CHAPTER III

RESEARCH METHODOLOGY

Local of the Study

The locale of the study will focus on Taiwan the members who have had the experience of Voluntourism.The volunteer tourists in Taiwan can search form Government Departments, who support, charge or plan the Voluntourism program (Such as: Ministry of Education, Taiwan; National Youth Commission, Taiwan), NGO or NPO who have the Voluntourism program (Such as: Kingcar Education Foundation, Taiwan), the student societies in universities who hold the volunteer travel program, and the organizations or units who are the destination providers.

Population and Sampling Procedures

Population

The population of this study will focus on the volunteer tourists in Taiwan who went to the rural and remote areas and did the work to help the local people to develop their living environments, or give assistance to save remains and historical buildings during their vocation in Taiwan or other countries.

Sampling

In this study will use the stratified sampling and systematic sampling, and adopt the confidence interval approach from Ott (1993) $N = \dfrac{z^2 p(1-p)}{e^2}$ (N: the sample size; z: standard error associates with chosen level of confidence; P: estimated variability in the population; e: acceptable error).

Follow the confidence interval approach. This study sets the sample under the 95% confidence level, and adopt the reference about 50% is widely used in social science research, and acceptable error is $\pm 5\%$. In consequence, the study has to get the samples more than 385.

Sampling Framework

The volunteer tourists name lists will get from:

Government Departments: such as Ministry of Education and National Youth Commission in Taiwan.

NGO or NPO: Such as Kingcar Education Foundation in Taiwan, and some student societies in universities.

General Organization: such as organizations or units who are the destination providers or hold the volunteer travel programs.

The name lists will include the volunteer tourists who ever attended the Voluntourism programs and activities before AD 2010 (2010 is included).

Stratified Sampling and Systematic Sampling

In statistics, stratified sampling is a method of sampling from a population. When sub-populations vary considerably, it is advantageous to sample each subpopulation (stratum) independently. Stratification is the process of grouping members of the population into relatively homogeneous subgroups before sampling. The strata should be mutually exclusive: every element in the population must be assigned to only one stratum. The strata should also be collectively exhaustive: no population element can be excluded. Then random or systematic sampling is applied within each stratum. This often improves the representativeness of the sample by reducing sampling error. It can produce a weighted mean that has less variability than the arithmetic mean of a simple random sample of the population.

In this study will group members of the population into 3 subgroups. According to the sampling framework, the classification method will base on the volunteer tourists take a

part the Voluntourism programs or activities from government departments, non-profit organization or general organization. Then adopt the systematic sampling to get the samples to do the questionnaire Survey

Measurement of Variable

In this study will take the questionnaire survey. The questionnaire adopts Likert-type scale with 5 degrees, and uses the criteria of the measurement as follows: 5= Strongly Agree, 4= Agree, 3= Neutral, 2= Disagree and 1= Strongly Disagree, to measure the respondents' intention for each question. Moreover, after the data analysis, we can discuss the degree of the agreement, if gets the point between of 4.21 – 5.00, that means strongly agrees with the argument; if gets the point between of 3.41 – 4.20, that means agrees with the argument; if gets the point between of 2.61 – 3.40, that means neutral with the argument; if gets the point between of 1.81 – 2.60, that means disagrees with the argument; finally, if gets the point between 1.00 – 1.80, that means strongly disagrees with the argument. The measurement of variable of each concept and the items in every concept will be discussed in the follows.

Activity Involvement

Activity involvement was measured using an adapted version of McIntyre and Pigram's (1992) involvement scale (see Table 1). There are three dimensions, attraction (4 items), centrality (4 items), and self-expression (4 items) in this scale.

Table 1 Activity Involvement Scale

Dimension	No	Item	ID
Attraction	1	Participating in the Voluntourism program is very important to me.	AI1
	2	Participating in the Voluntourism program offers me relaxation when pressures build up.	AI3
	3	Participating in Voluntourism program is one of the most satisfying things I do.	AI5
	4	I really enjoy the Voluntourism program.	AI7
Centrality	1	I find a lot of my life is organized around the Voluntourism program.	AI4
	2	Participating in the Voluntourism program has a central role in my life.	AI8
	3	I enjoy discussing the Voluntourism program with my friends.	AI10 (removed)
Self Expression	1	Participating in Voluntourism program says a lot about who I am.	AI2
	2	You can tell a lot about a person by seeing them participating in Voluntourism program.	AI6
	3	When I participate in Voluntourism program I can really be myself.	AI9
	4	When I participate in Voluntourism program others see me the way they want to see me.	AI11

Source: McIntyre and Pigram (1992; Kely and Mowen, 2005)

Experiential Marketing

Experiential marketing was measured using items adapted from Schmitt's (1999) research (see Table 2). The experiential marketing scale is included five dimensions: sense (4 items), feel (5 items), think (4 items), act (5 items), and relate (4 items).

