

## USING PZB TO EXPLORE THE IMPACT OF LEISURE FARM SERVICE QUALITY ON THE WILLINGNESS TO REVISIT: USING SATISFACTION AS AN INTERMEDIARY VARIABLE

Chi-Ming Chen

Assistant Professor, Department of Tourism and Recreation,  
Cheng Shiu University, Taiwan

Mao-Chun Chiu

Associate Professor, Department of Recreation and Sport Management,  
Tajen University, Taiwan

Chun-Chang Yen\*

Associate Professor, Department of Sports and Recreation,  
Meiho University, Taiwan

\*Corresponding Author: [yen70420627@gmail.com](mailto:yen70420627@gmail.com)

### Abstract

This research mainly takes tourists visiting Tsou Ma Lai Farm as the research object and attempts to explore the effect of service quality on their willingness to revisit by using satisfaction as an intermediary variable. In this study, 1000 samples were tested by using questionnaires, 145 incomplete and invalid questionnaires were excluded and a total of 855 valid ones were analyzed. The effective questionnaire recovery rate was 85.5% and the data is executed by Amos 20.0 statistical software to execute the convergence validity, differentiation validity, and adaptability in the structural equation model. Path analysis and intermediary effect analysis by adopting MacKinnon's (2008) bootstrapping. Research results show that Hypothesis 1: The quality of leisure farm services has a significant impact on customers' satisfaction; Hypothesis 2: Satisfaction has a significant impact on their willingness to revisit; Hypothesis 3: Service quality has a significant impact on the willingness to revisit; Hypothesis 4: Service Quality has a significant effect on their willingness to revisit through satisfaction intermediary effects. Researchers will further put forward specific suggestions based on the research results.

Keywords: service quality, satisfaction, willingness to revisit, intermediary effect, bootstrapping

## I. Introduction

The improvement of national income, coupled with the implementation of the two-day weekly off, allows Taiwanese people to spend more time in outdoor leisure activities. Leisure activities are highly connected into food, clothing, housing and transportation of modern people's lives, and lifestyle of leisure life tends to diversify. People are eagerly to seek the demand for leisure life arrangements. In recent years, government departments have continuously encouraged citizens' consumption during their trip; meanwhile, tourism and leisure industries to continually promote and develop souvenirs and relevant products, which has led to an increasing demand for scenic spots in Taiwan. Leisure farm is a type of leisure agriculture, and leisure agriculture is an industry combining agriculture and leisure (Guo, Zheng 2016). Domestic scholars Zhou, Ouyang, and Chen pointed out in the "2018 Taiwan Tourism 2020 Sustainable Development Strategy" report that the government has listed leisure farm tourism as one of the specific measures in sightseeing tourism. In 2019, in cooperation with the Tourism Bureau of the Ministry of Transport to expand autumn and winter tourism subsidies and handle the expansion of autumn and winter national agricultural tourism incentives, the Agricultural Committee of the Executive Yuan "108 Annual Expansion of Autumn and Winter National Agricultural Tourism Incentive Program" has been implemented from September 5, 108 to December On the 31st, free travel on weekdays, experience voucher of 250 dollars discount per room, which can be used for admission of special agricultural

experience industries announced by the Agricultural Committee, various agricultural experience activities, agricultural special products or companions, etc., and expects the amount of consumption may increase local economic development (Agri-tour,2019).

According to the statistics from the Council of Agriculture (2019a), a total of 27.6 million tourists, including 610 thousand ones from overseas, who visited domestic leisure agricultural areas and created the amount of consumption of 10.8 billion NT dollars made 95 agricultural leisure areas and 451 leisure farms in Taiwan tremendous income. The budget from government spent on leisure agricultural farm in 2019 was originally only 150 million NT dollars, and another 50 million NT dollars would be invested in the second half of the year. The allotment of the budget was twenty million dollars for tour experience vouchers for consumption stimulation and another 30 million dollars were for promoting the hardware and software equipment. This information manifested the popularity of leisure agricultural farms and support from the government. In addition to the efforts of operators, the promotion of leisure agriculture also requires relevant governmental support to implement the guidance and management of leisure agriculture. In sum, government's subsidies in leisure agriculture and tourism, and citizens' paying more attentions on their leisure life have made leisure farms become their priority choice on traveling.

Continuous operation and development on creative tourism market by the leisure agricultural business in re-

cently years made leisure farm a crucial scenic spot for citizens' outdoor activities and an option of traveling purpose for them. Based on the fifth definition of Article 3 in Agricultural Cultural Development Act: Recreational agriculture refers to a kind of farming management that applies landscapes of countryside, ecosystem and environmental resources, integrate the production of agriculture, forestry, fishery and animal husbandry, agricultural activities, cultures of farm villages and life of peasant families, provide citizen recreation and enhance the objective of experiencing agriculture and farm villages.

According to the Tourism Statistics Annual Report from Tourism Bureau in 2019, the number of tourists visiting private recreational areas in Taiwan and Fujian area was 285,943, with 285,943 ones visiting Tsou Ma Lai farm and 267,586 ones visiting Flying Cow Ranch in 2019. With 27.6 million visitors annually visiting leisure agricultural farms nationwide annually, these farms gradually attract tourists' attention. Due to people's competitive stress from work, tense from interpersonal relationship and their busy life, leisure activities have become a necessary part of modern life. From the statistical data provided by Tourism Bureau, 91.2 percent of citizens chose domestic trip with 376.9 billion NT dollars consumption (Tourism Bureau, 2019b), both rates increased annually.

Tsou Ma Lai Farm is located at the intersection of Zengwenxi Main Stream and two major tributaries - Dapu Stream (Zengwen Reservoir, Wushantou Reservoir) and Houbori Stream (Nanhua Reservoir Water Source). The two great hills turned into a torrent, which caused

the deep river run like thousands of horses. Tsou Ma Lai Farm, a leisure agricultural area operated by Tainan City Peasants' Association, started with professional grass planting and later transformed into a sightseeing and leisure farm. Also, Tsou Ma Lai received the first group of certification in legal scenic amusement park, and won many prizes later. In 2016, it was awarded the assessment of the Taiwan Leisure Agriculture Development Association commissioned by the Agricultural Committee and passed the leisure farm service certification. With the area of 120 hectares, one-third of the space is New Zealand-style pasture grassland.

Tsou Ma Lai provides diversified services such as sightseeing, recreation, viewing, catering, accommodation, camping, conferences, agricultural experience, environmental education and eco-tourism. It has been developed and operated by the Tainan City Farmers' Association since 1988 and had become a crucial agricultural outdoor classroom in Southern Taiwan (Tsou Ma Lai Farm, 2019b).

Under the competition of many leisure agricultural areas, how to take customers as the satisfaction orientation, maintain service quality, meet customer needs and make customers revisit again has become an important issue in the management of leisure farms. The only two things that customers will purchase are products they need and services they are satisfied with. Business people provide unique services to satisfy the customers. Good services require wise and high-quality communication. The definitions of good service are smile, communication, consideration, being

warm and being interesting. Those enterprises which satisfy customers can make big fortunes by their revisits.

