# Tourism safety on LanZhou city, GanSu province, China

Gonglin Lu* Akkachai Poosala**

Ph.D. Candidate, Management, School of Management, Shinawatra University*

Ph.D Management, School of Management, Shinawatra University**

**Abstract**

The process of world integration is deepening, and the world as a whole is becoming more and more interconnected. At the end of last year, the covid-19 epidemic that swept the world is still affecting our lives. When there is a major public health event, it is important to keep tourists away from high-risk tourism destinations.

Therefore, this study attempts to take the connotation of destination tourism security as the entry point. Based on the theory of expectation difference, a subjective evaluation model of destination tourists' sense of security is constructed. At the same time, by collecting respectively diachronic statistical data and survey data, using the method of multivariate statistical analysis, the safety evaluation model and the tourist destination of security evaluation model fitting inspection, after fitting test and application of evaluation model, and then make a travel security early warning of judgment.

The results show that tourists' safety expectation has positive influence on tourists' safety experience. Tourist safety experience has positive influence on tourist safety; Tourist safety expectation has negative influence on tourist safety.

**Key Words** : Tourists safety expectation, Tourists safety experience, Tourists safety

## Introduction

The increasing interdependent global political and economic systems, rapid advances and reduced costs in transportation and telecommunication, availability of more leisure time and disposable income for travelling, and other favourable factors have contributed to the significant growth of the tourism industry.

WTTC President & CEO David Scow sill (2017) said: “At a time of global economic challenges, travel and tourism continues to grow faster than the global economy and is an enduring source of job creation and a driver of growth for every region in the world.

Tourism is a sunrise industry, a livelihood industry and a happiness industry. However, frequent incidents of personal injury in scenic spots have become a factor restricting the upgrading of the tourism industry. Therefore, the safety of scenic spots is in urgent need of institutionalized support and guarantee. Tourism is gradually integrated

into People's Daily life, but at the same time, the safety of tourist attractions is increasingly prominent. According to public media reports, since 2017, the media has reported at least 95 incidents of personal injury in tourist attractions, including 66 in 2017 and 29 in 2018.

Li liang Yi (2003), a specially invited overseas expert from the state administration of foreign experts affairs and the chairman of Singapore's hunting group, who is also a professor at several domestic universities, said that the occurrence of a tourism safety accident will cause a serious blow to the local tourism economy, and tourism safety deserves everyone's attention. Therefore, zheng xiangmin (2010) suggested that it is urgent to improve the laws and regulations related to tourism safety and institutionalize the guarantee and to strictly control and supervise the new game equipment in new scenic spots to ensure the development of tourism.

**Research Objectives**

1. To study the relationship between the influencing factors of tourist safety expectation and tourist safety experience in tourism.
2. To study the relationship between the influencing factors of tourist safety expectation and tourist safety in tourism.
3. To study the relationship between the influencing factors of tourist safety experience and tourist safety in tourism.

**Research Methodology**

The purpose of this study is to study the influence of tourism safety. The author mainly adopts a mixed research method mainly based on quantitative. On the basis of quantitative research and combined with qualitative analysis, the author uses questionnaires to collect quantitative data. In this part, a research theoretical model will be constructed, trying to further explore and reveal the relationship between tourism safety expectation, tourism safety experience and tourism safety evaluation. On this basis, this part will be based on the basic theory, integrate the literature review, and design appropriate questionnaires on this basis to make the research questions specific and operable.

The choice of tourist destination is a decision made by weighing and evaluating various influencing factors. Before tourism, tourists make a comprehensive balance and evaluation on various sensory factors, information and image of the tourism destination, social experience and travel experience to form safety expectation and perception; in the process of tourism, they can feel and experience the tourism environment and cultural

conditions of the tourism destination to generate a practical sense of security; after tourism, tourists have a sense of integrity through tourism by comparing the expectation with the actual experience, the cognition of the sense of security of tourism destination is formed. The overall evaluation of tourists is often that there is a certain gap between the expected sense of security and the actual experience of security. The expected sense of security and the actual experience of security are compared to form a travel experience, which directly affects the reputation of tourists and the next travel purchase decision.

The sample of this research is calculated by using Taro Yamane (1973) formula with 95% confidence level. The object of this study is tourists from Lanzhou City, Gansu Province. According to the data of Gansu Provincial Tourism Administration, in 2019, Lanzhou received 82 million tourists. Therefore, this survey collected a total of 420 valid questionnaires and interviewed 10.