Table 2 Experiential Marketing Scale

Dimension	No	Item	ID
Sense	1	The natural environments in the destination where holds the Voluntourism program make me feel appropriate.	EM9
	2	The building and place in the destination where holds the Voluntourism program make me feel appropriate.	EM1
	3	The public facilities in the destination where holds the Voluntourism program make me feel acceptable.	EM5
	4	The smells in the destination where holds the Voluntourism program make me feel comfortable.	EM3
Feel	1	I consider that the place where holds the Voluntourism program makes me feel comfortable.	EM3
	2	I consider that when I participated in the Voluntourism program, the instructor's guidance and interpretations were very clear.	EM4
	3	The ambiance in the place where holds the Voluntourism program makes me feel relaxed.	EM7
	4	When I participated in the Voluntourism program, the experiences make me feel happy.	EM12
	5	The staffs in the place where holds the Voluntourism program, they are very friendly and have good attitude.	EM14

Table 2 (Continued)

Dimension	No	Item	ID
Think	1	The experiences of participating in the Voluntourism program will help me to enhance my awareness of social responsibility.	EM8
	2	The experiences of participating in the Voluntourism program will help me to think about the interactions with others.	EM16
	3	I think the Voluntourism program is totally different from the other tourism activities.	EM18
	4	I think that participate in the Voluntourism program can lead me away from the madding crowd.	EM20
Act	1	The facilities in the destination where holds the Voluntourism program are easy to use.	EM10
	2	The activities in the Voluntourism program are various and interesting.	EM17
	3	The Voluntourism program provides me the different way to experience my life.	EM22
	4	I am willing to participate in the Voluntourism program because of the attractive activities which holds by the destination.	EM19
	5	I am willing to buy local souvenirs for my family/friends.	EM13
Relate	1	After participating in the Voluntourism program, it helps me to increase the interaction with others.	EM21
	2	After participating in the Voluntourism program, I am willing to recommend the Voluntourism program to the others.	EM15
	3	I will associate with participating in the Voluntourism program when I want to enjoy my vocation.	EM6
	4	After participating in the Voluntourism program, it increases my social activities.	EM11

Source: Schmitt (1999)

Experiential Value

Experiential Value was measured using items adapted from Mathwick et al. (2001); Batra and Ahtola (1991); Holbrook and Hirschman (1982); Babin et al. (1994) researches (see Table 3). The experiential value scale is included 4 dimensions: consumer return on investment (2 items), service excellence (2 items), playfulness (3 items), and aesthetic (5 items).

Table 3 Experiential Value Scale

Dimension	No	Item	ID
Consumer Return on Investment	1	It is worthwhile for me to pay the travel expense for the Voluntourism program.	EV1
	2	The activities in the Voluntourism program are met my expectation.	EV3
Service Excellence	1	The facilities and products in the Voluntourism program are professional.	EV2
	2	When I participated in the Voluntourism program, the destination provided good services for me.	EV7
Playfulness	1	Participating in the Voluntourism program can help me to forget annoyance and strain in life.	EV8
	2	Participating in the Voluntourism program can let me away from the real life.	EV11
	3	Participating in the Voluntourism program can make my life to be easier.	EV5
Aesthetic	1	Participating in the Voluntourism program can bring me the feeling of ease.	EV4
	2	Participating in the Voluntourism program can let me feel joyfully and satisfactorily.	EV10
	3	The field of the destination where hold the Voluntourism program is provided with aesthetic.	EV12

Table 3 (Continued)

Dimension	No	Item	ID
	4	It is very attractive for me to participate in the Voluntourism program.	EV9
	5	I like the ambiance which is created by the destination where hold the Voluntourism program.	EV6

Source: Mathwick, et al. (2001; Batra and Ahtola, 1991; Holbrook and Hirschman, 1982; Babin et al., 1994)

Place Attachment

Place attachment was measured using items adapted from Kyle, Mowen, and Tarrant's (2004) research (see Table 4). The research was adopting Williams and Roggenbuck's (1989) place attachment scale. Their conceptualization consisted of measures capturing two dimensions: place dependence (4 items) and place identity (7 items).

