

# A Cognitive Study of Tourists on Attraction of Penghu Ocean Firework Festival

Wen-Chieh Hsieh

Tajen Technology University /Recreation Sport Management, Pingtung, Taiwan

Email: mm003@ms4.url.com.tw

Hsiao-Ming Chang

Chienkuo Technology University /Kinesiology Health and Leisure Studies, Changhua, Taiwan

Email: cmchang9@ms23.hinet.net

**Abstract**—The main purpose of this study is that the analysis tourists for Penghu Ocean Firework Festival attraction cognitive, and demographic variables for tourists attraction cognitive. This study adopted questionnaire survey, this study used questionnaire survey way to the island of Taiwan to go to Penghu Ocean Firework Festival of tourists for the object, and mining sentinel convenience sampling method festival is cast on-site, as well as nearby downtown streets conducted surveys, totaling to obtain effective 593 copies of the questionnaire. The information obtained by the descriptive statistics, t-test, and one-way ANOVA analysis, the study found that: 1. In attraction cognitive, tourists to "Want to feel the charm of the beauty of the sparkling fireworks" is the highest. 2. Different gender, with or without children, and will not affect a tourist attraction cognitive. 3. In different marital status, age, level of education, personal monthly income, and occupation, will affect the tourist attraction cognitive. According to the research results, the study not only supports for Penghu's tourism industry with the unit in charge of operations on the recommendations, and also other researchers suggestions for future research.

**Index Terms**—attraction, festival planning, tourist, penghu ocean firework festival.

## I. INTRODUCTION

### A. Background and Research Motivation

Penghu is Taiwan's largest outlying islands, and has a wealth of natural resources, including natural tourism resources, humanities tourism resources, tourism development foundation. The Penghu tourist season is mainly during the summer months of June to August, the main tourism resources of the waters of leisure and recreation activities. However, due to the influence of the northeast monsoon in winter, Penghu area and peak seasons sightseeing crowd obvious differences. Penghu County government since 2003, organized the first "Penghu Ocean Firework Festival" began, and has been in its ninth year. The origin of the Penghu Ocean Firework Festival, Penghu, May 25, 2002 off the coast of

a major event China Airlines plane crash occurred, the indirect effects of Penghu's tourism industry, whether the aviation industry, the hotel accommodation industry or the food and beverage industry, are subject to a considerable degree of spread. Penghu County Government is to boost tourism, the year in cooperation with China Airlines held "Do style in Penghu" activities. Since 2002 handling success, the county government in the next year (2003) with a number of airlines, shipping companies and the private sector by the co officially held the first session of 2003 Penghu Ocean Firework Festival, and the venue moved to the Goddess Temple held, inviting well-known singer, group performances go, and with high-altitude fireworks show [1]. Penghu Ocean Firework Festival becomes therefore held in April-May each year as one of the important tourist attraction.

Gunn and Var [2] pointed out that the attraction is the driving force behind the tourism system if the tourist market is the "driving force" of travelers' action, the tourist attraction on the provision of a major "pull". The major tourist attraction, is to attract people to generate tourism interest, people visited tourist destinations [3]. The way tourism has gradually towards diversification, fixed attractions may not be able to attract tourists, tourist attractions, however, by organizing festivals, to increase tourism attraction, to extend the residence time of tourists and enhance revisiting rate [4].

From the above description can be found attraction for a tourist area, attractive tourists come tourism plays an important role. And organizing festivals is major incentives to attract large crowds in the short term. Lin's [5] study found no significant differences in different gender and education level of attraction for Firework Festival. However, significant differences exist in different age, occupation, marital status, as well as the different income. Syue [6] research found different gender, age, the average monthly income of no significant difference in the Firework Festival's attraction cognitive In addition, the main purpose of the residence time, level of education, occupation, and area of residence has a significant difference exists. Penghu Ocean Firework Festival has been held for several years, however, the attraction of tourists for this activity what

---

Manuscript received November 15, 2012; revised December 29, 2012.

would change with the annual program content different? This requires in-depth understanding of the place.

### B. Purpose

Based on the above discussion, the main purpose of this study is that the cognitive situation analysis tourists for Penghu Ocean Firework Festival attraction. Then tourists analysis of different demographic variables, Firework Festival attraction cognitive differences between. By the analysis of the results, can provide the planners of festivals, in activities designed reference. Also provide future researchers, the reference in the study design.