Hence, this research attempts to realize whether the service quality of Tsou Ma Lai Farm has a significant impact on the willingness to revisit. Service quality and customer satisfaction have become the key factors for everyone in the industry to compete with others and attract customers. How can they stand out in a fiercely competitive environment? The quality of service must be continuously improved in order to make customers feel "home away from home" and "forget to return". The purpose of this study is to realize whether the service quality of Tsou Ma Lai Farm has a significant impact on satisfaction. Customer satisfaction is a main goal pursued by many companies, which has become a major tool and is also the most important evaluation index for business management nowadays. Leisure farms which combine agriculture, tourism, and restaurants provide tourists a variety of choices while visiting there. In such competitive market, how leisure farms increase these tourists to revisit would be influenced by the significant impact of service satisfaction.

For leisure farms, product value and service quality are often the first consideration of customers when making choices. Service quality not only helps companies to establish relationships with customers, but also helps to increase tourist satisfaction.

Service quality is the most crucial specialty while these farms competing with others in the same field (Chen, Huang, 2015). Hence, this study

attempts to explore whether its service quality has a significant effect on the willingness to revisit through satisfaction intermediary effects, and give business suggestions to the operators afterwards. We will use SEM to develop and verify models to compare the degree of adaptation between the theoretically generated opposite models and data and to increase research reliability and validity. Further, the model would provide research results with practical value suggestions and references for leisure farms to enhance its competitive advantage and create greater business opportunities.

## II. Literature Review

### 2.1 Degree of Satisfaction

The related theory of satisfaction was firstly proposed by Lawler (1973). Leisure agriculture contains the characteristics of service, experience and catering. The leisure farms which mainly engaged in leisure agriculture attempts to be distinguished from general leisure tourism industry must possess their own special theme features to improve customer satisfaction. Satisfaction is the result of personal expectations and cognition, that is, the comparison between personal expected psychology and actual experience (Chen, Chen, Chen, 2014). Leisure farm is a service industry, which must own indispensable physical resources, but also consider the success factors of the characteristics of the service industry. Meeting consumer demand and creating high consumer satisfaction are often the reasons for consumers' repurchases (Huang, Ye, Ye, 2011). Therefore, customer satisfaction is an important indicator of enterprise self-improvement

and can be used as a reference for marketing. Relevant research and measurement aspects of customer

satisfaction are discussed in this study. Table 1 indicated the relevant research on customers' services.

Table 1. Relevant Research on Customers' Services

Author	Year	Research subject	Measure Facets
Cronin <i>et al.</i>	2000	Service Industry	Consumers' viewpoints of feelings and evaluation
Ho, L. M., Su, Y. F.	2010	Leisure farm	Quality of Catering Equipment, Farm Environment Quality, Consumption Prices, Service Attitude, Staff's Professions and Level of Value Tourists
Hung S. J. Yeh, L. C., Yeh, L. J.	2011	Leisure farm	Service Value, Staff's service, Service Environment
Lee, J. H., Lee, K. L., Lai S. C.	2013	Leisure farm	Package Itinerary, Consumer Experience
Cheng, C. Y.	2013	Leisure farm	Environment planning, Equipment Planning, Food and Service
Cheng, S. C.	2015	Education Park	Overall satisfaction, Staff's Service, Rural Industry, History and Humanities
Kao, S. F., Jen C. H., Zhong, Z. Q.	2018	Leisure farm	Equipment Satisfaction, Staff Satisfaction, Beautiful experience

Resources sorted by the author

Satisfaction is mostly related to pre-trip expectations and post-travel experience. When tourists' traveling experience meets their expectations, a sense of satisfaction occurred, and the tourists will be satisfied (Chen & Chen, 2010). Domestic scholars Chen *et al.* (2011) have pointed out that the quality of services provided to the tourists by the business operators may affect the satisfaction of tourists. Many leisure farms nowadays have become multi-functioned. Besides its own rural, local, ecological and experiential industrial characteristics, business operators in order to attract tourists to visit again, the characteristics of tourist satisfaction and service quality have been taken into

consideration in the development of leisure farm management for tourists' willingness to revisit, and they hopefully to improve their strength of competition.

## 2.2 Service Quality (SQ)

According to the statistics of the Agricultural Committee of the Executive Yuan (2019), till the year of 2019, 95 leisure agricultural areas have been designated nationwide, which means that the operators have excellent standards in management, services, software and hardware facilities, and the agricultural products of leisure agriculture are tangible. The service is intangible and the experience is

unforgettable (Li et al., 2013). Leisure farms mainly sell "personal services"-based businesses. Farm operators ought to ensure high-quality services so that every visitor can enjoy the "home away from home" service, tourists feel strong "Mood, comfortable" taste of kimochi. Both service quality and external hardware facilities are the key factors for the farmers to improve service quality and to attract more visitors for the farm operators. (Lin et al. 2015).

Service is an intangible, service cannot be returned. It is a natural commodity (Chen, Xu, 2018). The definition of service quality was first proposed by Levitt (1972). It is believed that service quality is the result of service which can meet the set standards; and service quality which focuses on customer satisfaction with a service determine the quality of service. Parasuraman et al. (1985) defines "Service Quality" (SQ) as the gap between "Expected Service" (ES) and "Cognitive Service" (Perceived Service, PS), when the expected service is higher than the cognitive service means that customers are not satisfied with the quality of service, which means the existence of the gap between the customer's expected service quality and the actual feeling after receiving the service. Their relationship is shown in Figure 1.

Parasuraman et al. (1994) also proposed that service quality is the ability of service providers to meet customer expectations for services. Parasuraman et al. (1988) developed a set of conceptual models of service quality, referred to as "PZB" as follows:

1. Tangible
2. Empathy
3. Assurance
- 4.

Customers' Service

Reactivity (Responsiveness) 5. Reliability. Relevant research and measurement aspects of service quality are discussed in this study. Table 2 indicated serviced quality related research.

The current global perspective and the improvement of the living environment of the Chinese people result in higher requirement in service quality. Today's consumers have different requirements for service quality. Service quality is different from general product quality. It is an invisible and abstract concept and is not easily to be measured with varieties. Therefore, farm operators ought to raise their service quality as much as they can to make tourists feel better. (Chen, 2016, Chen, Xu, 2018) PZB is one of these important index measurement methods in the field of service marketing. It is widely used by industry and scholars as a classification and measurement method of service quality. Therefore, researchers use the PZB model as a tool to investigate service quality in this study.

