Tourism Purchase Behavior of Taiwanese Tourists to Mainland China's –An Exploration on Cluster Analysis

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*Abstract:*Cluster analysis is a method in data processing. It can be applied to marketing in many aspects in practice, providing a scientific and reasonable method for the formulation of marketing strategies. Based on the essence of the cluster analysis method, this study has a new exploration, and explores the some factors of Taiwan tourists' demands, involvement, motivation and Intention. The impact of travel purchase behavior. This study intends to explore the cluster analysis method from the mutual influence of each variable, and analyze the influence of each factor on the purchase behavior in the specific application of consumer behavior in marketing the goal is to make the tourism marketing theory of this paper more perfect.

Key words: cluster analysis; tourism purchasing involvement; tourism Intention.

I. Introduction. Clustering has a wide range of uses. In business, clustering can help market analysts to subdivide different consumer groups from their consumer database and summarize the consumption patterns of each type of consumer. This study uses cluster analysis as a research method to investigate the influence of complex and diverse cross-strait tourism purchasedemands on the purchase behavior of Taiwanese tourists to the mainland China's. The research establishes a model of tourist purchase behavior and the mutual influence of various variables. Thus, the theoretical framework and operating system of tourists' tourism behavior are established.

This research focuses on tourism purchase behavior, and then takes Taiwan tourists to travel to the mainland China's as a specific research object, summarizes the behavioral manifestations of the interaction between tourism purchase behavior and different tourist behavior characteristics, and tries to explore tourism consumer behavior. At present, there has been a certain degree of research on tourism purchase behavior. Existing research is scattered in various fields and has a multi-disciplinary comprehensive research perspective, but there is a

lack of in-depth and systematic research on Taiwanese tourists' travel purchase behavior in the mainland China's. This research extends from the theoretical basis of consumer behavior to the expression of travel purchase behavior with expectations from the principle of consumer purchase behavior, and extends to the theoretical thinking of travel consumer behavior. The main purpose is the purchase demand and motivation of Taiwan tourists to the mainland China'.. .., etc., the impact of its tourism purchase behavior, multi-factor analysis affects the behavior of Taiwan tourists to travel to the mainland to purchase intentions, and the results of consumer behaviors showing different tourism purchase intentions, in order to provide tourism companies with a more in-depth and detailed understanding of tourists Purchase behavior characteristics to develop more effective marketing strategies.

2. Literature review
2.1tourism purchase involvement

The concept of tourism involvement was gradually applied in the fields of leisure and tourism in 1980. The research topics include leisure and tourism involvement, involvement dimensions, comparison of the involvement degree of different tourism activities, and so on. The so-called travel purchase involvement refers to the emotional input, motivation, and excitement of an individual in a specific travel activity (Havitz&Dimanche, 1990) [1]. Selin& Howard (1988) believes that self-involvement exists between the individual and tourism activities, which is the degree of pleasure and self-expression obtained by tourists during tourism activities [2]. As the characteristics of tourism are highly involved, the way to know the product is to use the search method of tourism information. Why do tourists collect information before traveling? The study of McIntosh &Goeldner (1990)[3] pointed out that tourists collect information mainly to improve the quality of tourism and reduce the uncertainty of tourism. Therefore, tourists usually collect tourist spots before deciding on a tourist location. Activities, accommodation facilities and attractions.

Schul& Crompton (1983) mention that the information search method of tourists will first search internally, that is, rely on past travel experience, especially to a place that has been more frequently visited in the past. When one's own experience and knowledge are insufficient, an external search will be conducted [4]. If tourists are engaged in tourism activities for a longer holiday, they will usually search for relevant information from the outside and collect more information from various sources. Therefore, purchasing tourism products is a complex decision-making process. This process is related to the involvement of tourists themselves, and also related to external factors, which will affect the main factors of tourists' purchasing decisions.

From the above discussion, the involvement of tourism purchase can be regarded as an idea or attitude of the participant towards the activity in which he participates. When this

attitude is combined with the tourism activity, the participant can find out the relationship with himself the relevance of itself, and this kind of relevance with different of high and low, will have different effects on the behavior of participants. This also makes tourism consumers' perceptions of alternative behaviors vary depending on their own of involvement.

