- Meis, S., Joyal, S., & Trites, A. (1995). The US repeat and VFR visitor to Canada. *Journal of Tourism Studies*, 6(1), 27-37.

- Miller, L. C., & Berg, J. H. (1982). Selectivity and urgency in social exchange. In V. J. Derlega (Ed.), *Communication, intimacy, and close relationship*. New York:

  Academic Press.
- Mohiyeddini, C., Paulia, R., & Bauer, S. (2009). The role of emotion in bridging the intention–behaviour gap: The case of sports participation *Psychology of Sport and Exercise*, 10(21), 226-234.
- Molm, L. D. (1991). Affect and social exchange: Satisfaction in power-dependence relations. *American Sociological Review*, *56*, 475-493.
- Moore, R., Moore, M. L., & Capella, M. (2005). The impact of customer-to-customer interactions in a high personal contact service setting. *Journal of Services Marketing*, 19(7), 482-491.
- Morais, D. B. (2000). *Reconceptualization of loyalty under a resource investment*perspective: A study of group leaders in the leisure service industry. Unpublished
  Ph.D. dissertation. Clemson University, Clemson, SC.
- Morais, D. B., Backman, S. J., & Dorsch, M. J. (2003). Toward the operationalization of resource investments made between customers and providers of a tourism service. *Journal of Travel Research*, 41(May), 362-374.
- Mulaik, S. A. (2004). Objectivity in science and structural equation modeling. In D. Kaplan (Ed.), *The Sage handbook of quantitative methodology for the social sciences*. (pp. 425-446). Thousand Oaks, CA: Sage Publications.

- Musil, C. M., Warner, C. B., Yobas, P. K., & Jones, S. L. (2002). A comparison of imputation techniques for handling missing data. Western Journal of Nursing Research, 24(7), 815-829.
- Namasivayam, K. (2002). The consumer as "transient employee" consumer satisfaction through the lens of job-performance models. *International Journal of Service Industry Management*, 14(4), 420-435.
- Nias, D. K. B. (1977). The structuring of recreational interests. *Social Behavior and Personality*, 5, 383-388.
- Nichols, C. M., & Snepenger, D. J. (1988). Family decision making and tourism behavior and attitudes *Journal of Travel Research*, 26(4), 2-6.
- Nilsson, P. A. (2002). Staying on farms: An ideological background. *Annals of Tourism Research*, 29(1), 7-24.
- Noe, F. P., & Uysal, M. (2003). Social interaction linkages in the service satisfaction model. *Journal of Quality Assurance in Hospitality & Tourism 4*(3/4), 7-22.
- Nowak, L., & Washburn, J. (1998). Antecedents to client satisfaction in business services. *Journal of Services Marketing*, 12(6), 441-452.
- Oh, H., & Parks, S. C. (1997). Customer satisfaction and service quality: Critical review of the literature and research implications for the hospitality industry. *Hospitality Research Journal*, 20, 35-64.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, *17*, 460-469.

- Oliver, R. L. (1993). Cognitive, affective and attribute bases of the satisfaction response. *Journal of Consumer Research*, 20, 418-430.
- Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York: McGraw-Hill.
- Oppermann, M. (1997). First-time and repeat visit to New Zealand. *Tourism Management*, 18(3), 177-181.
- Oppermann, M. (1998). Association involvement and convention participation. *Journal* of Hospitality & Tourism Research, 21(3), 17-30.
- Organic Agriculture (2008). from http://www.ers.usda.gov/Briefing/Organic/.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70, 201-230.
- Pearce, D. G. (1992). Alternative tourism: Concepts, classifications, and questions. In V. L. Smith & W. R. Eadingtom (Eds.), *Tourism alternatives: Potentials and problems in the development of tourism* (pp. 15-30). Chichester: Wiley.
- Pearce, D. G., & Butler, R. (1993). *Tourism research: Critiques and challenges*.

  London: Routledge.
- Pedhazur, E. J., & Schmelkin, L. (1991). *Measurement, design, and analysis: An integrated approach*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Perdue, R. R., Long, P. T., & Allen, L. (1987). Rural residents tourism perceptions and attitudes. *Annals of Tourism Research*, 14(3), 420-429.

- Petrick, J. F. (2004a). First timers' and repeaters' perceived value. *Journal of Travel Research*, 43, 29-38.
- Petrick, J. F. (2004b). The role of quality, vlaue, and satisfaction in predicting cruise passengers' behavioral intentions. *Journal of Travel Research*, 42, 397-407.
- Petrick, J. F., & Backman, S. J. (2001). An examination of golf travelers' satisfaction, perceived value, loyalty, and intentions to revisit. *Tourism Analysis*, 6(3/4), 223-237.
- Petrick, J. F., & Backman, S. J. (2002). An examination of the construct of perceived value for the prediction of golf travelers' intentions to repurchase. *Journal of Travel Research*, 41, 34-45.
- Petrick, J. F., Morais, D. B., & Norman, W. C. (2001). An examination of the determinants of entertainment vacationers' intentions to visit. *Journal of Travel Research*, 40(1), 41-48.
- Petrick, J. F., Tonner, C., & Quinn, C. (2006). The utilization of critical incident technique to examine cruise passengers' repurchase intentions. *Journal of Travel Research*, 44(3), 273-280.
- Price, L. L., Arnould, E. J., & Tierney, P. (1995). Going to extremes: Managing service encounters and assessing provider performance. *Journal of Marketing*, *59*, 83-97.
- Pritchard, M. P. (2003). The attitudinal and behavioral consequences of destination performance. *Tourism Management*, 8(1), 61-73.