### 2.3 Willingness to Revisit

With the changes of the times and the evolution of economic development, agriculture in Taiwan has gradually transformed into a multi-functional aspect that combines food safety, rural development and ecological conservation. "Leisure Farm" is a combination of related industries such as agriculture, service-oriented and multi-cultural industry (Wang, Wang, 2014; Lin, Liang, Cai, 2013). Leisure farms provide a field for experiencing

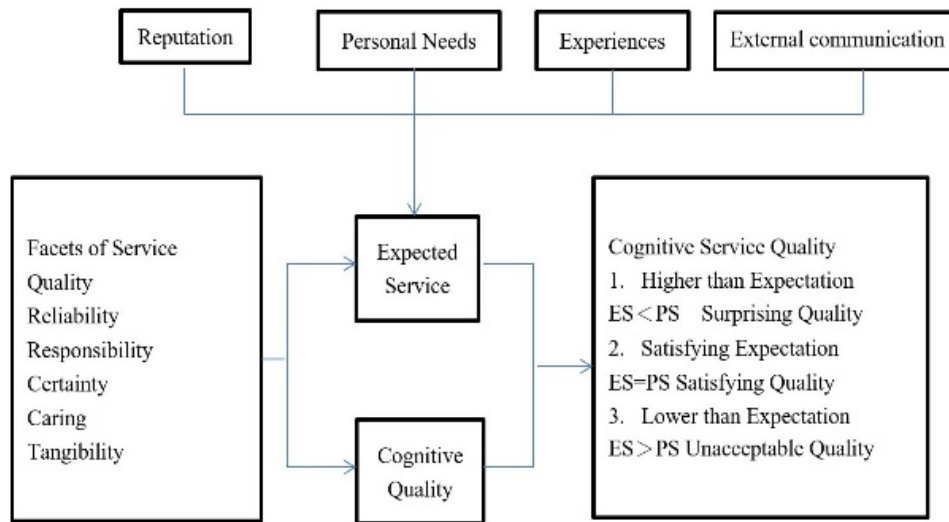


Figure 1. Conceptual Structure of Service Quality

Sources: Parasuraman, A., Zeithaml, V.A., and Berry, L. (1985), A conceptual model of service quality and its implications for future research," *Journal of Marketing*, 49, 48.

rural activities, understanding rural culture, understanding agricultural production, enjoying rural life, and getting into rural ecology. With the three-in-one nature of leisure agriculture and the characteristics of the six-level industry, they can do it with other tourism industries and differentiate themselves from others to increase their income, to promote rural development, and make leisure farms a unique and attractive tourist destination (Liu et al., 2015).

For leisure farm operators, what they expect the most is the tourists' willingness on revisiting and purchase produces in the forms; hence, only tourists who wish to revisit can promote the sustainable operation of the industry (Um, Chon, & Ro, 2006). The willingness to revisit will have the same meaning as the user's "repetitive

purchase" behavior. If tourists can have a high degree of revisit on the leisure farm, it will increase the number of operators and increase their profitability. Therefore, the reasons how these farm owners satisfy tourists and increase the satisfaction of tourists from leisure farms and the willingness of tourists to revisit are the purposes of this research.

In sum, with the increase in the number of leisure farms and limited by the type of operation, most of the leisure products provided by domestic leisure farms are similar, which also makes the operation of leisure farms face severe competition. This study attempts by measuring and evaluating the service quality of leisure farms, satisfaction and willingness to revisit can the farm operators utilize these references. Hopefully this research

Table 2. Service Quality Related Research

Author	Year	Research Objects	Measure facets
Parasuraman , Zeithaml, and Berry	1988	Banking, long distance calls company	Tangibility, reliability, responsiveness, reliability and care
Wang, Y. Y., Wang, J.M.	2014	Leisure Farm	Tangibility, reliability, responsiveness, reliability and care
Jung, P. F., Cheng, J. H., Lee, Y. C.	2012	Leisure Farm	Tangibility, reliability, responsiveness, reliability and care
Lin, Y. S., Yen, W.H. Ho, L. M., Lo, I.T.	2015	Leisure Farm	Tangibility, reliability, responsiveness, reliability and care
Chen, Y. C.	2016	Leisure Farm	Tangibility, reliability, responsiveness, reliability and care
Chen, C. M., Hsu, M. C.	2018	Theme Park	Tangibility, reliability, responsiveness, reliability and care

Resources sorted by the author

result can be used as a reference for tourism industry management and academic research in the future.

### III. Research methods

#### 3.1 Research Object

In this research questionnaire, systematic sampling (Systematic Sampling) arranges all the sample units of the mother group in sequence, and divides them into many intervals, and takes a sample every few units. The study was conducted according to the proportion of tourists visiting the farms on holidays and non-holidays. The number of interviewed tourists was determined by selecting one tourist

every ten tourists. Tsou Ma Lai Farm is a well-known tourist attraction in Tainan, so the researchers take the entry tourists as the research objects. The testing time is September 1-30, 2019. Five groups of graduates with professional academic training are invited to assist in the testing of 1,000 samples. After eliminating 145 invalid questionnaires with incomplete answers, a total of 855 valid questionnaires were analyzed, and the effective questionnaire recovery rate was 85.5%.

#### 3.2 Research Framework and Assumptions

- (1) The relationship between service quality and customer satisfaction



Tourists pay more attention to service quality than they were in the past. Foreign scholars believe the levels of satisfaction are affected by the perception of service quality, price, product results, and the situational factors and personal factors after the comparison of product expectations. (Zeithaml, Bitner, 2000, Kotler, 2003) The common feature of leisure farms is by using the leisure agricultural resources to provide visitors with in-depth guided commentary and experience activities, which not only meets the tourists' recreational needs but also increases farmers' income. Agriculture is a combination of production, life and ecology. In other words, it is a three-level industrial combination of agricultural production and sales, agricultural processing and recreational services. (Zheng, Guo, 2016)

The so-called satisfaction, Lee, Lee and Wicks (2004) believes that satisfaction refers to the experience composed of the individual attributes of all goods and services; leisure farms have a variety of recreational products. How can operators reduce costs, improving the quality of tourists' re-entry wishes and provide services related to tourist rest becomes very important in management (Chen, 2016). Hemple, Donald, J. (1977) believes that customer satisfaction depends on the degree of realization of customer's expected product or service benefits, and it reflects the degree of consistency between expected and actual results. In the study of service quality and satisfaction, most scholars believe that service quality has a positive effect on satisfaction, and

service quality has a significant impact on customer satisfaction. (Chen et al., 2010, Ruan, 2013, Wang, Wang, 2014, Lin et al., 2015, Xie et al., 2015, Chen, 2016) The research results discovered that there is a significant level between service quality and satisfaction, and also has a significant impact on customers' satisfaction. Based on the above inferences, this study proposes the first hypothesis:

H1: The quality of leisure farm services has a significant impact on satisfaction.

(2) Relationship between customer satisfaction and willingness to revisit

Cardozo (1965) is the first scholar who put forward the concept of customer satisfaction and believed that increasing customer satisfaction would increase the willingness of customers to revisit. According to Article 3 of the Leisure Agriculture Guidance and Management Measures, three elements are necessary for planning a leisure agricultural area: 1. Regional agricultural characteristics; 2. Enriching landscape resources; 3. Enriching ecological and cultural assets that preserve value (Agricultural Committee of the Executive Yuan, 2019). In this way, the unique agricultural characteristics of the leisure agricultural areas are planned, which not only effectively promotes the arrival of tourists, but also promotes the employment development and characteristic construction of the entire area. Tourists with high willingness to revisit the leisure farms will possibly increase these industries' income and further

make possible promotion of these industries, and the increasing profit may cause sustainable operation to these farms. For leisure farm operators, the most expectation is that tourists can go to the farm to consume, so it is very important to understand the influencing factors of tourists on farm satisfaction and willingness to revisit. (Zhang et al., 2008) Most scholars believe that satisfaction has a significant impact on the willingness to revisit (He, Su, 2010, Ruan, 2013, Zhang, 2015, Chen, 2016) Based on the above inferences, this study proposes a second hypothesis:

H2: Satisfaction of leisure farms has a significant impact on willingness to revisit

(3) Relationship between service quality, customer satisfaction and willingness to revisit

Zeithaml and Bitner (2000) pointed out that service quality will directly affect customer satisfaction and customers' willingness to revisit. The relationship between service quality to service industry is just like air to people, because if the current leisure service industry provides low service quality, customers would not revisit for consumption (Chen, Zhang, 2015). Service quality includes intangibility, inability to store, heterogeneity, and indivisibility, (Lin et al., 2015) and the willingness to revisit is a concept of re-consumption in terms of consumer behavior. (Zhong, Liao, 2012).