2.2Tourism purchase demand

Tourism purchase demand refers to the various possible prices of core tourism products in a certain period of time and the quantity relationship that potential tourists are willing and able to purchase at these price levels. Those who are willing to purchase a certain core tourism product at a certain price within a certain period of time Quantity. The generation of tourism purchase demand has both objective and subjective factors. Objective factors are external factors that make people become tourists, and subjective factors are internal factors that make people become travelers.

Song, Wong and Chon (2003) [5] analyzed the tourism purchase demand of 16 major source countries in Hong Kong, and found that the most important factors affecting tourist demand are mainly tourism product prices and source countries. Economic conditions. In addition, the research on the factors affecting tourism purchase demand mostly starts from the two aspects of tourists' own factors and tourism destination factors. Lin and Tao (2000) [6] divided the factors that affect tourism demand into influencing factors and obstacle factors. It takes economic factors and psychological preferences as influencing factors, and non-economic factors, namely spatial distance, time constraints, cultural and social responsibility, and physical and mental disabilities as obstacle factors. The research on the factors affecting tourism demand is basically the discussion of individual tourism demand from the perspective of economics.

This article pays attention to the discussion of the demand for transportation factors in the tourism purchase demand, mainly the tourism purchase demand generated by the cross-strait transportation for Taiwan tourists to the mainland China's, which belongs to the category of this factor. In particular, the rapid development of air transportation has greatly shortened the space distance of travel, thereby alleviating the fatigue of time and space during travel, and enabling more people to realize their desire to travel in their limited leisure time.

2.3Tourism purchase Motivation

Tourism purchase motivation is a state of the internal psychology of tourists, which is affected by two factors. One is past travel experience, which is the psychological or physical experience that tourists have obtained during the previous travel process, and the other is travel information. The behavior of tourists receiving or collecting travel-related information. When tourists experience tourism activities, they will use past experience and the environmental impact at that time to generate demand and form tourism motives. Lin (1988) also believes that

travel experience is an abstract psychological state of the individual, and its motivation will be formed due to the accumulation of personal physical and psychological demand and memories of experience [7].

Generally speaking, tourism purchase motives have the following characteristics: (1) there are differences. Tourists with different tourism purchase motives in the same tourism behavior will have different tourism purchase motives (Lou, 2002) [8], also That is to say, although the external environment is the same, the tourism purchase motivation will vary from person to person; (2) It is cross-cutting, tourism purchase motivation In tourism activities, tourists' tourism purchase motivation isn't

single, but Multiple motives coexist at the same time, but they are often based on one motive and other motives at the same time; (3) It is adjustable, tourism purchase motives will generate other new demand after meeting one demand in tourism activities Such a new motivation will be produced again, so the tourism purchase motivation is a dynamic process, (Livajchen, 1997) Therefore, in tourism activities, the motivation will be adjusted due to different environments; (4) Is sequential. The purchase motivation of tourism is based on the importance of its tourism purpose and the sequence of demand before and after [9]. This study believes that some theories of tourism purchase motivation are discussed from the perspective of human physiological or psychological demand, such as drive theory and hierarchy ofdemand theory, and some back and forth from behavioral results, and others such as attribution theory and expectation theory. It is discussed from the social structure. Tourism purchase motives are the motives triggered by tourists before they engage in tourism activities. Because motives have complex and changeable psychological behaviors and are affected by the characteristics of various tourism purchase motives, they cannot be concluded by a single model.

2.4 Travel purchase intention

Purchasing intention has been confirmed, and it can be used as a key indicator to predict consumer behavior. It is the subjective tendency of consumers to purchase objects, (Fishbein&Ajzen, 1975) [15]. Behavioral science theory has long classified intention as an element in the attitude structure (view, touch, intention), and believes that intention is predictable, and behavior is generated. Therefore, for a long time, "purchase intention" has always been in the practical world. It is the most accurate prediction item for marketers to predict customer buying behavior (Morwitz&Schmittlein, 1992) [16].