- Puczko, L., & Ratz, T. (2000). Tourist and resident perceptions of the physical impacts of tourism at Lake Balaton, Hungary: Issues for sustainable tourism management. *Journal of Sustainable Tourism*, 8(6), 458-479.
- Ratz, T., & Puczko, L. (1998). *Rural tourism and sustainable development*. Paper presented at the Rural Tourism Management: Sustainable Options. from http://www.ratztamara.com/rural.html
- Raykov, T. (1997). Scale reliability, Cronbach's coefficient alpha, and violations of essential tau-equivalence with fixed congeneric components. *Multivariate Behavioral Research*, 32, 329-353.
- Raymond, M., & Roberts, D. (1987). A comparison of methods for treating incomplete data in selection research. *Educational and Psychological Measurement*, 47, 13-26.
- Reichel, A., Lowengart, O., & Milman, A. (2000). Rural tourism in Israel: Service quality and orientation. *Tourism Management*, 21(5), 451-459.
- Reisinger, Y., & Turner, L. (1999). Structural equation modeling with Lisrel:

  Application in tourism. *Tourism Management*, 20(1), 71-88.
- Rettig, K. D., & Bubolz, M. M. (1983a). Interpersonal resource exchanges as indicators of quality of marriage. *Journal of Marriage and the Family*, 45(3), 497-509.
- Rettig, K. D., & Bubolz, M. M. (1983b). Perceptual indicators of family life quality. Social Indicators Research, 12(4), 417-438.
- Rettig, K. D., & Leichtentritt, R. D. (1998). A general theory for perceptual indicators of family life quality. *Social Indicators Research*, 47, 307–342.

- Reynolds, K. A., & Arnould, M. J. (2000). Customer loyalty to the salesperson and the store: Examining relationship customers in an upscale retail context. *Journal of Personal Selling and Sales Management*, 20(2), 89-98.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698-714.
- Rise, J., Thompson, M., & Verplanken, B. (2003). Measuring implementation intentions in the context of the theory of planned behavior. *Scandinavian Journal of Psychology* 44(2), 87-95.
- Ritchie, J. R. (1975). On the derivation of leisure activity types-a perceptual mapping approach. *Journal of Leisure Research*, 7, 128-140.
- Ritzer, G. (1988). Frontiers of social theory. New York: Oxford University Press.
- Rook, K. S. (1987). Reciprocity of social exchange and social satisfaction among older women. *Journal of Personality and Social Psychology*, 52(1), 145-154.
- Rosenbaum, M. S., & Massiah, C. A. (2007). When customers receive support from other customers exploring the influence of intercustomer social support on customer voluntary performance. *Journal of Service Research*, 9(3), 257-270.
- Rummel, R. J. (1975). *Understanding conflict and war*. Beverly Hills, CA: Sage Publications.
- Russell, R. C., Wesley, F., & Sutherland, P. (2008). Going where the Joneses go:

  Understanding how others influence travel decision-making. *International Journal of Culture, Tourism and Hospitality Research*, 2(1), 12-24.

- Rust, R. T., & Oliver, R. L. (1994). Service quality: Insights and managerial implication from the frontier. In R. T. Rust & R. L. Oliver (Eds.), *Service quality: New directions in theory and practice*. (pp. 1-19). Thousand Oaks, CA: Sage.
- Schneider, B., & Bowen, D. E. (1995). Winning the service game. Boston, MA: Harvard Business School Press.
- Searle, J. R. (1990). Collective intentions and actions. In P. R. Cohen, J. Morgan & M. E. Pollack (Eds.), *Intentions in communications* (pp. 401-415). Cambridge, MA: MIT Press.
- Sell, J., Griffith, W. I., & Wilson, R. K. (1993). Are women more cooperative than men in social dilemas? *Social Psychology Quarterly*, *56*(3), 211-222.
- Sharpley, R., & Vass, A. (2006). Tourism, farming and diversification: An attitudinal study. *Tourism Management*, 27, 1040-1052.
- Shoham, A., Schrage, C., & Eeden, S. v. (2004). Student travel behavior: A cross-national study. *Journal of Travel & Tourism Marketing*, 17(4), 1-10.
- Shostack, G. L. (1985). Planning the service encounter In J. A. Czepiel, Michael R.S olomon & C. F. Surprenant (Eds.), *The service encounter* (pp. 243-254). Lexington, MA: Lexington Books.
- Sichel, H. S. (1982). Repeat-buying and the Poisson-generated inverse Gaussian distribution. *Applied Statistics*, *31*, 193-204.
- Sierra, J. J., & McQuitty, S. (2005). Service providers and customers: Social exchange theory and service loyalty. *Journal of Services Marketing*, 19(6), 392-400.

- Simpson, P. M., & Siguaw, J. A. (2008). Destination word of mouth: The role of traveler type, residents, and identity salience *Journal of Travel Research*, 47(2), 167-182.
- Sinehotta, F. F., Scholz, U., & Schwarzer, R. (2005). Bridging the intention–behaviour gap: Planning, self-efficacy, and action control in the adoption and maintenance of physical exercise. *Psychology and Health*, 20(2), 143-160.
- Singleton, R., & Straits, B. (1999). *Approaches to social research*. New York: Oxford University Press.
- Sirakaya, E., & Woodside, A. (2005). Building and testing theories of decision making by travellers. *Tourism Management*, 26, 815-832.
- Sirgy, M. J. (1982). Serf-concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9, 287-300.
- Sirgy, M. J., & Su, C. (2000). Destination image, self-congruity, and travel behavior: Toward an integrative model *Journal of Travel Research*, *38*(4), 340-352.
- Smith, A. K. (1997). Customer satisfaction with service encounters involving failure and recovery: An integrative model of exchange. Unpublished Ph.D. dissertation.