## II. METHODOLOGY

### A. Subject and Sampling

In this study, the research departments to the island of Taiwan to Penghu National Scenic Area tourists travel for the object, convenience sampling survey. April 2012 to May every Monday, four (Fireworks Festival held during the evening) time after the fireworks scene Goddess Temple, as well as being near the right way downtown neighbourhood and open-air cafes and shops seating area to investigate, night from 9 o'clock to 11 o'clock. Survey a total payment of 660 questionnaires were recovered 612 copies, which deducted answer is not complete or consistent answers to the questionnaire 19 total 593 valid questionnaires.

### B. Questionnaire

In this study, a "tourist attraction scale, based primarily on researchers to the field observation experience, and another reference Syue [6] study of Penghu Fireworks Festival benefits the tourist attraction Scale, and Lin [5] study Penghu Ocean Fireworks of the section travel motivation, satisfaction with attraction scale, Lu [7] study about the Penghu marine tourism and recreation attractive, plus reference prepared from the Institute of tourism attraction. A total of 18 questions in this section Scale mining Likert 5-point scale to measure the scale, from "strongly agree", "agree", "normal", "disagree", "strongly disagree" were given scores of 1-5. This study of demographic variables, including area of residence, gender, age, marital status, level of education, occupation, personal monthly income.

### C. Data Analysis

In this study, the recovery of valid questionnaires was utilized of SPSS for Windows 18.0 version for statistical analysis, analysis steps include: 1. Exploratory factor analysis and Cronbach's  $\alpha$  test of the statistical way to construct the research questionnaire of the reliability and validity. 2. Used frequency analysis watch Penghu Ocean Firework Festival tourists demographic variables assigned, as well as the cognitive situation for the Festival tourism attraction. 3. Used t-test and one-way ANOVA statistical methods, to analyze the different demographic tourists, that the differences cognitive in the attraction of Firework Festival.

### D. Analysis of Questionnaire of Validity and Reliability

Exploratory factor analysis, this study Penghu Ocean Firework Festival Attraction Scale extract four factors, according to the characteristics of each of the factors, and with reference to related Penghu Ocean Firework Festival studies [5]-[7], were named to the "activities theme and program", "enjoying performances", "to experience cuisine with landscape" and "vacation with experience", the scale cumulative variance of 57.66, explained tourists to Penghu Ocean Fireworks Festival attraction explanatory power of 57.66%. Cronbach's  $\alpha$  value of .90. From the above results show that the research scales has a high degree of reliability.

## III. RESULT

### A. Effect Sample Characteristics Analysis

593 questionnaires were recovered, in terms of gender; the effective sample size of 593 people and 299 females (50.4%) was the highest. Marital status, which unmarried and 460 (79.3%) was the highest. Answer this question, with or without children, a total of 236 people, including 68 people with no children, 168 children. In this study, the effective sample size of 593 people, the researchers speculate that respondents with no children, did not answer this question. In terms of age, 21-30 345 (59.2%) was the highest. In the level of education, including universities, 337 (56.8%) was the highest. Occupation, there are 290 students (49.1%) as the highest. In terms of personal monthly income, which income below \$ NT. 20,000, 218 (36.9%) was the highest. To live in Kaohsiung, 103 (17.6%) in the area of residence, which is the highest.

### B. Tourist Cognition on Attraction in the Firework Festival

The analysis of the results shows that the tourist attraction of the Ocean Fireworks Festival that "high" 7 (Mean > 4), were identified as: "Want to feel the charm of the beauty of the sparkling fireworks" (M=4.14), "Experience the beauty of Penghu geographical landscape" (M=4.13), "High-notability activities" (M=4.06), "Experience Penghu rich seafood cuisine" (M=4.05), and "Experience the lively atmosphere of the fireworks show" (M=4.03), "experience romantic evening atmosphere" (M=4.02), as well as "Fireworks show content exciting" (M=4.01). However, tourists in 11 other attraction aspects that these attraction range between "normal" to "high".

### C. Analysis of the Different demographic Differences

#### 1) Gender

Table I t test analysis results show that different gender tourists "Activities theme and program" ( $t = -1.66$ ,  $p > .05$ ), "Enjoying performances" ( $t = -1.84$ ,  $p > .05$ ), "To experience cuisine with landscape" ( $t = -1.52$ ,  $p > .05$ ), and "Vacation experience" ( $t = -1.95$ ,  $p > .05$ ) factors are not significant differences exist.