The purchase intention of travel is due to the occurrence of the travel motive and the continued personal travel behavior, which leads to the internal journey of this travel towards a certain travel purpose. Here, the travel motive is the driving force of the travel purchase intention. Actions or behaviors that can cause tourism. Therefore, for the behavior of tourists, the intention to purchase tourism has a stronger and more direct influence. Therefore, if you

can clarify the purchase intention of tourism, you can also speculate the purpose and behavior of tourism more clearly. Here, travel purchase intention can refer to an individual's observable or perceptual tendency to act, or it can be an individual's tangible, purposeful or even planned tendency, the inner course of the pursuit of goals.

Therefore, the intention to purchase tourism is the intention or state of preparation of the individual before the tourism activity. In the study, the purchase intention of tourism refers to the possibility that consumers plan to purchase tourism products within a specific period, and the intention to purchase is also an important indicator of the occurrence of purchase behavior. As for the indicator for measuring purchase intention, the consumer's intention to "want to buy" and "re-inquiry" for tourism products after using the service characteristics is used as the measurement item of tourism purchase.

3. Methodology
3.1 Hypothesis

After factor analysis of the data, the transformed factors can be used to further classify individuals, or perform other statistical analysis. According to the research directions discussed in the above mentioned literature and the research hypotheses of the interaction relationship between the indicator variables of each factor observation are as follows:

H1.The difference in travel purchase demand will affect the purchase intention of Taiwan tourists to travel to the mainland China's.

H2. The interaction between tourism purchase demand and tourism purchase involvement will affect the Intention of Taiwan tourists to travel to the mainland China's.

H3. The interrelationship among travel purchase demand and involvement and motivation will affect the intention to travel to the mainland China's.

3.2 Study design

This research refers to the variables of tourism purchase demand: (1) Convenient transportation is the main reason for traveling to the mainlandChina's. (2) It can save a lot of travel expenses (3) Save time and reduce physical load (4) Promote more tourists to travel to the mainland China's. Operational definitions of variables involved in tourism purchase include: (1)think travel agencies can buy best travel, (2)refer to others experience, (3)not enough time for travel, (4) personality traits, (5) travel expenses, and (6) travel risks. And variables of tourism purchase motivation: (1) Leisure motivation (2) Cultural motivation (3) Interpersonal relationship (4) Shopping motivation (5) Ideal motivation.Andvariables of Tourism purchase intention: (1) intention to travel to mainland China's. (2) Plans to travel to the mainlandChina's. And variables of tourism purchase motivation soon(3) Recommend relatives to China.

In this study, the three dimensions of tourists' purchase demand, involvement, motivation, and travel purchase intention were used to make the interviewees (1) strongly agree; (2) agree; (3) ordinary; (4) Disagree; (5) Extremely disagree; give points after choosing one item.

3.3 Research methods (data collection and analysis methods)

In this study, a total of 1,200 questionnaires were distributed to potential tourists in Taiwan, and 1,046 were collected, with a response rate of 87%. Among them, there are 300 copies in Taipei City, 200 copies in Taoyuan City, 100 copies in Hsinchu County, 200 copies in Taichung City, 200 copies in Kaohsiung City and 200 copies in Hualien County. There are 526 males, accounting for 50.3%; 520 females, accounting for 49.7%. In terms of age, (31-40 years old) is the most, with 375, accounting for 35.9%; followed by (21-30 years), with 289, accounting for 27.6%; in terms of education level, college (college) is the most with 613, accounting for 58.6%; followed by high school (vocational), with 269, accounting for 25.7%; in terms of occupation, the business service industry is the largest, with 291, accounting for 27.8%, followed by 171 public teachers, accounting for 16.3%. The statistical methods of data analysis include: narrative statistics, reliability analysis, analysis of variance, and cluster analysis of many different subdivided groups in this study. This process obtains new variables and gives new names. Then carry out statistical analysis with the dependent variable. This study uses purchase intention as the dependent variable or the factor analysis extraction factor for statistical analysis. That is, by using factor analysis to construct a set of simplified clustering variables. Its advantage is that these factors represent the basic structure of the variable value, and the above methods are all executed by SPSS software.