**Data Analysis**

In this research, by analyzing the collected data, using SPSS and AMOS statistical software, draw corresponding conclusions and verify the results. The first is to conduct descriptive statistical analysis of the data, analysis of socio-demographic characteristics, then to the reliability and validity of the data, to confirm the factor analysis, and finally to use the structural equation model to test the structural model fit and verify the hypothesis. To draw conclusions of the research. A total of 420 questionnaires were collected in this study, and the analysis results are as follows.

The gender variable was divided into two groups, which were commonly male and female. Data from the survey found that there were 420 respondents, 240 males and 180 females. The age variable was divided into five categories groups. The first categorizing was aged less than 18 years; the second categorizing was aged from 19-30 years; the third categorizing was aged from 31-40 years; the fourth categorizing was aged from 41-50 years;the fifth categorizing was aged more than 51 years. There are 5 people younger than 18 years old, accounting for 1.2%; 120 people aged 19-30, accounting for 28.6%; 76 people aged 31-40, accounting for 18.1%; 191 people aged 41-50, accounting for 45.5%; there are 28 people over 51 years old, accounting for 6.6%. The educational level was divided into four categories groups: Junior high school and below, high school, college degree, master degree or above. The respondents who had Junior high school and below 36 (8.6%); the respondents who had high school 189 (45.0%); the respondents who had college degree 140 (33.3%); the respondents who had master degree or above 55 (13.1%). The Occupation of respondents was dividing into six groups. The results shown 70 students (16.7%), 125

public servant (29.8%), 22 retired people (5.2%), 42 self-employment (10.0%), 145 service industry (34.5%), 16 others (3.8%). The travel types were dividing into four groups. Travel agencies have the most choice of travel methods with 158 people traveling (37.6%), Family travel is the second highest type of travel with 116 people (27.6%). There are 89 people (21.2%) who travel by company, 57 people (13.6%) in other modes of travel.

This study used Cronbach's alpha, Correlated item - total correlation (CITC) as the main measure. As for the standard of Cronbach's, although different scholars have different opinions, it is generally believed that greater than 0.7 has a good reliability. After measurement, the Cronbach's of the dimensions of tourist's safety expectation, tourists' safety experience was all greater than 0.7, and the correlation value between each item and the overall was all greater than 0.4. It shows that all indicators have passed the reliability test, and the measurement items of tourist safety expectation and tourist safety experience have good reliability, stability and internal consistency.

Validity refers to the extent to which a measurement tool can correctly measure the problem to be measured. Measurement validity is to confirm whether the collected data can reach the desired conclusion, reflect the problem to be discussed, and judge whether the latent variables are reasonable. Factor analysis is a common and effective method to test validity. In this study, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were used to test the validity of the measurement scale and structure.

**Table 1**: Value of KMO and Bartlett's Test of tourist's safety expectation

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.812 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 5058.499 |
| | Df | 97 |
| | Sig. | .000 |

**Table 2**: Value of KMO and Bartlett's Test of tourist's safety experience

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.826 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 6759.497 |
| | df | 204 |
| | Sig. | .000 |

On the basis of exploratory factor analysis, this study conducted confirmatory factor analysis on all observed variables to verify the relationship between measured variables and latent variables.

The results of second- order confirmatory factor analysis of tourists' safety expectations showed that CMIN/ DF= 2. 070<3, CFI and TLI were 0. 912 and 0. 903 respectively, both greater than 0.9. The value of RMSEA is 0.038 less than 0.1; GFI=0.935, AGFI= 0. 923, both exceeding the ideal value of 0. 9; PNFI and PCFI were 0. 760 and 0. 821, respectively, greater than 0. 5. It indicates that the data fit is good. All path coefficients have statistical significance at the level of P<0.001. The comprehensive verification shows that the measure of 8 dimensions of tourist safety expectation is effective.

From the results of second- order confirmatory factor analysis of tourist safety experience, CMIN/ DF= 2. 715<3, CFI and TLI = 0. 927 and 0. 919 respectively, both greater than 0.9; The value of RMSEA is 0.048 less than 0.1; GFI=0.918, AGFI=0.902, both exceeding the ideal value of 0.9; PNFI and PCFI were 0.801 and 0.835 respectively, both greater than 0. 5, indicating good data adaptability. All path coefficients have statistical significance at the level of P<0. 001. The comprehensive verification shows that the measures of 8 dimensions of tourist safety experience are effective.