TABLE I. SUMMARY OF DIFFERENT GENDER ON ATTRACTION T TEST ANALYSIS

Factor Variables	Frequency	M	SD	t-value	Sig
<b>A</b>					
Male	299	27.70	4.44	-1.66	.097
Female	294	28.30	4.36		
<b>B</b>					
Male	299	11.99	2.03	-1.84	.067
Female	294	12.31	2.15		
<b>C</b>					
Male	299	14.61	2.61	-1.52	.128
Female	294	14.94	2.77		
<b>D</b>					
Male	299	15.18	2.52	-1.95	.051
Female	294	15.62	2.89		

Note: A= Activities theme and program, B= Enjoying performances, C= To experience cuisine with landscape, D= Vacation experience

2) Marital status

TABLE II. SUMMARY OF DIFFERENT MARITAL STATUS ON ATTRACTION T TEST ANALYSIS

Factor Variables	Frequency	M	SD	t-value	Sig
<b>A</b>					
Married	120	27.40	4.80	-1.67	.095
Unmarried	460	28.15	4.30		
<b>B</b>					
Married	120	12.63	1.98	2.62*	.009
Unmarried	460	12.07	2.12		
<b>C</b>					
Married	120	14.77	2.72	-.10	.992
Unmarried	460	14.77	2.72		
<b>D</b>					
Married	120	15.32	2.85	-.45	.654
Unmarried	460	15.44	2.67		

\*p<.05; Note: A= Activities theme and program, B= Enjoying performances, C= To experience cuisine with landscape, D= Vacation experience

The Table II t test analysis results different marital status tourists Activities theme and program "(t=-1.67, p>.05)," To experience cuisine with landscape "(t=-.10, p>.05) as well as the "Vacation experience" (t=-.45, p>.05) factors are not significant differences. "Enjoying performances" (t=2.62, p<.05) factors, significant differences exist, married persons (M=12.63) than unmarried persons (M = 12.07)

3) Have or no children

TABLE III. SUMMARY OF DIFFERENT CHILDREN STATUS ON ATTRACTION T TEST ANALYSIS

Factor Variables	Frequency	M	SD	t-value	Sig
<b>A</b>					
Children	68	26.79	4.94	-1.73	.085
No Children	168	27.90	4.26		
<b>B</b>					
Children	68	12.59	1.84	1.63	.104
No Children	168	12.13	1.99		
<b>C</b>					
Children	68	14.71	2.74	-.26	.796
No Children	168	14.80	2.58		
<b>D</b>					
Children	68	15.44	2.47	-1.13	.260
No Children	168	15.84	2.46		

\* Note: A= Activities theme and program, B= Enjoying performances,

C= To experience cuisine with landscape, D= Vacation experience

The Table III t test analysis results display, whether the child tourists Activities theme and program "(t=-1.73, p>.05)," Enjoying performances "(t=1.63, p>.05), the "To experience cuisine with landscape "(t=-.26, p>.05), and" Vacation experience "(t=-1.13, p>.05) factors are not significant differences exist.

4) Age

TABLE IV. SUMMARY OF DIFFERENT AGE ON ATTRACTION ONE-WAY ANOVA ANALYSIS

Factors	SS	df	MS	F	Scheffe
<b>A</b>					
Between Groups	229.18	4	54.80	2.83*	2>1
Within Groups	11194.63	578	19.37		
Total	11413.83	582			
<b>B</b>					
Between Groups	1104.58	4	26.14	6.15*	2,3>1
Within Groups	2456.95	578	4.25		
Total	2561.52	582			
<b>C</b>					
Between Groups	58.69	4	14.68	2.01	N/S
Within Groups	4218.35	578	7.30		
Total	4277.05	582			
<b>D</b>					
Between Groups	48.73	4	12.18	1.65	N/S
Within Groups	4263.92	578	7.38		
Total	4312.66	582			

\*p<.05; Note: A= Activities theme and program, B= Enjoying performances,

C= To experience cuisine with landscape, D= Vacation experience 1.20 year old or less, 2.31-30 year old, 3.31-40 year old

Table IV One-way ANOVA test analysis results show that different age of tourists the "Activities theme and program" (F=2.83, p<.05), and "Enjoying performances (F=6.15, p<.05) factors significant differences exist. However, no significant differences exist in the "To experience cuisine with landscape (F= 2.01, p>.05), and" Vacation experience "(F=1.65, p>.05) factors. Scheffe Post Hoc results show that, in the "Activities theme and program" factors, 21-30 age the tourists, significantly higher than the 20-year-old's tourists. "Enjoying performances" factors, 21-30-year-old, and 31-40 years old tourists, significantly higher than the 20-year-old tourist.