3.4 Data analysis

As shown in Table 1 below, in the sample the average value of travel costs saved by the convenience of cross-strait transportation is the lowest at 2.96, and the average value of travel plans to the mainland within a year is the highest at 3.76. Most of the average value below 3.0 is scattered in the scope of tourism purchase demand, indicating that Taiwanese tourists to the mainland China's. cannot meet the characteristics of tourism purchase demand at this stage, and the standard deviation of these three options is very different. Among them, the "convenient transportation on both sides of the strait will save you a lot of travel expenses" and "convenient transportation on both sides of the strait is the main factor you consider when traveling to the mainland". The expectations are low and opinions are relatively inconsistent. The main reason is that many tourists expect convenient transportation and significant price reductions in air tickets, but the fares announced by airlines are far from consumers' expectations. This is also one of the reasons why the demand of tourists cannot be met. From

the table below, we can see that the overall Cronbach'sAlpha value of all variables is above 0.747, indicating that the construction of this scale has internal consistency.

Table 1.Questionnaire sample statistics and reliability analysis table

Facet	Variable	Operational definition	mean	standard deviation	Cronbachs α
tourism demand	X1	Convenient transportation	2.96	1.257	0.796
	X2	save a lot of tour expenses	2.90	1.315	
	X3	save time and physical load	2.96	1.316	
	X4	more tourists will travel to the mainland	3.47	.904	
tourism involvement	X5	Think agencies can buy best travel	3.65	.902	0.747
	X6	Refer to others' experience	3.30	.891	
	X7	not enough time for travel	3.49	.862	
	X8	personality traits	3.59	.845	
	X9	travel expenses	3.40	.882	
	X10	travel risks	3.50	.950	
tourism motivation	X11	Leisure motivation	3.81	.864	0.698
	X12	Cultural motivation	3.77	.875	
	X13	Interpersonal relationship	3.51	.832	
	X14	Shopping motivation	3.54	.930	
	X15	Ideal motivation	3.26	1.048	
tourism intention	X16	Intention to travel to mainland China	3.55	.884	0.906
	X17	Plans to travel to the mainland soon	3.76	.837	
	X18	Recommend relatives to China	3.43	.937	

4. Results

4.1 Hypothesis 1

H1. .The difference in travel purchase demand will affect the purchase intention of Taiwan tourists to travel

To the mainland China's.

In the recovered valid questionnaires, the K-means analysis was used to find the number of classes with the most appropriate effect, and the single-factor analysis of variance and Scheffe's post-test and sorting were used to perform the cluster grouping effect verification, based on each cluster Name the characteristics of the questionnaire, and verify other characteristics and types of the questionnaire.

Table 2. Center value of cluster analysis of tourism demand

tourism demand	一	二	三
X1 convenient transportation	2	4	3
X2 saves travel expenses	1	4	3
X3 saves time and effort	1	4	3
X4 increase in tourists	3	4	3
Number of samples	296	338	412

From the above table, we know that "X4 increase in tourists" has the highest score in each cluster, which also shows the greater the impact on each cluster. Followed by "X1 convenient transportation." The two variables "X2 saves travel expenses" and "X3 saves time and effort" show the same results. In addition, it is observed from each cluster that the scores of each variable in the group of each variable in the second and third clusters are the same, and the mean distribution of the variables in this cluster tends to be the same. One-way analysis of variance was used for clustering and grouping test.

Table 3 Cluster variance analysis of tourism demand

Demand cluster average	Cluster 1	Cluster 2	Cluster 3	F value	P value
X1 convenient transportation	1.52	4.24	2.96	246.322	.000***
Scheffé Test	2 > 1; 3 > 1				
X2 saves travel expenses	1.39	4.21	3.07	199.966	.000***
Scheffé Test	2 > 3,1 ; 3 > 1				
X3 saves time and effort	1.38	4.31	2.83	612.864	.000***
Scheffé Test	2 > 1 ; 3 > 1				
X4 increase in tourists	3.32	3.70	3.40	16.171	.000***
Total	7.61	16.46	12.26		

Source: Compiled by this research Note: * means P<0.1** means P<0.01 *** means P<0.001

After the clusters are grouped, they should be described according to the nature of the clusters. After the SPSS program is calculated, the arithmetic mean and standard deviation of each cluster can make the clustering status clearer. This research is based on the distribution status of the cluster core to classify. The main purpose of cluster analysis is usually to focus on the classification of samples. There are relatively few statistical inferences. The above table is divided into three clusters according to the scores of each group. Name them separately.

(1) Tourism purchase demand cluster 1. Tourism purchase demand is not high. It demand to be developed and stimulated the travel product market with convenient cross-strait

transportation among the first cluster of people, so it is named "type yet to be developed".