  University of Maryland at College Park, College Park, MD.
- Solnet, D. (2007). Employee-customer linkages: A social identification perspective in a hotel industry context. *Journal of Hospitality and Tourism Management*, *14*(2), 129-143.
- Solomon, M. R., Surprenant, C. F., Czepiel, J. A., & Gutman, E. G. (1985). A role theory perspective on dyadic interactions: The service encounter. *Journal of Marketing*, 49(1), 99-111.

- Sonnino, R. (2004). For a 'piece ofbread'? interpreting sustainable development through agritourism in Southern Tuscany. *European Society for Rural Sociology*, 44(3), 285-300.
- Sorkin, D., Rook, K. S., & Lu, J. L. (2002). Loneliness, lack of emotional support, lack of companionship, and the likelihood of having a heart condition in an elderly sample. *The Society of Behavioral Medicine.*, 24(4), 290-298.
- Stern, P. C., Dietz, T., & Guagnano, G. A. (1995). The new ecological paradign in social-psychological context. *Environment and Behavior*, 27(6), 723-743.
- Suprenant, C. F., & Solomon, M. R. (1987). Predictability and personalization in the service encounter. *Journal of Marketing*, *51*(2), 86-96.
- Sutton, S. (2008). How does the health action process approach (HAPA) bridge the intention-behavior gap? An examination of the model's causal structure. *Applied Psychology*, *57*(1), 66-74.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York: Harper Collins.
- Tchetchik, A., Fleischer, A., & Finkelshtain, I. (2008). Differentiation and synergies in rural tourism: Estimation and simulation on the Israel market. *American Journal of Agricultural Economics*, 90(2), 553-570.
- Teichman, M., & Foa, U. G. (1975). Effect of resources smilarity on satisfaction with exchange. *Social Behavior and Personality*, 3(2), 213-224.
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York: John Wiley & Sons.

- Tian-Cole, S., Crompton, J. L., & Willson, V. L. (2002). An empirical investigation of the relationship between service quality, satisfaction and behavioral intentions among visitors to a wildlife refuge. *Journal of Leisure Research*, 34(1), 1-24.
- Tomas, S. R., Scott, D., & Crompton, J. L. (2002). An investigation of the relationships between quality of service performance, benefits sought, satisfaction and future intention to visit among. *Managing Leisure*, 7, 239–250.
- Tornblom, K. Y., & Fredholm, E. M. (1984). The influence of the nature and comparability of resources given and received. *Social Psychology Quarterly*, 47, 50-61.
- Tourism Snapshot: 2006 facts & figures year-in-review (2006). Retrieved 05/11/2008.

  from

  http://www.corporate.canada.travel/docs/research\_and\_statistics/stats\_and\_figure
  s/tourism year-in-review 2006 web eng.pdf.
- Tsiros, M., & Mittal, V. (2000). Regret: A model of its antecedents and consequences in consumer decision making. *Journal of Consumer Research*, 26(4), 401-417.
- Tuomela, R. (1995). *The importance of us: A philosophical study of basic social nations*. Stanford, CA: Stanford University Press.
- Tuomela, R., & Miller, K. (1985). We-Intentions and social action. *Analyse & Kritik*, 7(S), 26-43.
- Turner, J., Foa, E. B., & Foa, U. G. (1971). Interpersonal reinforcers: Classification, interrelationship and some differential properties. *Journal of Personality and Social Psychology*, 19(2), 168-180.

- Tzokas, N., & Saren, M. (1997). Building relationship platforms in consumer markets: A value chain approach. *Journal of Strategic Marketing*, *5*(2), 105-120.
- Um, S., Chon, K., & Ro, Y. (2006). Antecedents of revist intention. *Annals of Tourism Research*, 33(4), 1141-1158.
- Uysal, M., Jurowski, C., Noe, F. P., & McDonald, C. D. (1994). Environmental attitude by trip and visitor characteristics. *Tourism Management*, *15*(4), 284-294.
- Veeck, G., Che, D., & Veeck, A. (2006). America's changing farmscape: A study of agricultural tourism in Michigan. *The Professional Geographer*, 58(3), 235–248.
- Velleman, J. D. (1997). How to share an intention. *Philosophy and Phenomological Research*, *57*, 29-50.
- Vermeir, I., & Verbeke, W. (2008). Sustainable food consumption: Exploring the consumer "attitude—behavioural intention gap. *Ecological Economics*, 64(3), 542-553.
- Weaver, D. B., & Fennell, D. A. (1997). The vacation farm sector in Saskatchewan: A profile of operations. *Tourism Management*, *18*(6), 357-375.
- Weigel, R. H., & Weigel, J. (1978). Environmental concern: The development of a measure. *Environment and Behavior*, *10*, 3-15.
- Westbrook, R. A., & Oliver, R. L. (1999). The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of Consumer Research*, 18(June), 84-91.
- Whisenhunt, D. W. (1974). *The environment and the American experience*. Port Washington, NY: Kennikat Press.