5) Education level

TABLE V. SUMMARY OF DIFFERENT EDUCATION LEVEL ON ATTRACTION ONE-WAY ANOVA ANALYSIS

Factors	SS	df	MS	F	Scheffe
<b>A</b>					
Between Groups	342.71	6	57.12	2.99*	5,6>1
Within Groups	11138.29	583	19.10		
Total	11480.99	589			
<b>B</b>					
Between Groups	53.23	6	8.87	2.03	N/S
Within Groups	2546.94	583	4.34		
Total	2600.17	589			
<b>C</b>					
Between Groups	45.56	6	7.59	1.05	N/S
Within Groups	4227.63	583	7.25		
Total	4273.19	589			
<b>D</b>					
Between Groups	44.04	6	7.34	.99	N/S
Within Groups	4323.76	583	7.42		
Total	4367.80	589			

\*p<.05; Note: A= Activities theme and program, B= Enjoying performances,

C= To experience cuisine with landscape, D= Vacation experience

1. Junior or less, 2.high school, 3.junior college, 4. College, 5.master and Ph.D

Table V One-way ANOVA test analysis results show that tourists of different levels of education in the Activities theme and program "(F=2.99, p<.05) factors have significant differences exist. Scheffe Post Hoc results show that the University and master's and doctoral degrees tourists junior or less, significantly higher than the tourists. But in "Enjoying performances" (F=2.03, p>.05), "To experience cuisine with landscape" (F=1.05, p>.05) and "Vacation experience" (F=.99, p>.05) the factors are not significant differences exist.

6) *One month income*

TABLE VI. SUMMARY OF DIFFERENT ONE MONTH INCOME ON ATTRACTION ONE-WAY ANOVA ANALYSIS

Factors	SS	df	MS	F	Scheffe
<b>A</b>					
Between Groups	58.07	4	14.52	.75	N/S
Within Groups	11414.89	586	19.48		
Total	11472.96	590			
<b>B</b>					
Between Groups	76.61	4	19.15	4.47	2>7
Within Groups	2511.58	586	4.29		
Total	2588.19	590			
<b>C</b>					
Between Groups	44.19	4	11.05	1.53	N/S
Within Groups	4243.43	586	7.24		
Total	4287.62	590			
<b>D</b>					
Between Groups	33.14	4	8.29	1.13	N/S
Within Groups	4300.12	586	7.34		
Total	4333.26	590			

\*p<.05; Note: A= Activities theme and program, B= Enjoying performances,

C= To experience cuisine with landscape, D= Vacation experience  
2. \$ NT. 20,001-40,000, 7.not income

Table VI One-way ANOVA test analysis results show that different personal monthly income tourists "Activities theme and program" (F=.75, p>.05) "To experience cuisine with landscape" (F=1.53, p>.05) and "Vacation experience" (F=1.13, p>.05) factors were no significant differences exist. But Enjoying performances (F=4.47, p<.05), significant differences exist Scheffe Post Hoc results showed income of \$ NT from 20,001-40,000 tourists, significantly higher than the no-income of tourists.

7) *Occupations*

TABLE VII. SUMMARY OF DIFFERENT OCCUPATIONS ON ATTRACTION ONE-WAY ANOVA ANALYSIS

Factors	SS	df	MS	F	Scheffe
<b>A</b>					
Between Groups	281.15	7	40.16	2.09*	Not found
Within Groups	11186.82	583	19.19		
Total	11467.97	590			
<b>B</b>					
Between Groups	129.05	7	18.43	4.34*	2>8
Within Groups	2467.24	583	4.23		
Total	2596.29	590			
<b>C</b>					
Between Groups	74.99	7	10.71	1.48	N/S
Within Groups	4216.96	583	7.23		
Total	4291.96	590			
<b>D</b>					
Between Groups	68.67	7	9.81	1.33	N/S
Within Groups	4307.09	583	7.34		
Total	4375.76	590			