    (2) Tourism purchase demand cluster two. The variables of the observation indicator in this cluster show that the average of all variables is the highest in each cluster, and the tourism purchase demand is strong, which is named "active participation type".

    (3) The third cluster of tourism purchase demand. It is believed that direct cross-strait flights will save a lot of travel expenses and have deep expectations of demand, sit is named "economic benefit type".This research starts from the hypothesis testing, after cluster analysis, the cluster analysis of each group and the variance analysis of tourism purchase intentions, the principle is to infer the control variables, whether there are significant differences in the overall distribution of the observed variables at each level to achieve the purpose of analysis.

Table 4 Variance analysis of tourism demand and tourism intention clustering

tourism demandclustering	samples	Mean	Standard deviation	Scheffe	
1.Types to be developed	296	3.4336	.04281	2 > 3 > 1	
2.Active participation type	338	3.6755	.03922		
3.Type of economic benefit	412	3.6028	.03072		
Analysis of Variance of Demand	sum of squares	Degree of freedom	Mean sum of squares	F value	P value
Between Groups	9.644	2	4.822	10.160	.000***
Within Groups	494.984	1043	.475		
Total	504.627	1045			

Source: Compiled by this research Note: * means P<0.1** means P<0.01 *** means P<0.001

    The results of the comparison of the mean values found that: [Cluster 2] The number of cluster samples for "active participation type" was 338; the standard deviation was .03922, with a mean value of 3.6755 being the highest, and the lowest was [Cluster 1] " Types to be developed " The number of samples is 296, the standard deviation is .04281, and the average value is 3.4336. It can be seen that for Taiwanese tourists, the "active participation type" is an important clustering of travel purchase demand to the mainland China's. On the hypothesis of "different tourism purchase demand, will it lead to different purchase intentions to travel to the mainland China's.", after a one-way analysis of variance, the result statistic F value is 10.160, P value is .000, and because P<0.001, it reaches Significant level, so accept the hypothesis H1.

4.2 Hypothesis 2

    H2. The interaction between tourism purchase demand and tourism purchase involvement will affect the intention of Taiwan tourists to travel to the mainland to purchase.

    When travel consumers choose or use travel products or services, they will vary according

to their personal ideas, but travel purchase involvement reflects a continuous psychological state of tourists. This study follows the observation pointer of travel purchase involvement. The six variables are divided into three types of tourism purchase involved in aggregation.

Table 5. Center value of cluster analysis of tourisminvolvement

Tourism involvement	一	二	三
X5 think agencies can buy best travel	4	3	2
X6 refer to others' experience	4	3	2
X7 not enough time for travel	4	3	3
X8 personality traits	4	4	2
X9 travel expenses	4	3	2
X10 travel risks	4	3	2
Number of samples	556	427	63

From the above table, we know that the variable "X8 does not match personality" has the highest score in each cluster, and it also shows that it has the greatest impact on each cluster, followed by the variable "X7 is not free", and other variables are important for each cluster is relatively low.

Table 6 Cluster variance analysis of tourism involvement

Involvement cluster average		Cluster 1	Cluster 2	Cluster 3	Fvalue	P value
X5 think agencies can buy best travel		4.04	3.42	1.84	302.310	.000***
	Scheffé Test	1 > 3 ; 2 > 3				
X6 refer to others' experience		3.85	2.77	2.08	445.653	.000***
	Scheffé Test	1 > 2,3 ; 2 > 3				
X7 not enough time for travel		3.58	3.48	2.68	32.280	.000***
	Scheffé Test	1 > 2 ; 2 > 3				
X8 personality traits		3.76	3.58	2.22	115.023	.000***
	Scheffé Test	1 > 2,3 ; 2 > 3				
X9 travel expenses		3.90	2.91	2.29	338.168	.000***
	Scheffé Test	1 > 2,3				
X10 travel risks		4.15	2.84	2.19	674.052	.000***
	Scheffé Test	1 > 2 ; 2 > 3				
Total		23.28	19	13.3		

Source: Compiled by this research Note: * means P<0.1** means P<0.01 *** means P<0.001

After analysis of variance, the clustering and grouping test was performed, and it was found that the numerical distribution of "X9 brand image" in the four clusters was compared, the P value <0.001 reached a significant level, the F value was 302.310, and the cluster 1 was

significantly higher than the cluster. Three; cluster two is significantly higher than cluster three. After the clusters are grouped, they are described according to the nature of the clusters. After statistical calculations, the arithmetic mean and standard deviation of each cluster can be used to make the clustering status clearer. From the table above, the scores of each group are divided into total for three clusters, and named separately.