**Table 3**: Second-order confirmatory factor analysis of tourists' safety expectation

| The Path | | | Standardized factor loading | Path coefficient | S.E. | C.R. | P |
|---|---|---|---|---|---|---|---|
| Law and Order Situation | <--- | Safety expectation | 0.631 | 1.000 | | | |
| Tourism environment | <--- | Safety expectation | 0.761 | 1.221 | 0.154 | 7.955 | *** |
| Service element | <--- | Safety expectation | 0.854 | 1.216 | 0.153 | 7.960 | *** |
| Local culture | <--- | Safety expectation | 0.777 | 1.196 | 0.149 | 8.037 | *** |
| Safety information | <--- | Safety expectation | 0.757 | 1.150 | 0.144 | 7.976 | *** |
| Subjective control | <--- | Safety expectation | 0.646 | 1.125 | 0.142 | 7.926 | *** |
| Interpersonal communication | <--- | Safety expectation | 0.413 | 0.847 | 0.132 | 6.401 | *** |
| Self-identification | <--- | Safety expectation | 0.530 | 0.758 | 0.109 | 6.982 | *** |
| CMIN | DF | P | CMIN/DF | RMR | GFI | AGFI | PGFI |
| 653.995 | 316 | 0.000 | 2.070 | 0.040 | 0.935 | 0.923 | 0.782 |
| TLI | CFI | | | | PNFI | PCFI | RMSEA |
| 0.903 | 0.912 | | | | 0.760 | 0.821 | 0.038 |

**(**mean P<0.001**)**

**Table 4**: Second-order confirmatory factor analysis of tourists' safety experience

| The Path | | | Standardized factor loading | Path coefficient | S.E. | C.R. | P |
|---|---|---|---|---|---|---|---|
| Law and Order Situation | <--- | Safety experience | 0.849 | 1.000 | | | |
| Tourism environment | <--- | Safety experience | 0.829 | 1.060 | 0.080 | 13.201 | *** |
| Service element | <--- | Safety experience | 0.839 | 1.035 | 0.080 | 12.953 | *** |
| Local culture | <--- | Safety experience | 0.834 | 1.050 | 0.078 | 13.425 | *** |
| Safety information | <--- | Safety experience | 0.703 | 0.693 | 0.063 | 11.019 | *** |
| Subjective control | <--- | Safety experience | 0.680 | 0.926 | 0.075 | 12.361 | *** |
| Interpersonal communication | <--- | Safety experience | 0.446 | 0.622 | 0.064 | 9.733 | *** |
| Self-identification | <--- | Safety experience | 0.565 | 0.599 | 0.059 | 10.095 | *** |
| CMIN | DF | P | CMIN/DF | RMR | GFI | AGFI | PGFI |
| 858.040 | 316 | 0.000 | 2.715 | 0.055 | 0.918 | 0.902 | 0.768 |
| TLI | CFI | | | | PNFI | PCFI | RMSEA |
| 0.919 | 0.927 | | | | 0.801 | 0.835 | 0.048 |

**(**mean P<0.001**)**

Structural equation model ( SEM) mainly includes measurement model and structural model, so the test analysis of structural equation model includes the test of measurement model and the fitting test of structural model. This study verifies and analyzes the respective measurement models of tourist safety expectation, tourist safety experience. This part mainly verifies the structural model of tourist safety expectation, tourist safety experience, and tests the research construction proposed above. The main paths of tourist safety assessment model are shown in Figure 2.