\*p<.05; Note: A= Activities theme and program, B= Enjoying performances,

C= To experience cuisine with landscape, D= Vacation experience  
2. Service, 8.student

Table VII One-way ANOVA test analysis results show that tourists of different occupations the "Activities theme and program" (F=2.09, p<.05), and "Enjoying performances" (F=4.34, p<.05) factor there are significant differences exist. Scheffe Post Hoc results show that the "Activities theme and program" factors, and found no significant differences between the two groups. In "Enjoying performances" factors, the service sector is higher than the students. However, no significant differences exist in the "To experience cuisine with landscape" (F=1.48, p>.05), and "Vacation experience" (F= 1.33, p>.05) factors.

IV. DISCUSSION

A. *Tourist Cognition on Attraction in the Firework Festival*

Before discuss the hypotheses, the first tourists to understand cognition Ocean Fireworks Festival. The analysis results show that in the seven high attractiveness indicators related to the Fireworks Festival "want to feel the charm of the beauty of the sparkling fireworks", "high-notability activities", "experience the lively atmosphere of the fireworks show ", fireworks show content exciting", and "experience romantic evening atmosphere". Similar to previously Ocean Fireworks Festival study, for example, Lin [5] study found reasons to watch the Fireworks Festival attract tourists, the main novelty of the activities exciting, active content, sound as well as visual and auditory feast.

But tourists are not completely Ocean Fireworks Festival comes, the study also found that tourists to Penghu tourism "experience the beauty of the Penghu geographical landscape" and experience Penghu rich seafood cuisine, but also attract their main reason. In fact, festivals is a combination of local cultural resources in the short-term activities related to the study, is to strengthen the local image, to become one of the tourists attraction [8] and Ocean Fireworks Festival of the intention is also true, mainly to increase the number of off-season during sightseeing and promote the benefits of local can be learned from this study, although the festivals is one of the tourist attraction, but the place was originally the tourism resources, is still the main attract tourists elements.

B. *Analysis of the Different Demographic Differences*

Different gender tourists are not significant differences exist in the "Activities theme and program", "Enjoying performances", "To experience cuisine with landscape" and "Vacation experience" factors. The same as the results of the analysis results and Lin [5] and Syue [6], gender and will not affect the attractive blister cognitive. So from the above, can be found in different gender tourists, they are the same perception of Firework Festival attraction. Different marital status the "Activities theme and program", "To experience cuisine with landscape", and "Vacation experience factors are not significant differences exist. But significant differences

exist in the "Enjoying performances" factors, the married than unmarried. The results of this study and the results of Lin [6] the same results were found unmarried the Firework Festival attraction cognitive, were higher than a married person. Since the majority of children married, they look Firework Festival main purpose; it is likely that the majority is going to take the kids to experience this scenario. In addition, due to the care of children, so they will not be able to sit and watch the fireworks, it is much lower unmarried Firework Festival attraction cognitive reason.

The analysis results show that, whether the child tourists are no significant differences in the "Activities theme and program", "Enjoying performances", "To experience cuisine with landscape" and "Vacation experience" factor. This also shows that tourists with or without children, their cognitive Firework Festival attraction are the same. Different age of tourists have significant differences exist in the "Activities theme and program" and "Enjoying performances" factors. However, no significant differences exist in the "To experience cuisine with landscape" and "Vacation experience" factors. Post Hoc results show that, in the "Activities theme and program" factors, 21-30 age the tourists, significantly higher than the 20-year-old's tourists. "Enjoying performances" factors, 21-30-year-old, and 31-40 years old tourists, significantly higher than the 20-year-old tourist. The results of the analysis results with Syue [6], in their study found that age does not affect the attractiveness of suction cognitive. Lin [6] the same results, obviously tourists of different ages, their cognitive Firework Festival attraction, there are significant differences.