Conclusions from most relevant

researchers indicated that improving the quality of service increases the level of tourists' satisfaction and enhances the willingness of tourists to revisit. The higher the service quality increases, the better satisfaction the tourists have. This positive circulation increases tourists' willingness to revisit. Tourist satisfaction has a significant positive impact on revisiting willingness, and service quality and caring service quality have a positive impact on customer loyalty. (Fornell, 1992, Li et al., 2006, Lin, 2010, Ruan, 2013, Lin et al., 2015; Wang, Wang, 2014; Chen, 2016) Customer satisfaction has a significant intermediary effect on experience marketing and revisiting consultants, and leisure farm operators can increase customer satisfaction through experience marketing, thereby increasing customer willingness to revisit (Wu, 2009; Lin et al., 2015).

Leisure farm operators should improve the quality of service, which it will increase the satisfaction of tourists in recreation and strengthen tourists' willingness to revisit. Based on the above inferences, this study proposes Hypothesis 3 and Hypothesis 4:

H3: The quality of leisure farm services has a significant impact on the tourists' willingness to revisit.

H4: The service quality of leisure farms has a significant influence on the willingness to revisit via satisfaction intermediary effects

The research structure is shown in Figure 2.

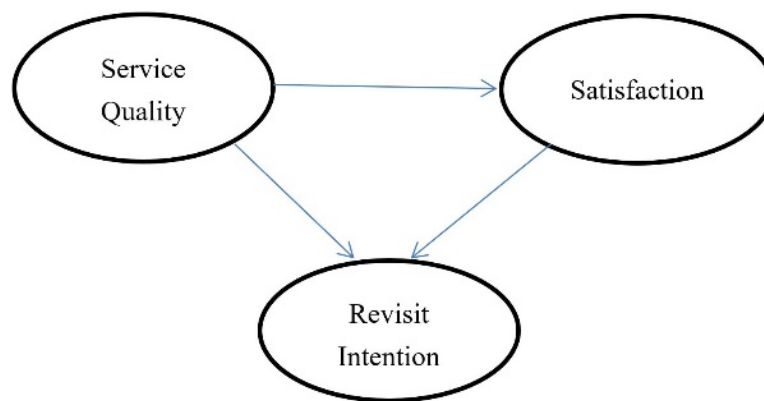


Figure 2. Research Structure

### 3.3 Research tools

This research chose a questionnaire survey method and divided the research questionnaire into four parts.

(1) Satisfaction analysis scale. The levels of satisfaction are based on the "expectation theory" proposed by Lawler (1973) and on the definition of Chen & Chen declared in 2010. And the questionnaire is adapted from part of the questionnaire content of Chen and Xu declared in 2018. The variables of satisfaction include the three levels of "Environmental Planning", "Service Facilities and Safety", and "Emotional Cognition" and the questions are based on the subject's score on the Tsou Ma Lai Farm Scale by using Likert five-point scoring method (from very dissatisfied to very satisfied).

(2) Service quality analysis scale. The service quality scale of this study is based on the service quality SERVQUAL scale of Parasuraman, Zeithaml and Berry (1988), and is designed based on the "expectation-inconsistency" theory. It is adapted from Chen and Xu (2018) Part of the questionnaire content: the construction of the scale.

This questionnaire is conducted based on the customers' evaluation on service quality based on their real feelings about the farm operators' service standard. The multiple-item SERVQUSL scale - tangibles, caring, assurance, reliability, and responsibility are utilized as five variables of service quality in this research. Results would be based on the subject's score on the Tsou Ma Lai Farm Scale and the Likert 5-point scoring method (from very dissatisfied to very satisfied).

(3) Revisiting willingness analysis scale is revised from part of the questionnaires made from Wu Zhaozhan's in 2009, Huang Xiuqing and in Zongliang's in 2017. The scale constructed is composed of four questions. The score on the scale is used as a benchmark, and Likert's five-point scoring method (from very dissatisfied to very satisfied). The fourth part is personal basic information.

### 3.4 Data analysis

According to the purpose of the study, the following statistical methods are adopted statistically.

(1) After taking back the questionnaires, researchers firstly checked and

sorted out the questionnaire, deleted the questionnaire with incomplete answers, then validated the questionnaire numbers, filed them, and finally used SPSS for 20.0 Windows statistical software for data analysis. Statistics on the distribution of personal attribute variable data of valid samples revealed the overview of the samples, including the number and percentage of samples.

(2) Structural equation model analysis: In this study, Amos statistical software was used to analyze the convergence validity, differentiation validity, and adaptability of the research model to verify the reliability and validity of the model. Path analysis was used to analyze Hypothesis 1: Leisure farm service quality has a significant impact on satisfaction; Hypothesis 2: Satisfaction of leisure farms has a significant impact on the willingness to revisit; Hypothesis 3: The quality of leisure farm services has a significant impact on the willingness to revisit. Finally, the bootstrapping method proposed by MacKinnon (2008) is used to test Hypothesis 4: Leisure farm services Quality has a significant effect on the willingness to revisit through the intermediary effect of satisfaction.

#### IV. Results and Discussion

##### 4.1 Analysis of Demographic Variables

In terms of age, 384 persons (44.9%) aged 21 to 30 were the most, followed by 153 persons (17.9%) under

20 years old; 558 unmarried persons (65.3%) in marital status were more than 297 married persons (34.7%); As for occupations, the highest percentages of the tourists were students (40.4%), 345 ones; the second highest ones were those who work in the service industry: 210 ones (24.6%). The third highest ones were 156 government servants such as soldiers or public school teachers (18.2%), 54 ones were housekeepers (6.3%), 48 ones were unemployed (5.6%) and 16 ones were worked in other field (4.7%). The highest group of those tourists' companions was family members or relatives - 78 ones, the percentage was 44.2%; the second highest one was friends or classmates, the number was 348 and the percentage was 40.7%. Table 3 indicated the analysis of demographic variables.

##### 4.2 Convergence Validity

Anderson and Gerbing's (1988) complete structural equation model (SEM) is divided into two stages. The first stage measurement model (Measurement Model) was completed and then the researcher proceeded to the evaluation of the second stage structural model. The "Confirmatory Factor Analysis" (CFA) is a part of Structural Equation Model (SEM) analysis. This study is based on the Kline (2011) two-stage model and later the variables of the modified CFA measurement model were evaluated and reduced. If the measurement model is acceptable, the full SEM model report will be made.