- Williams, P., Paridaen, M., Dossa, K., & Dumais, M. (2001). *Agritourism Market and Product Development Status Report*. Report to British Columbia Ministry of Agriculture, Fisheries and Food & Ministry of Small Business, Tourism and Culture, Victoria, B.C.
- Wilson, L.-A. (2007). The family farm business? Insights into family, business and ownership dimensions of open-farms. *Leisure Studies*, 26(3), 357-374.
- Wirtz, J., Doreen, K., & Khai, S. (2000). Should a firm with a reputation for outstanding service quality offer a service guarantee? *Journal of Service Marketing*, 14(6), 502-512.
- Witt, P. A. (1971). Factor structure of leisure behavior for high school age youth in three communities. *Journal of Leisure Research*, *3*, 213-219.
- Wu, C. H.-J. (2007). The impact of customer-to-customer interaction and customer homogeneity on customer satisfaction in tourism service-The service encounter prospective. *Tourism Management*, 28, 1518-1528.
- Yi, Y. (1990). A critical review of consumer satisfaction. *Review of Marketing*, *4*, 68-123.
- Yi, Y., & Gong, T. (2009). An integrated model of customer social exchange relationship: The moderating role of customer experience. *Service Industries Journal*, 29(11), 345-67.
- Yi, Y., & La, S. (2004). What influences the relationship between customer satisfaction and repurchase intention? Investigating the effects of adjusted expectations and customer loyalty. *Psychology & Marketing*, 21(5), 351–373.

- Yoon, M. H., Seo, T. H., & Yoon, T. S. (2004). Effects of contact employee responses and customer service evaluation. *Journal of Service Marketing*, 18(5), 395-412.
- Yuksel, A., & Rimmington, M. (1998). Customer-satisfaction measurement. *Cornell Hotel and Restaurant Administration Quarterly*, 37(2), 72-91.
- Zeithaml, V. A., & Bitner, M. J. (1996). Services marketing. New York: McGraw Hill.
- Zhang, J., Beatty, S. E., & Walsh, G. (2008). Review and future directions of cross-cultural consumer services research. *Journal of Business Research*, 61(3), 211–224.
- Zhanga, H. Q., Qub, H., & Tang, V. M. Y. (2004). A case study of Hong Kong residents' outbound leisure travel. *Tourism Management*, 25, 267-273.

# APPENDIX I

### PAPER SURVEY INSTRUMENT

#### AGRITOURISM ENCOUNTER SURVEY

#### SECTION 1. BACKGROUND INFORMATION

1.	Please ind	icate your residency. City, State: or Zip code:
2.	•	sit the farm alone or with companions? Alone □With companions□
	a.	If with companions, what is your relationship (check all that apply)?
		Family □
		Friends
		Relatives□
		Partner □
		If other, please specify
	b.	If with companions, how many people in your party, including yourself?
3. ]	Is this your	first visit to this farm? Yes □ No □
	a.	If no, how many times have you visited?

#### **SECTION 2. SOCIAL EXCHANGE**

#### **SOCIAL INTERACTION**

Please indicate how much you agree or disagree with the following statements that ask about your perceived interaction with each party specified below. The following is a brief description of each party.

- Farmers (Service providers): the host farmers of the farm you visited.
- Local residents: Other farmers and residents at/around the farm you visited.
- Companion: Anyone whom you accompanied with your visit to the farm.
- Other customers: Other visitors and customers you met on the farm.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. ( ) were concerned about the welfare of visitors.	Farmers	1	2	3	4	5
	Local residents	1	2	3	4	5
2. ( ) were consistently courteous to me.	Farmers	1	2	3	4	5
	Local residents	1	2	3	4	5

3. ( ) were willing to listen to any problem related to the farm, farm	Farmers	1	2	3	4	5
products, or its tour programs.	Local residents	1	2	3	4	5
4. ( ) could be relied on when I have problems or questions regarding the farm or tour program.	Farmers Local residents	1	2 2	3 3	4 4	5 5
5. ( ) were concerned about the welfare of visitors.	Companions	1	2	3	4	5
	Other customers	1	2	3	4	5
6. ( ) were consistently friendly to me.	Companions	1	2	3	4	5
	Other customers	1	2	3	4	5
7. ( ) were willing to listen to any problem related to the farm, farm	Companions	1	2	3	4	5
products, or its tour programs.	Other customers	1	2	3	4	5
8. ( ) could be relied on when I have problems or questions regarding the	Companions	1	2	3	4	5
farm or tour program.	Other customers	1	2	3	4	5

# RESOURCE EXCHANGE

Please indicate how often you have received the following types of treatment from each party. Check the number that best corresponds to the frequency that you received that type of treatment.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	1	2	3	4	5
Local residents	1	2	3	4	5
Companions	1	2	3	4	5
Other Customers	1	2	3	4	5
Farmers	1	2	3	4	5
Local residents	1	2	3	4	5
Companions	1	2	3	4	5
Other Customers	1	2	3	4	5
Farmers	1	2	3	4	5
Local residents	1	2	3	4	5
Companions	1	2	3	4	5
Other Customers	1	2	3	4	5
Farmers	1	2	3	4	5
Local residents	1	2	3	4	5
	Local residents Companions Other Customers Farmers Local residents Companions Other Customers Farmers Local residents Companions Other Customers Farmers Farmers Farmers	Farmers 1 Local residents 1 Companions 1 Other Customers 1 Local residents 1 Companions 1 Other Customers 1 Local residents 1 Companions 1 Other Customers 1 Local residents 1 Companions 1 Companions 1 Farmers 1 Farmers 1 Farmers 1 Farmers 1	Farmers 1 2 Local residents 1 2 Companions 1 2 Other Customers 1 2 Local residents 1 2 Companions 1 2	Farmers       1       2       3         Local residents       1       2       3         Companions       1       2       3         Other Customers       1       2       3         Local residents       1       2       3         Companions       1       2       3         Other Customers       1       2       3         Local residents       1       2       3         Local residents       1       2       3         Companions       1       2       3         Other Customers       1       2       3         Other Customers       1       2       3         Farmers       1       2       3	Farmers         1         2         3         4           Local residents         1         2         3         4           Companions         1         2         3         4           Other Customers         1         2         3         4           Local residents         1         2         3         4           Companions         1         2         3         4           Other Customers         1         2         3         4           Local residents         1         2         3         4           Companions         1         2         3         4           Other Customers         1         2         3         4           Other Customers         1         2         3         4           Farmers         1         2         3         4