(1) Tourism purchases are involved in a cluster. In this cluster, the variables of the observation indicators show that the mean of all the variables in the first cluster is the highest in each cluster. The main degree of involvement is the worry about the purchase the travel itinerary and destination risk, and secondly, I believe that from the travel experience of family, friends and others, you can buy satisfactory travel. Here, the positioning is named "continuous involvement type" tourism purchase involvement.

(2) Tourism purchase involves a two-cluster, where the cluster focuses on the perception that the purchased tour does not conform to their own personality traits, named "highly involved" tourism purchase involvement.

(3) Tourism purchase involves three clusters. The average value of all variables in this cluster is

Thelowest among all clusters. It is named "low involvement" tourism purchase involvement.

Table 7 Variance analysis of tourism demand and tourism involvement clustering

Involvement cluster	samples	Mean	Standard deviation	Scheffe
1. continuous involvement	556	3.7572	.60924	
2. highly involved	427	3.4450	.67195	1 > 2 > 3
3. low involvement	63	2.9048	.91860	
Tourism demand and involvement	Degree of freedom	sum of squares	Fvalue	P value
After correction	8	9.449	22.838	.000***
tourism demand	2	6.250	15.108	.000***
tourism involvement	2	28.954	69.984	.000***
tourism demandx tourism involvement	4	2.192	5.299	.000***

Source: Compiled by this research Note: * means P<0.1** means P<0.01 *** means P<0.001

After transportation convenience demand and tourism purchase are involved in two sets of clusters, the results of the cross-comparison of the mean values of each factor show that: [Cluster 1] The number of "continuous involvement" cluster samples is 556; the

standard deviation is .60924 , The average value of 3.7572 is the highest, and the lowest is [Cluster 3] The number of "low involvement" cluster samples is 63; the standard deviation is .91860, and the average value is 2.9048, which shows that for tourists in Taiwan, The sample after cluster analysis (53.2%) believes that the degree of involvement of the "continuous involvement type" clusters traveling to the mainland China's. The value of the F statistic involved in tourism purchase is 69.984, and the relevant significance is P <0.001, which has a significant level, and has a significant impact on the purchase intention of traveling to the mainland. For the interaction between travel purchase involvement and transportation convenience demand, the value of the F statistic is 5.299, and the relevant significance is P<0.001, which has a significant level, so hypothesis 2 is accepted. That is, the interaction between transportation convenience demand and travel purchase involvement the effect will affect the intention of Taiwan tourists to travel to the mainland China's. and the verification result is a significant difference.

4.3 Hypothesis 3

H3. The interrelationship among travel purchase demand and involvement and motivation will affect the intention to travel to the mainland China's.

Table 8 Variance analysis of tourism demand, tourism involvement and tourism motivation

	Degree of freedom	Mean sum of squares	F value	P value
After correction	30	4.875	13.806	.000***
tourism purchase involvement	2	3.577	10.131	.000***
tourism purchase motivation	3	9.667	27.380	.000***
tourism purchase demand	2	4.387	12.426	.000***
tourism involvement$_x$ motivation	6	2.685	7.604	.000***
tourism involvement$_x$demand	4	1.200	3.399	.009**
Tourism motivation$_x$demand	5	1.991	5.639	.000***
tourism involvementx tourism motivation x tourismdemand	8	.955	2.705	.006**

Source: Compiled by this research Note: * means P<0.1** means P<0.01 *** means P<0.001