Table 3. Analysis of demographic variables

Category	Group	Times	Percentage	Category	Group	Times	Percentage
Gender	Male	372	43.5	Marital Status	Married	297	34.7
	Female	483	56.5		Single	558	65.3
Age	Under 20	153	17.9	Occupation	No job	48	5.6
	21-30	384	44.9		Student	345	40.4
	31-40	141	16.5		Service Industry	210	24.6
	41-50	117	13.7		Government servant	156	18.2
	Older than 50	60	7.0		Housekeeper	54	6.3
Companion	Alone	72	8.4	Others	42	4.9	
	Family/relative	378	44.2				
	Friends/peers	348	40.7				
	Company/Group	33	3.9				
	Others	24	2.8				

The measurement model applies the most approximate method, and the estimated parameters include standardized factor load, composition reliability, and average variance extraction. Hair, Anderson, Tatham and Black (1998), Nunnally and Bernstein (1994) and Fornell and Larcker (1981) suggested the criteria for convergence validity:

1. The standardized factor loading (Standardized Factor Loading) is higher than 0.50;
2. The composition reliability (Composite Reliability, CR) is higher than 0.60;
3. The average variance extraction (Average Variance Extracted, (AVE)) is higher than 0.50

The results, as shown in Table 4, the load of standardized factors is between 0.62-0.91, and the topics have topic reliability; the reliability of the

research facet composition is between 0.88-0.93, both exceeding 0.6, which meets the standards recommended by scholars, Showing that 9 facets have internal consistency; while the average variation number extraction range is .62-.71, which is higher than 0.5, which meets the standards of Hair, et al. (1998), Fornell and Larcker (1981), showing The surface has good convergence validity. 4.3 The Discriminant Validity Verification

The discriminant validity is different in verifying the correlation between two different facets. In this study, the confidence interval method is used to test the confidence interval of the correlation coefficient between facets. If the confidence interval is not included, it means that the facets have different validity. SEM establishes the confidence interval of the correlation coefficient. At the 95% confidence level, using Bootstrap's estimation method, if the confidence interval is lower than 1,

the null hypothesis is rejected, and the two facets have different validity (Zhang, 2011; Xu et al., 2011; Torkzadeh et al., 2003). This study used Bias-corrected and Percentile method to estimate the

results as shown in Table 5. The confidence intervals of all standardized correlation coefficients do not include 1, indicating that all facets have different validity.

Table 4 Data Analysis of Convergence Validity

Latent Variable	Observation Variable	Standardized Factor Loading	C.R.	AVE	Latent Variable	Observation Variable	Standardized Factor Loading	C.R.	AVE
Environmental Planning	S4	.83	.88	.62	Reliability	SQ13	.81	.87	.63
	S3	.90				SQ14	.90		
	S2	.78				SQ15	.76		
Service facility and Safety	S1	.62	.89	.68	Responsibility	SQ10	.70	.86	.63
	S8	.87				SQ11	.88		
	S7	.85				SQ12	.88		
Affective cognition	S6	.84	.93	.76	Assurance	SQ7	.77	.86	.67
	S5	.72				SQ8	.85		
	S11	.90				SQ9	.84		
Willingness to revisit	S10	.87	.93	.76	Tangibles	SQ1	.88	.88	.71
	S9	.82				SQ2	.91		
	S12	.89				SQ3	.73		
Willingness to revisit	R4	.88	.93	.76	Caring	SQ4	.73	.86	.63
	R3	.91				SQ5	.86		
	R2	.81				SQ6	.87		
	R1	.89							

Table 5. Bootstrap Correlation coefficient 95% Confidence interval

Parameters	Estimation	Bias-corrected		Percentile method	
		Lower bound	Upper bound	Lower bound	Upper bound
Service quality ↔ Willingness to revisit	.43	.32	.53	.32	.53
Satisfaction ↔ Service quality	.74	.62	.83	.63	.83
Satisfaction ↔ Willingness to revisit	.45	.36	.53	.36	.53

#### 4.4 Moderate

The assumption of SEM is model covariance matrix equals to sample covariance matrix. The SEM is a large sample analysis method, so it is easy to cause a P value of less than 0.05 and cause false rejection of the assumption which results in a poorly matched model. To solve this problem, Bollen and Stine proposed a solution called “Bootstrap correction” in 1992. Schumacker and Lomax (2010) and Kline (2011) later suggested that the fitness of the model should report a variety of different

fitness indicators to determine the fitness of the model. For the matching index in this study, we chose Jackson, Gillaspay and Purc-Stephenson ‘s (2009) work collecting and categorizing relevant research results from 194 international academic journal (SSCI) papers, and use the nine most widely used matching indexes in SSCI to report the model fitness. As shown in Table 6, the model fits all meet the standard. Therefore, the display model has good adaptability.

Table 6. Goodness of Fit Index

Goodness of fit index	Tolerable range	Research Model Fit
Chi-square value	The smaller the better	531.89
Degrees of freedom	The smaller the better	423
Normed Chi-sqr ( $\chi^2/df$ )	$1 < \chi^2/df < 3$	1.26
GFI	$\geq 0.9$	.98
AGFI	$\geq 0.9$	.98
RMSEA	$\leq 0.08$	.02
SRMR	$\leq 0.08$	.06
TLI (NNFI)	$\geq 0.9$	.99
CFI	$\geq 0.9$	.99

#### 4.5 Path analysis

From Table 7, the path coefficient results are known. Service quality (b = .69, p <0.05) significantly affects satisfaction. Hypothesis 1: The quality of leisure farm services has a significant impact on satisfaction. Satisfaction (b = .37, p <0.05) and service quality (b = 0.26, p <0.05) significantly affect the willingness to revisit. Hypothesis 2: Satisfaction has a significant effect on the willingness to revisit. Hypothesis 3: Service quality has a significant impact on the willingness to revisit. Establishing service quality effectively

explains 52% of satisfaction. Satisfaction and service quality can explain 22% of the willingness to revisit.