		4	•	•		-
	Companions	1	2	3	4	5
	Other Customers	1	2	3	4	5
5 ( ) offered discounts.	Farmers	1	2	3	4	5
6. ( ) provided or shared good quality	Farmers	1	2	3	4	5
equipment to use in this visit (basket, bag, etc).						
7. ( ) treated me personally.	Farmers	1	2	3	4	5
	Local residents	1	2	3	4	5 5
	Companions	1	2	3	4	5
	Other Customers	1	2	3	4	5
8. ( ) treated me with high esteem.	Farmers	1	2	3	4	5 5 5 5
	Local residents	1	2	3	4	5
	Companions	1	2	3	4	5
	Other Customers	1	2	3	4	5
9. ( ) provided me with information	Farmers	1	2	3	4	5
about problems.	Local residents	1	2	3	4	5
•	Companions	1	2	3	4	5 5
(	Other Customers	1	2	3	4	5
10. ( ) assisted me in arranging the visit.	Farmers	1	2	3	4	5
11. ( ) provided monetary benefits.	Farmers	1	2	3	4	5
12. ( ) provided good quality products.	Farmers	1	2	3	4	
( ) 1	Local residents	1	2	3	4	5
	Companions	1	2	3	4	5 5 5
	Other Customers	1	2	3	4	5
13. ( ) cared about me.	Farmers	1	2	3	4	5
	Local residents	1	2	3	4	5
	Companions	1	2	3	4	5
(	Other Customers	1	2	3	4	5 5 5
14. ( ) treated me special.	Farmers	1	2	3	4	5
The first special	Local residents	1	2	3	4	
	Companions	1	2	3	4	5
	Other Customers	1	2	3	4	5
15. ( ) educated me about a farm,	Farmers	1	2	3	4	5 5 5
its products, and its programs.	Local residents	1	2	3	4	5
its products, and its programs.	Companions	1	2	3	4	5
(	Other Customers	1	2	3	4	5
16. I took advantage of ( )' help.	Farmers	1	2	3	4	5
10. I took advantage of ( ) neip.	Local residents	1	2	3	4	5 5 5 5 5
	Companions	1	2	3	4	5
	Other Customers	1	2	3	4	5
	Farmers	1	2	3	4	5
· / •	Farmers	1	2	3	4	5
18. ( ) provided or shared souvenirs.	ranners	1		3	4	3

#### **SECTION 3. SATISFACTION**

The following set of statements relate to your overall feelings about the farm. For each statement, please choose the number that best reflects your feelings.

- "We" indicates you and your companions.
- "I" indicates yourself.

# We-Satisfaction

	Dissatisfied	Satisfied	
1. We were satisfied with the farm and its service.	1 2	3	4 5
	Displeased	Pleased	
2. We were pleased with the farm and its service.	1 2	3	4 5
	Unfavorable		Favorable
3. Our experience at the farm was	1 2	3	4 5
	Negative		Positive
4. Our overall feelings about the farm was	1 2	3	4 5

### **I-** Satisfaction

	Dissatisfied	Satisfied		
1. I was satisfied with the farm and its service.	1 2	3	4 5	
	Displeased	Pleased		
2. I was pleased with the farm and its service.	1 2	3	4 5	
	Unfavorable		Favorable	
3. My experience at the farm was	1 2	3	4 5	
	Negative		Positive	
4. My overall feeling about the farm was	1 2	3	4 5	

#### **SECTION 4. REVISIT INTENTION**

Please indicate how much you agree or disagree with each statement.

- "We" indicates you and your companions.
- "I" indicates yourself.

We-Intention	Very Low				Very High
1. My intention that my companion travelers and I will visit this farm again is	1	2	3	4	5
2. Our intentions to visit this farm again are	1	2	3	4	5
3. The likelihood that we would consider visiting this farm again is	1	2	3	4	5
<b>I-Intention</b>	Very Low				Very High
1. If I were to visit a farm again, the probability that it would be this farm again is	1	2	3	4	5
2. The likelihood that I would consider visiting this farm again is	1	2	3	4	5

Please describe aspects of your visit to the farm that may have had an impact on your intentions to revisit this farm. Please list your most positive and most negative aspect of your experiences.