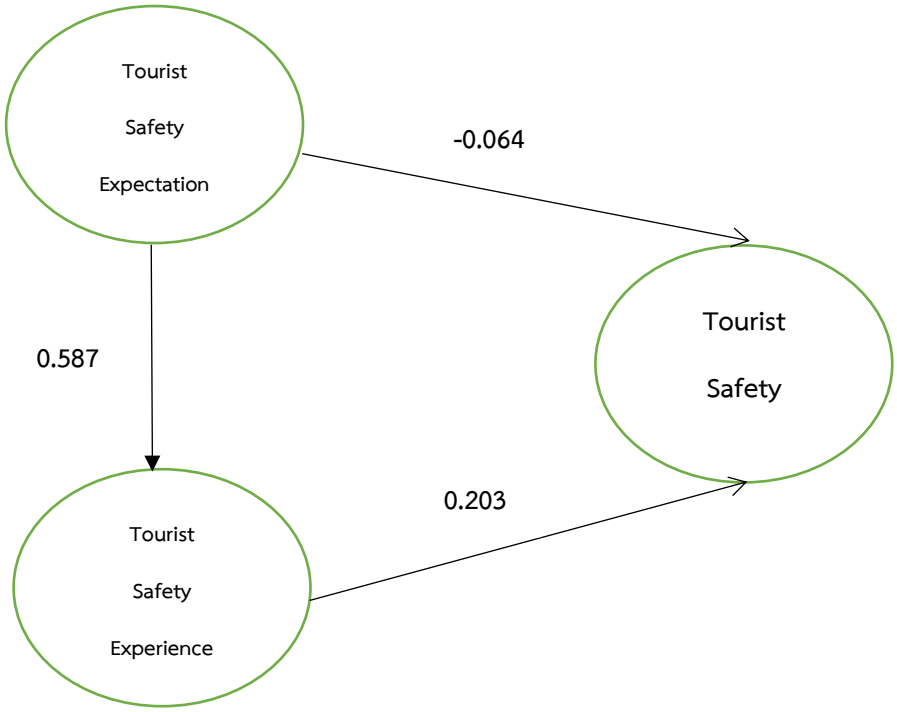


Figure 2: Tourist safety assessment model

According to the analysis of the fitting results of the structural equation model, the adaptation indexes of the model are: CMIN/DF=2.601<3, CFI and TLI are 0.936 and 0.918 respectively, both close to 0.9. The value of RMSEA is 0.047 less than 0.1; GFI=0.940, AGFI=0.917, both exceeding the ideal value of 0.9; PNFI and PCFI are 0.708 and 0.736 respectively, both greater than 0.5. It shows that the data of the structural equation model of tourist safety assessment has good suitability and all the indexes meet the requirements.

**Conclusion and Implication**

**The research conclusions of this article are as follows:**

•Tourist safety expectation has positive influence on tourist safety experience

From tourists safety assessment model of structural equation model analysis, according to data fitting tourists safety expectations for tourists safety experience the effects of path coefficient was 0.587, $P < 0.001$ level have statistical significance, suggesting that tourists safety expectations of tourists safety experience has significant positive influence.

•Tourist safety expectation has negative influence on tourist safety

From tourists safety assessment model of structural equation model analysis, according to data fitting tourists safety expectations for tourists safety the effects of path coefficient was -0.064, $P < 0.001$ level have statistical significance, suggesting that tourists safety expectations of tourists safety has significant negative influence.

•Tourist safety experience has positive influence on tourist safety

From tourists safety assessment model of structural equation model analysis, according to data fitting tourists safety experience for tourists safety the effects of path coefficient was 0.203, $P < 0.001$ level have statistical significance, suggesting that tourists safety experience of tourists safety has significant positive influence.

Tourists not only need to pay attention to their feelings about social security such as public security, tourism environment, service elements, regional culture and safety information, but also need to pay attention to their needs of interpersonal communication, subjective control and self- identity. In general, tourists' perception of psychological security is often ignored. In particular, tourist destinations pay more attention to the construction of tourism environment and the improvement of tourism service quality in the process of security governance, while ignoring tourists' psychological security.

**Limitation and Future Research Directions**

This study can be worth deep exploration in the future and more places, this study focused on exploring the destination tourism security theory connotation and evaluation model, constructing a scientific and effective evaluation index system, less comparison on destination tourism security situation of space and time, by increasing the sample data, to explore the safety and tourist destination security characteristics of space and time, and then put forward a more accurate destination tourism safety promotion strategy and management measures.

The status of destination tourism safety is developing and changing. With the influence of tourism safety management and tourism safety risk factors, the status of

destination tourism safety is dynamic fluctuation. Destination tourism safety evaluation needs dynamic tracking. Current tourism safety status can be analyzed and future tourism safety situation can be predicted through diachron-like sample data, so as to make good tourism safety early warning.

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