#### 4.6 Intermediary Effect Verification

The use of bootstrapping as an intermediary effect to test the indirect effect has higher statistically validity than the causal path method and coefficient product method (MacKinnon et al., 2004; Williams & MacKinnon, 2008). The biggest advantage of the bootstrapping method is that the estimation of indirect effects, unlike coefficient product method (such as the

Table 7. Outcome of Practice of Research Hypotheses

Dependent Variable	Independent Variable	Non-standardized regression coefficients	Standard error	Z Value	standardized regression coefficients	P Value	R <sup>2</sup> explained variation
Satisfaction	Service quality	.69	.04	16.57	.74	.00	.52
Willingness to revisit	Satisfaction	.37	.07	22.56	.29	.00	.22
	Service quality	.26	.07	5.07	.22	.00	

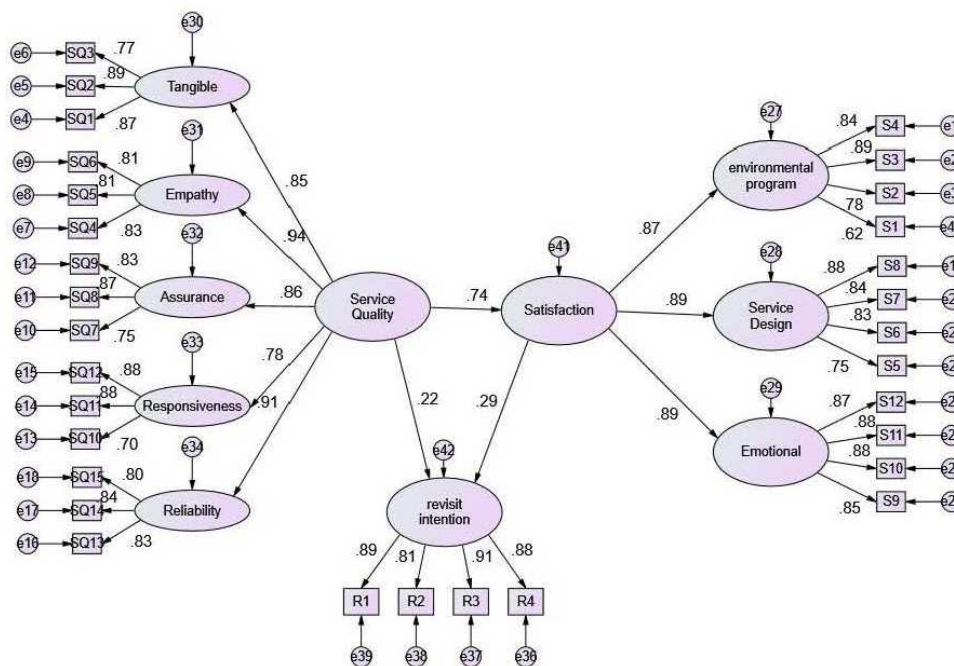


Figure 3. Statistical model of leisure farm tourists' service quality through satisfaction to revisit willingness

B-K method), does not require the indirect effects conform to the normal sampling distribution. Therefore, this study should use the bootstrapping method to test the intermediary effect.

1. Check the total effect, and end the analysis if the total effect doesn't exist, which indicates that there is no need to discuss the intermediary effect.
2. Check the indirect effect, and if the indirect effect is significant, the

intermediary effect exists.

After analyzing the total effect and the indirect effect in this study, we obtained the indirect effect analysis table of the intermediary model in the following table. From the table below, we can find that in the total effect of service quality → willingness to revisit,  $p < 0.05$ , and the confidence interval does not contain 0 [0.39, 0.64], which means that the total effect is established;



that is, the intermediary effect has service quality → satisfaction → willing to revisit,  $p > 0.05$ , and the confidence interval contains 0 [0.06 to 0.43] means that the indirect effect is established, showing Service quality → Satisfaction

→ Re-entry willingness intermediary effect is established. Hypothesis 4: Service quality has a significant effect on the willingness to revisit through satisfaction intermediary effects. Table 8 indicated intermediary effect analysis.

Table 8. Intermediary effect analysis

Effect	Point estimate	Coefficient product			Bootstrap 1000 times	
		Standard error	z-Value	p-Value	Lower bound	Upper bound
<b>Total effect</b>						
Service quality→Revisit willingness	.52	.06	8.67	.00	.39	.64
<b>Non-direct effect</b>						
Service quality→Revisit willingness	.26	.09	2.89	.02	.06	.43

## V. Conclusions and Recommendations

### 5.1 Conclusion

This study explores the impact of leisure farm service quality on the willingness to revisit: using satisfaction as an intermediary variable. According to the results of this study:

(1) The service quality of Tsou Ma Lai Farm has a significant effect on the standardized regression coefficient of satisfaction of .69, hypothesis one is established. This study found the research conclusions are consistent with results of these studies: Chen et al., 2010, Ruan, 2013; Wang, Wang, 2014, Lin et al., 2015, Xie et al., 2015; Chen, 2016.

(2) Satisfaction of the Tsou Ma Lai farm ( $b = .37, p < 0.05$ ) and service quality ( $b = 0.26, p < 0.05$ ) The tourists' willingness to revisit has a significant impact, and the second hypothesis is established. The findings of this study are consistent with the conclusions of these studies: He, Su, 2010; Ruan, 2013; Zhang, 2015; Chen, 2016.

(3) Service quality effectively explains 52% satisfaction. Satisfaction and service quality can explain 22% of the tourists' willingness to revisit. The quality of service has a significant impact on the willingness to revisit, and the third hypothesis is established. This study found that the research conclusions are consistent with others researchers' outcomes: Fornell, 1992, Li et al, 2006, Lin, 2010, Ruan, 2013, Lin

et al., 2015, Wang, Wang, 2014, Chen, 2016.

(4) Service quality → satisfaction → willingness to revisit,  $p > 0.05$ , confidence interval contains 0 [0.06 to 0.43], service quality has a significant effect on the willingness to revisit through satisfaction intermediary effect. The fourth hypothesis is established. The findings of this study are consistent with the findings of these researchers' outcomes: Wu, 2009; Lin, Yan, He, Luo, 2015.

## 5.2 Recommendations

The results of the study show that service quality has a significant impact on satisfaction and willingness to revisit, satisfaction has a significant effect on willingness to revisit, and service quality has a significant effect on the willingness to revisit through satisfaction intermediary effects. Therefore, according to the research results, specific suggestions for improving service quality and satisfaction are as follows:

(1) Serving others is fun, receiving others' services is a kind of enjoyment, and farm operators should provide the quality of service that exceeds customer expectations.

The results of the study showed that service quality has a significant impact on satisfaction. When your service quality is confirmed, the more frequently customers visit, the less worries you have about your business. It's said "It is my honor to serve you." Service is highly correlated to emotions, making your customers feel your service is a pleasure instead of feeling like a must routine. Good service is art, which

makes you feel that serving others is fun and receiving service from others is enjoyment. Once your customers reach a loyalty indicator and get used to your services, they would turn to you every time they need relevant service. Service quality and satisfaction is the fundamental drive for competition. Hence, improving the staff's service attitude and service quality, raising customers' satisfaction by utilizing staff's professions is a must solution for sustainable operations to these leisure farm managers.

(2) Strengthen various professional trainings of employees to create happy employees and happiness to customers

The results of the study show that service quality has a significant impact on the tourists' willingness to revisit. Customers spend money for varied services such as surprises or innovative services, life consumption experience, etc. Casual service industry sell goods, respect, mood, caring, relationship, professional, experience, feeling, humor, commitment, etc. to customers, happiness is the most crucial one among them. Therefore, it is suggested that leisure farm operators or managers strengthen various professional trainings for employees, improve staff service attitude and professional service quality, and create happy employees to increase tourists' willingness to revisit.

(3) Operators need to have professional management capabilities to increase satisfaction and increase the willingness of tourists to revisit.