Positive aspect:			
Negative aspect:			
8 I <u>—</u>			

# SECTION. ENVIRONMENTAL BELIEFS (New Ecological Paradigm)

Please indicate how much you agree or disagree with each statement on how you see natural environment. For each statement, please circle a number that best reflects your opinion.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. We are approaching the limit of the	1	2	3	4	5
the earth can support.					
2. Humans have the right to modify the	1	2	3	4	5
natural environment to suit their needs.					
3. When humans interfere with nature,	1	2	3	4	5
it often produces disastrous consequences.					
4. Human ingenuity will insure that we do	1	2	3	4	5
NOT make the earth unavailable.					
5. Humans are abusing the environment.	1	2	3	4	5
6. The earth has plenty of natural resources	1	2	3	4	5
if we just learn how to develop them.					
7. Plants and animals have as much right	1	2	3	4	5
as humans to exist.					
8. The balance of nature is strong enough to	1	2	3	4	5
cope with the impacts of modern industrial nations.					
9. Despite our special abilities humans are	1	2	3	4	5
still subject to the laws of nature.					
10. The so-called "ecological crisis" facing	1	2	3	4	5
humankind has been greatly exaggerated.					
11. The earth is like a spaceship with very	1	2	3	4	5
limited room and resources.					
12. Humans were meant to rule over the	1	2	3	4	5
rest of nature.					
13. The balance of nature is very delicate	1	2	3	4	5
and easily upset.					
14. Humans will eventually learn enough .	1	2	3	4	5
about how nature works to be able to control it.					
15. If things continue on their present course,	1	2	3	4	5

we will soon experience major ecological catastrophe.

# **SECTION 6. QUESTIONS ABOUT YOU**

This final section of the survey asks for information about you. The information you provide **WILL NOT** be identified with you personally.

1. What is your age?	_
2. What is your gender? Female □	l Male □
3. What category best describes yo	our current employment status? (Check one)
□Employed full-time □Employed part-time □Self-employed □Full-time homemaker □Student □Retired □Not currently employed □Other ( <i>Be specified</i> )  4. What is the highest level of form	mal education you have completed? ( <i>Check one</i> )
1 2 3 4 5 6 7 8	9 10 11 12 13 14 15 16 17 18 19
Elementary	High School College and After
<ul><li>5. What was your total annual ho 2008? (Check one)</li><li>☐ Under \$19,999</li></ul>	usehold income before taxes (from all sources) in
□ \$20,000 - \$29,999 □ \$30,000 - \$39,999 □ \$40,000 - \$49,999	
□ \$50,000 - \$59,999 □ \$60,000 - \$69,999	
□ \$70,000 - \$79,999 □ \$80,000 - \$89,999 □ \$90,000 - \$99,999	
□ \$100,000 or more	

6. Which of the following best describes your ethnic background? (Multiple choices are ok)
☐ Caucasian ☐ Hispanic or Mexican American ☐ African American ☐ Asian ☐ American Indian ☐ Other (please specify) ☐ Refused
7. What best describes your family situation?  ☐ Single ☐ Married ☐ Single parent with child (ren) ☐ Married with child (ren) ☐ Other (please specify):
8. If you have any suggestions or comments on this survey or the farm, please don't hesitate

Thank you very much!

# APPENDIX II

### ONLINE SURVEY INSTRUMENT



This survey is being conducted to understand agritourists' opinions about you experience at an organic farm that you visited. Your opinion is very important. Please take a few minutes to complete this survey. The information you provide will be kept strictly confidential.

#### Why participate?

You were selected to represent agritourists to organic farms. The goal of this research is to understand how your interpersonal interactions at the farm influence your satisfaction and intention to revisit.

This study is to help small scale organic farms with marketing information and promote the importance of sustainable farming communities that open the door to the public. This is an excellent opportunity to share your experience at a farm and help small scale organic farms develop a better service for visitors and farmers.

To begin this survey, please click on the URL address below or copy and paste the address into your internet browser's address window. To complete this survey, it will take 5 minutes.

http://www.rpts.tamu.edu/grads/Hchoo

If you have any question regarding this survey, please feel free to contact Hyungsuk Choo at hchoo@tamu.edu.

Thank you in advance for your participation in this survey.

Department of Recreation, Park, and Tourism Sciences Texas A&M University



#### **Exit this survey**

### 1. SECTION 1. BACKGROUND INFORMATION

		14%	6
1. Please indi	icate your residency.		
Email & farm name for prize drawing			
City, State.			_
Or Zip code			
2. Do you vis	it the farm alone or with co	mpanions?	
Alone			
<ul><li>With comp</li></ul>	panions		
	npanions, what is your rela	tionship? Please check	all that apply.
Family			
Friends			
Relatives			
Partner			
☐ If other, p	lease specify.		
4. Is this you	r first visit to this farm?		
O Yes			
O No			
5. If no, how	many times have you visite	ed?	
	Ne	xt	

Survey Powered by: <u>SurveyMonkey.com</u> "Surveys Made Simple."

**Exit this survey** 

2. SECTION 2-1.	SOCIAL EX	KCHANGE					
				29%			
Please indicate how statements that as specified below.							
The following is a learners (Service placed residents: Of Companions: Anyon Other customers:	providers): ther farmer one whom y	the host farm s and resider ou accompa	ners of the f nts at/aroun nied with yo	d the farm ur visit to tl	you visited. he farm.		
*1. ( ) were conce	rned about t	the welfare of	visitors.				
	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree		
Farmers (service providers)	$\circ$	$\circ$	0	0	$\bigcirc$		
Local residents	0	0	0	0	$\circ$		
<b>≭2.</b> ( ) were courte	eous to me.						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
Farmers (service providers)	0	0	0	0	$\circ$		
Local residents	0		0	0			
*3. ( ) were willing its tour programs		any problem	related to th	ne farm, farm	products, or		
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
Farmers (service providers)	0	$\circ$	$\circ$	$\circ$	$\circ$		
Local residents	0	$\circ$	0	0	$\bigcirc$		
*4. ( ) could be rel	*4. ( ) could be relied on when I have problems or questions regarding the farm or its tour program.						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
Farmers (Service Providers)	0	$\circ$	0	$\circ$	$\circ$		