Table 4 Place Attachment Scale

Dimension	No	Item	ID
	1	For the recreation activities that I enjoy most, the settings and facilities provided by the place where I participate in Voluntourism program are the best.	PA1
Place Dependence	2	I prefer the place where I participate in Voluntourism program over others settings and facilities for the recreational activities that I enjoy most.	PA4
	3	For what I like to do, I could not imagine anything better than the setting and facilities provided by the place where I participate in Voluntourism program.	PA7

Table 4 (Continued)

Dimension	No	Item	ID
	4	I enjoy visiting the place where I participate in Voluntourism program more than any other sites.	PA9
	1	The place where I participate in Voluntourism program means a lot to me.	PA2
	2	I am very attached to the place where I participate in Voluntourism program.	PA3
	3	I feel a strong sense of belonging to the place where I participate in Voluntourism program and its settings and facilities.	PA5
Place Identity	4	I have little, if any, emotional attachment to the place where I participate in Voluntourism program and its settings and facilities.	PA8
	5	I identify strongly with participate in Voluntourism activity.	PA6
	6	I feel participate in Voluntourism activity is a part of me.	PA10
	7	Participating in Voluntourism activity says a lot about who I am.	PA11

Source: Williams and Roggenbuck (1989; Kyle et al., 2004)

Revisit Intention

Revisiting Intention was measured using an adapted version of the Chang's (2006) scale (see Table 5). She used 3 items to measure the tourist's revisit intention, the first of all is "willing to visit again", the second is "willing to recommend", and the third is "willing to place the visiting destination in priority".

Table 5 Revisiting Intention Scale

Dimension	No	Item	ID
	1	I am willing to visit the place where I have ever participated in Voluntourism program again.	RI1
Revisiting Intention	2	I am willing to recommend the place where I have ever participated in Voluntourism program to the others.	RI2
	3	I am willing to place the destination where I have ever participated in Voluntourism program in priority.	RI3

Source: Chang (2006)

Research Instrument

According to the research objectives and research topic, and combining with reviewing several related researches and literatures, the research instrument of this study is being created, the scale of developing the volunteer tourists' revisit intention. In this study will adopt the questionnaire survey, the questionnaire is divided in 6 parts, first of all is the basic information of respondents; second, the items about the activity involvement; third, the items about the experiential marketing; fourth, the items about experiential value; fifth, the items about the place attachment; the last on is the items about revisiting intention.

Pretesting of the Instrument

To determine the effectiveness of the survey questionnaire, it is necessary to pretest it before actually using it. Pretesting can help to determine the strengths and weaknesses of your survey concerning question format, wording and order. In this research adopts the undeclared pretest, and does not tell respondents that it is a pretest. The survey is given just like to conduct it for real. This type of pretest allows checking the choice of analysis and the standardization of the survey. (Converse and Presser, 1986)

About how many participants should be recruited in the pretest? According to Narins (1999) pointed that it is difficult to say how many participants to have per pretest. A rule of thumb is a sample of 25 to 75 for a large-scale study. This can vary depending upon time constraints and resources as well as whether or not a similar study has been conducted with a similar population. And on the book "Making Health Communication Programs Work: A Planners Guide" has the chapter to discuss about the planning and pretest, it mentions that in pretest the sample size should be large enough, however, to give the confidence that have sampled a range of opinions. A reasonable and adequate sample size is 50 participants typical of the target audience. According to the references in this study will get 50 participants in the pretest process.

In the pretest process will use the statistic software to check the reliability and validity of the survey questions. To be reliable, a survey question must be answered by respondents the same way each time. According to Weisberg (1989), researchers can assess reliability by comparing the answers respondents give in one pretest with answers in another pretest. Then, a survey question's validity is determined by how well it measures the concepts it is intended to measure. Both convergent validity and divergent validity can be determined by first comparing answers to another question measuring the same concept, then by measuring this answer to the participant's response to a question that asks for the exact opposite answer.