The empirical study of this study found that satisfaction has a significant impact on the willingness to revisit. The citizens' preference on leisure is chang-

ing. Leisure farms, which possess a wealth of natural ecological resources combining production, life and ecology, have become one of the tourists' favorite scenic spots. Leisure farm managers can provide valuable products or self-experiencing activities such as self-harvesting of vegetables and fruits, processing of agricultural products, kilns, etc. Furthermore, scenery or industrial or cultural programs worth visitors to pay attention would increase tourists' satisfaction and meet the needs from varied kinds of tourists. The more important task for staff is their interpersonal relationship and ability of communication, politeness and adequate attitude, passion, ability of risk-taking, problem-solving and psychological knowledge of consumption. Therefore, operators need to have professional management capabilities, enrich the content of related activities, and update business strategies to increase tourists' satisfaction and their willingness to revisit.

(4) Improving service quality is a priority, so that tourists can feel at home.

The empirical study of this study which through the intermediary effect of satisfaction found that service quality has a significant impact on the tourists' willingness to revisit. At present, domestic agricultural administration agencies continue to offer many incentives and guide leisure farms internationalized. The downward direction of ecological conservation and the concept of leisure education are gradually accepted by the citizens. People living in the urbanized high-density society face high pressure physically and spiritually and fast-paced life, they would therefore visit leisure farms more frequently and take leisure activities there to relax.

Nevertheless, the task how to operate the leisure farms sustainably challenges the operation managers; the quality of service will affect the satisfaction of tourists, which causes the tourists' willingness to revisit. Hence, besides basic services, surprising services beyond customers' expectation, varied and innovative service quality is the key factor of success. Customized and individualized services which differ from standardized ones can meet modern customers' needs. Through the coping methods of improving staff professionalism and service quality to improve the satisfaction of tourists and increase the willingness of tourists to revisit will make visitors feel at home. Leisure farm operators should take promoting tourists' physical and spiritual health as a priority while improving service quality, so as long as tourists think of leisure farm, they think of Tsou Ma Lai Farm.

(5) Increase the frequency of using the sales and improve the completeness of interpreting the scores.

This study, which selected Tsou Ma Lai Farm as the survey site because of some reasons, may not represent the research completeness. Therefore, follow-up relevant studies are recommended. Literature review, group discussions, open-end questionnaires, case interviews, and other multi-party collection funds would be helpful for researchers to amend this scale and build various norms. The improvement will contribute to the interpretation and use of this scale and increase research value.

## References

Agricultural Committee of the Adminis-

- trative Council (2019a). Statistics and publications, retrieved October 8, 2019 from <https://www.coa.gov.tw/ws.php?id=8>
- Agricultural Committee of the Administrative Council (2019). Agricultural land regulations retrieval system: Management of leisure agriculture tutoring.
- Agricultural Land Regulation Search System: Leisure Culture Guide and Management Regulations, retrieved October 8, 2019 from <http://talis.coa.gov.tw/ALRIS/LawDetail.asp?tID=2002>
- Anderson, J. C., Gerbing, D. W. (1988). Structural Equation Modeling in practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411-423.
- Bollen, K. A., Stine, R. A. (1992). Bootstrapping goodness-of fit measures in Structural Equation Models. *Sociological methods and Research*, 21, 205-229.
- Cardozo, R. N. (1965). An experimental study of customer effort, expectation and satisfaction. *Journal of Marketing Research*, 2(3), 244-249.
- Chang, C.Y. (2013). A Study of the relationships among recreation motivation, leisure benefit and satisfaction in leisure farm. *Journal of Tourism and Travel Research*, 8(2), 1-18.
- Chang, S.C. (2015). *Tourist's Satisfaction and Consumption in Agricultural Experience Tour: A Case Study of Kim-Han Persimmon Education Field in Xinpu*, Master Thesis, National Chiao-Tung University, Hsinchu City.
- Chang, H.M., Chang, Y.C. Hsu, C.W. (2008). A study of tourist on destination image, environmental perception, experiences and revising willingness in Chingjing farm, *Journal of Leisure and Recreation Industry Management*, 3, 72-86.
- Chen, C. F., Chen, F. S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism Management*, 31(1), 29-35.
- Chen, C.H., Hsieh, C.H., Chang, C.C., Chang, Y.W. (2010). The service quality, satisfaction and brand image of Tsou-Ma-Lai Farm, *Journal of Rural Tourism Research*, 4 (1), 35-57.
- Chen, C.M., Hsu, M.C. (2018). Study on theme park tourists' perception of a service quality and satisfaction model, *Journal of Taiwan Society for Sport Management*, 18 (2), 181-214.
- Chen, H.F., Chang, W.J. (2015). The relationships among service quality, customer satisfaction and re-consumption intention—A study of NTU Sport Center. *Journal of Delin University of Technology*, 28, 1-18.
- Chen, J.X., Chen, W.H. (2015). A study of service quality and customer satisfaction in table tennis club in Taoyuan area. *Providence Univer-*

- sity: *Physical Education*, 9, 19-35.
- Chen, K.Y., Yang, M.C., Lin, Y.S., Lee, M.C. (2011). A study of the relationships among service scape, interpretation service quality, and tourists' behavioral intentions in tourism factory. *Journal of Outdoor Recreation Study*, 24(4), 1-28.
- Chen, W.C., Chen, W.H., Chen, K.Y. (2014). The Taitung Museum Tourist Service Quality and Satisfaction Research. *Journal of China University of Science and Technology*, 58, 183-201.
- Chen, Y.C. (2016). Literature reviews of satisfaction, service quality, recreation experience, and willingness to revisit Tsou-Ma-Lai Farm, *Leisure & Holistic Wellness*, 15, 66-75.
- Chin, W. W. (1998). Commentary: issues and opinion on Structural Equation Modeling. *Management Information Systems Quarterly*, 22(1), 7-16.
- Chou, Y.H., Ou-Yang, S.Y., Chen, K.C. (2018). Taiwan tourism 2020: A sustainable tourism development strategy, *Taiwan Modern Tourism*, 1(1), 1-20.
- Chung, P.F., Chang, C.H., Li, Y.C. (2012). A study of service quality in theme restaurant-an example of Jing-Yuan Café., *Review of Leisure, Sport and Health*, 3(2), 62-77.
- Cronin, J.J., 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.
- Fornell, C. R., Larcker, D. F. (1981). Evaluating Structural Equation Models with unobservable variables and measurement error, *Journal of Marketing Research*, 18(1), 39-50.
- Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56(1), 6-21.
- Hair, Jr. J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis* (5<sup>th</sup> Ed.). Englewood Cliffs, NJ: Prentice Hall.
- Hempe, Donald, J. (1977). "Consumer Satisfaction with Home Buying Conceptualization and Measurement," in Hunt, H. K. (Eds.), *The Conceptualization of Consumer Satisfaction and Dissatisfaction*, (Cambridge, M. A.: Marketing Science Institute), 7-21.
- Ho, L.M., Su, U.F. (2010). A Study of Consumers' Satisfaction and Revisit Willingness to Leisure Farm: Take Tsou Ma Lai Farm as an Example. *Journal of Kaohsiung Marine University*, 24, 221-237.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6 (1), 53-60.
- Hsieh, W.J., Hu, C.H., Wu, I.T. (2015). A study of the relationship of service quality and attendee's satisfaction for the disabled game at Kin-