Local residents O O O O

Strongly

agree

0

Agritourism Enco	Exit this survey					
				43%		
Please indicate how from each party. Of that you received to *1. ( ) were very for	theck the nathernal type of	umber that b				
*1. ( ) were very i	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Farmers		0	0	0	0	
Local residents	0	0	0	0	0	
Companions	0	0	0	0	0	
Other customers	0	$\circ$	0	0	0	
<b>*2.</b> ( ) treated me	as an impor	tant person.				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Farmers		0	0		0	
Local residents		$\bigcirc$	0	0	0	
Companions	0	0	0		0	
Other customers	0	0	$\circ$	0	0	
*3. ( ) provided me with information on attraction, lodging, or restaurant around the farm.						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Farmers	0	0	0	0	0	
Local residents			$\bigcirc$	0	0	
Companions	0		0		0	
Other customers			0		0	

\*4. ( ) offered discounts.

Farmers

Strongly

disagree

0

Disagree

0

Neutral

0

Agree

0

Local residents	0	0	0	0	0
Companions	0	0	0	0	$\circ$
Other customers	0	0	$\circ$	0	0
*5. ( ) helped me	greatly durir	ng the visit.			
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0	0	0	0
Local residents	0	0			0
Companions	0	0	0		0
Other customers	0	0		0	$\circ$
≭6. ( ) provided or bag, etc).		d quality equi	pment to use	in this visit	
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0	0	0	
Local residents	0	0		$\bigcirc$	$\circ$
Companions	0	$\bigcirc$	0	0	0
Other customers	0	0	0		$\circ$
<b>≭7.</b> ( ) treated me	personally.				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0	0	0	0
Local residents	0	0	0		0
Companions		0			
Other customers	0	0	0	0	0
<b>★8.</b> ( ) treated me	with high es	steem.			
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0	0	0	0
Local residents	0	0	0	0	0
Companions	0	0	0	0	0
		-	_	~	-

Other customers	0	0	0	0	0				
*9. ( ) provided m	e with infor	mation about	problems.						
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree				
Farmers	0	0	0	0	0				
Local residents	0	$\circ$	0		0				
Companions	0	0	0	0	0				
Other customers	0		0	0	0				
*10. ( ) provided r	nonetary be	nefits.							
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree				
Farmers	0	$\circ$	0	0	0				
Local residents		$\circ$			0				
Companions	0	0		0	0				
Other customers	0	0	0	0	0				
*11. ( ) assisted m	st11. ( ) assisted me in arranging the visit.								
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree				
Farmers	0	0	0		0				
Local residents	0	0	0	0	0				
Companions	0	0		0	0				
Other customers	0	0	0	0	0				
*12. ( ) provided good quality products.									
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree				
Farmers	0			0	0				
Local residents	0	0	0		0				
Companions	0	$\circ$	$\circ$	0	0				
Other customers	0	0	0	0	0				

\*13. ( ) cared about me.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0	0	$\circ$	0
Local residents	0	0		0	$\bigcirc$
Companions	0	0	0	0	0
Other customers	0	0	0	0	0
<b>*14.</b> ( ) treated m	e special.				
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0	0		0
Local residents	0	0	0		0
Companions	0	0	0		0
Other customers	0	0	0	0	0
*15. ( ) educated	me about a f	farm, its prod	ucts, and its	programs.	
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0	0		0
Local residents		0	0		0
Companions	$\bigcirc$	0			
Other customers	0	0	0	0	0
*16. ( ) provided	or share a fr	ee stuff.			
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0	$\circ$	0	0
Local residents	0	0	0		0
Companions	0	0	0	0	0
Other customers	$\circ$	0	$\circ$	0	0
<b>≭17.</b> I took advan	tage of ( )' h	ielp.			
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0			0
				_	

Local residents	0	0	0		0
Companions	0	0		0	0
Other customers	$\circ$	0		$\circ$	0
*18. ( ) provided o	or shared so	uvenirs.			
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	$\circ$			$\circ$
Local residents	0	0	0	0	
Companions	0	0	0	0	0
Other customers	0	0	$\circ$	0	0
<b>*19.</b> ( ) wished ha	ppy holiday:	s.			
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Farmers	0	0	0	0	0
Local residents	0	0	0	0	0
Companions	0	0			$\circ$
Other customers	$\circ$	0			0
		Drove 11			
		Prev	ext		

Survey Powered by: SurveyMonkey.com "Surveys Made Simple."

Exit this survey

Favorable

0

\*7. My experience at the farm was......

I-Satisfaction

Unfavorable

4. SECTION 3. SATISFACTION							
				57%			
The following set For each statement feelings.							
"We" indicates yo "I" indicates yours		ompanions.					
*1. We were satis	fied with the	farm and its	service.				
	Dissatisfied				Satisfied		
We-Satisfaction	0	0	0	0	$\bigcirc$		
*2. We were plea	sed with the f	arm and its	service.				
	Displeased				Pleased		
We-Satisfaction	$\bigcirc$	0		0	$\bigcirc$		
*3. Our experience	e at the farm	was					
	Unfavorable				Favorable		
We-Satisfaction	$\bigcirc$	0	0	0			
*4. Our overall fe	elings about t	he farm was	<b></b>				
	Negative				Positive		
We-Satisfaction	0	0	0	0	0		
<b>★5. I</b> was satisfied	d with the far	m and its se	rvice.				
	Dissatisfied				Satisfied		
I-Satisfaction	0	0	$\circ$	$\bigcirc$			
<b>≭6. I</b> was pleased	with the farm	n and its ser	vice.				
	Displeased				Pleased		
I-Satisfaction	0	0	0	0	$\circ$		

0 0 0 0

*8. My overall feel	ling about th	ne farm was			
	Negative				Positive
I-Satisfaction	0	0	$\circ$	0	0
		Prev	lext		
		Survey Power SurveyMonk	1 C C C C C C C		
		"Surveys Made	Simple."		