Analyzing the influence of the interaction of tourism purchase involvement, tourism purchase motivation and tourism purchase demand clustering on the intention to travel to the mainland China's. this study intends to take tourism purchase involvement type, tourism purchase motivation and tourism purchase demand as independent variables. The purchase intention is a three-factor analysis of variance for the dependent variable. The 10.131 of the F statistic

involved in tourism purchase has a significant level of significance P<0.001, which has a significant impact on the intention to travel to the mainland. The F statistic value of tourism purchase motivation is 27.380, and the relevant significance is P<0.001, which has a significant level, and has a significant impact on the mainland's intention to travel to the mainland China's. the F statistic value of tourism purchase demand is 12.426, and the related significance is P<0.001, reaching a significant level, which has a significant impact on tourism purchase intention. The interaction between tourism purchase involvement pattern and tourism purchase motivation clustering, F value is 7.604, and the correlation significance is P<0.001, which has a significant level. Therefore, the interaction between tourism purchase involvement pattern and tourism purchase motivation, the impact on tourism purchase intention is significant. The interaction between tourism purchase involvement and tourism purchase demand clustering has an F value of 3.399, and the correlation significance P=0.009<0.01, reaching a significant level. The interaction between tourism purchase involvement and tourism purchase demand has an impact on travel to the mainland China's.travel purchase intention is a significant influence.

The F value of the interaction between tourism purchase motivation and tourism purchase demand clustering is 5.639, and the correlation significance is P<0.001, which has a significant level, and has a significant impact on the purchase intention of traveling to the mainland China's. Tourism purchase involvement pattern and the cluster three-factor interaction between tourism purchase motivation and tourism purchase demand are different, F value is 2.705, and the correlation significance is P=0.006<0.01, with a significant level, tourism purchase involvement and The interaction between tourism purchase motivation and tourism purchase demand clustering has a significant impact on tourism purchase intention. The above verification results support Hypothesis 3.

5. Conclusions

The difference in tourism purchase demand will affect the intention to travel to the mainlandChina's. Assuming that the content is valid, it is learned that tourists believe that travel purchase demand is based on the reduction of travel expenses and time savings brought by convenient transportation, and it is regarded as the main incentive to travel to the mainland China's. That is, different travel purchase demand have a significant impact on travel purchase intentions. This also proves that the convenient transportation on both sides of the strait has a positive impact on Taiwan's intention to purchase tourism to the mainland China's. Therefore, reducing the transportation cost of tourists will encourage Taiwan tourists to travel to the mainland China's.

The interaction between tourism purchase demand and tourism purchase involvement will affect the intention to travel to the mainland China's. The hypothesis is valid, which also proves

that the interaction between tourism purchase demand and tourism purchase involvement will affect the intention of Taiwan tourists to travel to the mainland China's. Verification results there is a significant difference. Among them, the variables of the "continuous involvement" cluster observation indicator show that the average of all variables is the highest in each cluster. The degree of involvement in traveling to the mainland China's. is mainly due to the worry about the purchased travel itinerary and destination risk. Secondly, I believe that learning from the travel experience of relatives and friends can buy mainland tourism products that I am satisfied.

The relationship between tourism purchase demand and tourism purchase motivation and involvement will affect the intention to travel to the mainland China's. The hypothesis is valid, proving that the interaction of the three factors of tourism purchase motivation, demand, and tourism purchase involvement will affect the intention of Taiwan tourists to travel to the mainland China's. The verification results are significantly different. In the broad sense of leisure life, as long as they have the opportunity or free time, they can participate in tourism activities. The motivation of Taiwan tourists to the mainland China's. is the majority and the mainstream. In other words, this tourism motivation, coupled with meeting the demand of convenient transportation, low-risk travel itineraries and reasonable costs, is of positive significance to Taiwan's intention to travel to the mainland China's.

On the basis of previous research, this study makes a new exploration of the cluster analysis of travel consumers' purchasing behavior, mainly conducting "cluster three and four dependent variable analysis of variance." After subdividing the number and type results of the observation indicators of each purchasing behavior variable, it is a process of multiple behavioral factors, rather than the traditional single-order model, so it has more practical and theoretical significance. This study introduces the theory of tourism purchase behavior into the study of intangible products and services, and the research conclusions obtained are a meaningful theoretical supplement to the research in this field. From the statistical analysis results of this study, Taiwanese tourists believe that the convenience of cross-strait transportation is an incentive to travel to the mainland China's. Therefore, for the sustainability of Taiwan's tourism development to the mainland China's. the convenience of tourism transportation and the saving of tourism costs cannot be ignored.

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