- men County, Taiwan. *Journal of Sport and Recreation Management*, 12 (3), 1-19.
- Hsu, M.C., Pan, F.C., Huang, C.H. (2011) The research of behavioral for water sports tourist's in Green Island: The verification of the theory of planned behavior. *Journal of Taiwan Society for Sport Management*, 11 (2) , 43-67.
- Hu, L. T., Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: A multidisciplinary Journal*, 6 (1), 1-55.
- Huang, S.C., Yeh, L. C., Yeh, L. J. (2011). A Study of the relationship between perception of brand image and customer's satisfaction of leisure farm, *Journal of Lan Yang Institute of Technology*, 10, 81-87.
- Huang, X. Q., Lin, Z. L. (2017). The impact on tourists' willingness' to revisit from their leisure involvement in leisure farms and leisure benefits. *Asia's Holistic Health and Industrial Development for Senior Citizens Journal*, 5, 31-40.
- Jackson, D. L., Gillaspay Jr, J. A., Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological Methods*, 14(1), 6-23.
- Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling* (3 rd Ed.). New York: Guilford.
- Kolter, P. (2003). *Marketing Management* (11th Ed.). New Jersey: Prentice-Hall.
- Koa, H.F., Chan, C. H., Chung, C.C. (2018). Investigation of relationship between tourists' motivation experience, perceived value and satisfaction on leisure farms. *Journal of Physical Education Fu Jen Catholic University*, 17, 53-69.
- Lawler, E. E. (1973). *Motivation in Work Organizations*. Monterey, C.A.:Brooks /Cole.
- Levitt, T.(1972). Production-line approach to service. *Harvard Business Review*, 50(4):41-52.
- Li, Y.S., Zhong, Q. D., Liao, J.H. (2012). A study of how to promote leisure industry the customer willingness to revisit. *Zhong-zhou Journal of Management and Humanities*, 2 (1), 99-113.
- Lin, B. K. (2010). A study on foreign visitors' satisfaction of leisure farms - A case study of visitors from Southeast Asia. *Master Thesis*, Taiwan University, Taipei.
- Lin, G. S., Liang, L.H., Tsai, W. G. (2013). *Introduction and Practice of Leisure Business Management* (3 rd Ed.), Taipei: Shinlou Books Co., Ltd.
- Lin, W.R., Yang, L.C., He, C.R., Zeng, Y. H., Jhang, S.C. (2015). Applying IPA to explore service quality of Tsou-Ma-Lai farm. *Journal of Sport, Leisure and Hospitality Research*, 10(3), 34-52.

- Lin, Y.S., Yan, W.H., Ho, L.M., Luo, Y.T. (2015). The impact of tourism service quality for revisiting willingness in Jian Yuan leisure farm: to recreation satisfaction as intermediary variables analyzed. *Journal of Marine Leisure Management*, 5, 35-52.
- Liu, C.R., Lin, W.R., Lin, Y.M. (2015). Evaluating the creativity of recreation farm websites. *Bulletin of the Geographical Society of China*, 54, 37-53.
- Lee, C. K., Lee, Y. K., & Wick, B. E. (2004). Segmentation of festival motivation by nationality and satisfaction. *Tourism Management*, 25(1), 61-70.
- Lee, M. S., Chou, J.N., Lin, Y. J. (2006). The relationship between service quality, relationship quality, and customer loyalty in the leisure farms. *Journal of Agricultural Economics*, 80, 125-168.
- Lee, T. H., Lee, C. L., Lay, S.J. (2013). Study on the satisfaction of tourist experience and package tour in relation to loyalty of leisure farm customers: a case study of Yuan-Ying leisure farm in Guanyin Township, Taoyuan County. *Bulletin of Taoyuan District Agricultural Research and Extension Station*, 74, 65-79.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39, 99-128.
- MacKinnon, D. P. (2008). Introduction to statistical mediation analysis. New York, NY: Lawrence Erlbaum
- Nguyen, T.T. (2013). A study of relationship among destination image, service quality, customer value, satisfaction and revisiting intention-A case of Vietnam, Sapa Area. Master Thesis, National Taipei University of Technology, Taipei.
- Nunnally, J. C., Bernstein, I. H. (1994). *Psychometric theory* (3rd Ed.). New York: McGraw-Hill.
- Parasuraman, A., Zeithaml, V., Berry, L. (1994). Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70, 201-230.
- Parasuraman, A., Zeithaml, V., Berry, L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50.
- Parasuraman, A., Zeithaml, V. A., Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Schumacker, R. E., & Lomax, R. G. (2010). *A Beginner's Guide to Structural Equation Modeling* (3rd Ed.). Taylor and Francis Group, LLC.
- Torkzadeh, G., Koufteros, X., & Pflughoeft, K. (2003). Confirmatory analysis of computer self-efficacy. *Structural Equation Modeling*, 10

- (2), 263-275.
- Tourism Bureau, Tourism Statistics Annual Report (2019a), retrieved April 30, 2019, from <https://admin.taiwan.net.tw/FileUploadCategoryListC003330.aspx?CategoryID=2638da16-f46c-429c-81f9-3687523da8eb&appname=FileUploadCategoryListC003330>
- Tourism Bureau, Tourism Statistics (2019b). retrieved April 30, 2019 from <https://stat.moc.gov.tw/UploadFile/CulturalStatistic/47%E5%9C%8B%E4%BA%BA%E6%97%85%E9%81%8A%E6%A6%82%E6%B3%81.pdf>
- Tsou Mai Lai Farm (2019a), Know Tsou Ma Lai, retrieved October 8, 2019 from <http://www.farm.com.tw/about.php>
- Tsou Mai Lai Farm (2019b), About Tsou Ma Lai, retrieved 2019/10/8 from <http://www.farm.com.tw/news.php>
- Um, S., Chon, K., Ro, Y. (2006). Antecedents of revisit intention. *Annals of Tourism Research*, 33(4), 1141-1158.
- Wang, Y. Y., Wang, J.M. (2014). A study of Tai Yi Ecological Leisure Farm's service quality, and tourists' travel motivation, satisfaction, and revisiting willingness. *Journal of Leisure, Tourism, Sport, & Health*, 4(3), 61-82.
- Williams, J., MacKinnon, D. P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural Equation Modeling*, 15, 23-51.
- Website of Agriezgo (2019). 108 Year Expansion of Autumn and Winter National Agricultural Tourism Award, retrieved October 8, 2019 from <https://ezgo.coa.gov.tw/zh-TW/Front/AgriReward/Index>
- Wu, C.C., Liang, L.H., (2009). The Study on the Relationship between Experiential Marketing and Revisiting Intention of Leisure Farm-Customer Satisfaction as a Mediator. *Journal of Global Management and Economics*, 5(1), 59-71.
- Zhang, W.H. (2011). *Structural Equation Modeling*, Tutor TriStar, Kaohsiung.
- Zeithaml, V.A., Bitner, M.J. (2000). *Service Marketing: Customer Focus across the Firm*. New York: McGraw-Hill.
- Zheng, Y.L., Guo, L.S. (2016). *Recreational Farms Management (3<sup>rd</sup> Ed)*, Hwa Li Publishing Co., Ltd.