Different educational levels of the tourists there are significant differences in the "Activities theme and program" factors. Post Hoc results show that the University and master's and doctoral degrees tourists junior or less, significantly higher than the tourists. But in "Enjoying performances", "To experience cuisine with landscape" and "Vacation experience" factors are not significant differences. The results of the analysis results with Syue [6] found in their study of the different levels of education will affect the attractiveness of the suction cognitive. Lin [6] the results are not the same, obviously tourists of different ages, their cognitive Firework Festival attraction, with an annual program of the differences, their cognitive Firework Festival attraction has a noticeably different. Different personal monthly income tourists were no significant differences exist in the "Activities theme and program" "To experience cuisine with landscape" and "Vacation experience" factors. However, significant differences exist in the "Enjoying performances" Post Hoc results showed income of \$ NT from 20,001-40,000. Tourists, they are significantly higher than the income of tourists. Analysis results with different Syue [6], in their study found that the monthly income does not affect the attractiveness of suction cognitive. Lin [5] the results are not the same, obviously tourists of different ages, their cognitive

Firework Festival attraction, with an annual program of the differences, the monthly income of tourists, and their cognitive Firework Festival attraction will change.

Different occupations have significant differences exist in the "Activities theme and program" and "Enjoying performances" factors. Post Hoc results show that the "Activities theme and program" factors, and found no significant differences between the two groups. In "Enjoying performances" factors, the service sector is higher than the students. However, no significant differences exist in the "To experience cuisine with landscape" and "Vacation experience" factors. Analysis results and Lin [5] and Syue [6] the result will affect the attractiveness of different occupations attractive cognitive, found in its study.

### C. Suggestion

Due to fireworks is indeed an important tourist attraction, especially in weekday had little contact with the large fireworks tourists; Penghu Ocean Firework Festival has a highly attractive to them. From the results of this study clearly tourists their favorite Fireworks cast, and would like to take this opportunity to experience a romantic evening. Activity planners, the annual fireworks planning its importance, the subject matter must be innovative, diverse cast content, new experience and feelings, to attract tourists once again to re-visit tourists.

Different demographic variables, the study found that the different gender does not affect tourists' cognitive Firework Festival attraction, in addition to whether the child will not have an impact on. In other variables, such as marital status, level of education, occupation, and personal monthly income will be affected. Therefore, for the above differences, the activities organizers, the differences in the design of programs, it is necessary to think about the tourists planning activities.

### REFERENCES

- [1] Introduce of Penghu Ocean Firework Festival. [Online]. Available: <http://www.penghuns.gov.tw/user/Article.aspx?Lang=1&SNo=02002704>
- [2] C. A. Gunn and T. Var, *Tourism Planning: Basics, concept, cases*, 4<sup>th</sup> ed., New York: Routledge, 2002.
- [3] A. Leask, "Progress in visitor attraction research: Towards more effective management," *Tourism Management*, vol. 31, no. 2, pp. 155-166, 2010.
- [4] S. Yoon, D. M. Spencer, D. F. Holecek, and D. K. Kim, "A profile of Michigan's festival and special event tourism market," *Event Management*, vol. 6, no. 1, pp. 33-44, 2000.
- [5] W.-Ch. Lin, "A study of tourist's travel motivation, satisfaction, and attraction of firework festival 2007 in Penghu," M.S. thesis, Graduate Institute of Recreation and Health Management, Tajen University, Pingtung, Taiwan, 2007.
- [6] Y.-C. Syue, "A study of the tourism benefit of penghu firework festival," M.S. thesis, Department of Physical Education Job Training, National Taiwan Normal University, Taipei, Taiwan, 2008.
- [7] C. C. Lu, "A study of visitors, attraction, satisfaction and revisiting willingness of marine tourism in Penghu," M.S. thesis, Graduate Institute of Marine Creative Industry, National Penghu University, Penghu, Taiwan, 2011.
- [8] D. Getz, *Festival, Special Events, and Tourism*, NY: Van Nostran Reinhold, 1991.



resource planning.

**Wen-Chieh, Hsieh** (1978, Jan, 18). Lecture at Tajen Technology University /Recreation Sport Management, Pingtung, Taiwan. University of Pittsburgh Health and Leisure & Sports Master of Education, taught mainly explore education, leisure, fitness-based. The research areas are leisure activities planning and management, the recreational consumer behavior as well as leisure



**Hsiao-Ming Chang** (1969, Oct 10), Ph.D is Professor with the Department of Kinesiology Health and Leisure Studies, Chienkuo Technology University, Taiwan. R. O. C. He served as Head of the Department, the Secretary-General of the Chinese sports and leisure industries Management Society. He has written and published the leisure professional four books has published academic papers more than 128. The main research areas: the leisure consumer behavior, leisure management, tourism psychology and behavior, sports and adventure tourism.