Agritourism Encounte	er Survey				Exit this surve
5. SECTION 4. REVIS	IT INTENTIO	N			
				71%	
Please indicate how mu	ch you agree	or disagree wi	th each statem	ent.	
"We" indicates you and "I" indicates yourself.	your compan	ions.			
*1. We-Intention					
	Very low				Very high
Our intention that my					
companion travelers and I will visit this	0	0	0	0	0
farm again is Our intentions to visit this farm again are	0	0	0	0	0
The likelihood that we would consider visiting this farm	0	0	0	0	0
again is					
*2. I-Intention					
	Very low				Very high
If I were to visit a					
farm again, the					
probability that it would be this farm again is	0	0	0	0	0
The likelihood that I would consider visiting this farm	0	0	0	0	0
again is					
3. Please describe aspeto revisit this farm. Please Positive aspect					
Negative					
aspect					

Survey Powered by: SurveyMonkey.com "Surveys Made Simple."

Prev Next

A comment of the comm	The second secon	
Agritourism	-ncounter	SHIPVOV
Aditodisiii	Lilcountce	Julycy

**Exit this survey** 

6	CECTI	ONE	ENVID	ONMEN	TAI	REI	TEEC

	86%
--	-----

Please indicate how much you agree or disagree with each statement on how you see natural environment. For each statement, please circle a number that best reflects your opinion.

#### **\*1.** Environmental belief

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We are approaching the limit of the the earth can support.	0	0	0	0	0
Humans have the right to modify the natural environment to suit their needs.	0	0	0	0	0
When humans interfere with nature, it often produces disastrous consequences.	0	0	0	0	0
Human ingenuity will insure that we do NOT make the earth unavailable.	0	0	0	0	0
Humans are abusing the environment.	0	0	0	0	0
The earth has plenty of natural resources if we just learn how to develop them.	0	0	0	0	0
Plants and animals have as much right as humans to exist.	0	0	0	0	0

The balance of

nature is strong enough to cope with the impacts of modern industrial nations. Despite our	0	0	0	0	0
special abilities humans are still subject to the laws of nature. The so-called "ecological crisis"	0	0	0	0	0
facing humankind has been greatly exaggerated. The earth is like	0	0	0	0	0
a spaceship with very limited room and resources. Humans were	0	0	0	0	0
meant to rule over the rest of nature. The balance of	0	0	0	0	0
nature is very delicate and easily upset. Humans will eventually learn	0	0	0	0	0
enough about how nature works to be able to control it. If things continue on their	0	0		0	0
present course, we will soon experience major ecological catastrophe.	0	0	0	0	0

Prev Next

Survey Powered by:

SE	CTION 6. QUESTIONS ABOUT YOU	
	1	00%
	inal section of the survey asks for information about you. To de WILL NOT be identified with you personally.	he information you
1. V	What is your age?	
2 1/	What is your gender?	
0	Female	
	Male	
0	Male	
2 V	What category best describes your current employment status	
0	Employed full-time	
0	Employed part-time	
0	Self-employed	
0	Full-time homemaker	
0	Student	
0	Retired	
0	Not currently employed	
Oth	her (please specify)	
	(France specify	
4. V	What is the highest level of formal education you have complete	d?
0	Some elementary school	
0	Some high school	
	Nu v - 20 - 2 - 12 - 12 - 12 - 12 - 12 - 12	
0	High school graduate	

# 5. What was your total annual household income before taxes (from all sources) in 2008? Under \$19,999 \$20,000 - \$29,999 \$30,000 - \$39,999

Graduated from a 2-year college or universityGraduated from a 4-year college or university

Some graduate schoolA graduate degree

	\$40,000 - \$49,999
	\$50,000 - \$59,999
	\$60,000 - \$69,999
	\$70,000 - \$79,999
	\$80,000 - \$89,999
	\$90,000 - \$99,999
	\$100,000 or more
6. V	Which of the following best describes your ethnic background? (Multiple choices are ok)
	Caucasian
	Hispanic or Mexican American
	African American
	Asian
	American Indian
Oth	er (please specify)
7. V	What best describes your family situation?
0	Single
0	Married
0	Single parent with child (ren)
0	Married with child (ren)
Oth	er (please specify)
	f you have any suggestions or comments on this survey or the farm, please don't itate.
	Prev Done

Survey Powered by: SurveyMonkey.com "Surveys Made Simple."

#### **VITA**

Name: Hyungsuk Choo

Address: Department of Recreation, Park and Tourism Sciences, 2261

TAMU, Texas A&M University, College Station, Texas 77843

Email Address: hchoo@tamu.edu

Education: M.S. Hospitality and Tourism Management, Purdue University,

West Lafayette, IN USA 47907

B.A. Business Administration (Marketing emphasis), In-Ha

University, Incheon, Korea 402-751

Research Interest: Agritourism, Tourism on organic farms

Sustainable forms of marketing