This study adopts the confirmatory factor analysis to test the reliability and validity. In confirmatory factor analysis, Cronbach's alpha is used to measure the reliability of two or more construct indicators. Furthermore, in confirmatory factor analysis, assessing the measurement model validity occurs when the theoretical measurement model is compared with the reality model to see how well the data fits. In confirmatory factor analysis, to check the measurement model validity, the number of the indicator helps us. For example, in confirmatory factor analysis, the factor loading latent variable should be greater than 0.7. Chi-square test and other goodness of fit statistics like RMR, GFI, NFI, RMSEA, SIC, BIC, etc., are some key indicators that help in measuring the model validity in confirmatory factor analysis. (Statistics Solutions, 2009: online)

According to the references in this study got more than 50 participants in the pretest process, there are 70 despondences and 69 are valid. The result of the pretest shows as table 6:

Table 6 The Result of the Pretest

Constructs	Dimension	Cronbach's α	Constructs	Dimension	Cronbach's α
Activity Involvement	Attraction	0.8084	Experimental Value	Consumer Return on Investment	0.6780
	Centrality	0.7029		Service Excellence	0.6275
	Self Expression	0.6799		Playfulness	0.6552
Experimental Marketing	Sense	0.8448		Aesthetic	0.8126
	Feel	0.8678	Place Attachment	Place Dependence	0.7432
	Think	0.7968		Place Identity	0.8378
	Act	0.8628	Revisiting Intention		0.7792
	Relate	0.8339			

Data Gathering

Data gathering is a term used to describe a process of preparing and collecting data, for example, as part of a process improvement or similar project. The purpose of data gathering is to obtain information, to keep on record to make decisions about important issues, to pass information on to others (Weller and Romney, 1988). Primarily, data is collected to provide information regarding a specific topic. The data gathering plan in this study will contain the following activities:

Pre-collection activity: get the target data for pretesting use, and make sure the analysis methods.

Collection: follow the sampling approach to collect data.

Present findings: involve some form of sorting analysis and paper work.

Following the sampling approach and data gathering plan, this study will adopt the web Questionnaire and mail Questionnaire.

Analysis of Data

About the analysis of the data, in this research will use 2 kinds of the statistic software, Statistical Package for Social Science (SPSS) and Analysis of Moment Structure (AMSO). For descriptive data analysis, T-test, and regression analysis, SPSS was used. AMOS was used to do confirmation factor analysis and test the model and the multidirectional relationship such as structure equation model (SEM)

Descriptive Analysis

Descriptive analysis is used to describe the main features of a collection of data quantitatively. The analysis aims to provide an overview of the respondents and an insight into their behavioral patterns. (Mann, 1995)

Confirmatory Factor Analysis

In statistics, confirmatory factor analysis (CFA) is a special form of factor analysis. It is used to test whether measures of a construct are consistent with a researcher's understanding of the nature of that construct (or factor). In contrast to exploratory factor analysis, where all loadings are free to vary, CFA allows for the explicit constraint of certain loadings to be zero. CFA has built upon and replaced older methods of analyzing construct validity. CFA is commonly used in social research. CFA is frequently used when developing a test, such as a personality test, intelligence test, or survey (Asparouhov and Muthén, 2009).

For some applications the requirement of zero loadings for indicators not supposed to load on a certain factor has been regarded as too strict. A newly developed analysis method, Exploratory Structural Equation Modeling, specifies hypothesis about the relation

between observed indicators and their supposed primary latent factors while allowing for estimation of loadings with other latent factors as well (Asparouhov and Muthén, 2009).

SEM (Structural Equation Modeling)

Structural equation modeling (SEM) is a statistical technique for testing and estimating causal relations using a combination of statistical data and qualitative causal assumptions. This definition of SEM was articulated by the geneticist Wright (1921), and the cognitive scientist Simon (1953), and formally defined by Pearl (2000) using a calculus of counterfactuals.

Structural Equation Models (SEM) allows both confirmatory and exploratory modeling, meaning they are suited to both theory testing and theory development. Confirmatory modeling usually starts out with a hypothesis that gets represented in a causal model. The concepts used in the model must then be operationalized to allow testing of the relationships between the concepts in the model. The model is tested against the obtained measurement data to determine how well the model fits the data. The causal assumptions embedded in the model often have falsifiable implications which can be tested against the data. (Bollen and Long, 1993)

Among the strengths of SEM is the ability to construct latent variables: variables which are not measured directly, but are estimated in the model from several measured variables each of which is predicted to 'tap into' the latent variables. This allows the modeler to explicitly capture the unreliability of measurement in the model, which in theory allows the structural relations between latent variables to be accurately estimated. Factor analysis, path analysis and regression all represent special cases of SEM. (Bollen and Long, 1993).