



The Characteristics and Influence Factors of Travel Consumption Behavior of College Students in Qijing City, China

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ABSTRACT

The objectives of this research were (1) to examine the tourism consumption characteristics and consumption psychology of university students in Qijing City, and which kind of tourism consumption mode, (2) to analyze the factors influencing the tourism consumption of Qijing University students, and (3) to recommend targeted customers aimed at developing the university student tourism market.

This study employed the quantitative method via the questionnaire, the population is the students enrolled in five universities in Qijing City, with a total of 600 respondents. Using the computer software to analyze the data.

Major Findings: (1) the college students' travel consumption motives are a professional necessity, study tours, scenic tours, visiting mountains, relief of academic stress, and relaxation; (2) the seven factors of attractions are distance, time, transportation, price, safety, and spending power have the greatest influence on college students' tourism consumption behavior; and (3) the marketers should focus on developing and optimizing the local tourism products in Qijing City such as the famous historical sites and folk customs in the route design, catering to the tourism needs and preferences, and developing more tourism consumption projects suitable for college students in the Quijing city.

Keywords: Tourism motivation, Tourism consumption, College students characteristics, Qijing City tourism

1. Introduction

Tourism has become more and more important with the development of society and has started to play an important role in the economy of many countries (Arslanturk et al., 2011). Tourism positively affects long-term economic growth through different



channels (Wu et al., 2016) and has become a common development priority in many countries (Andriotis, 2002; Fagance, 1999; Lin and Liu, 2000; Schubert et al., 2011). Consistently, the Chinese government has prioritized the development and assistance of the tourism sector. Over the years, the significant role of tourism in driving China's national economy and social development has become increasingly evident. The growth of culture and tourism has played a crucial role in supporting the construction of a well-off society in all aspects. The focus on the core policy has additionally heightened the interest of government entities at all levels in the tourism sector.

It is worth noting that Yunnan Province is renowned domestically and internationally for its distinctive highland landscapes, tropical and subtropical border vistas, and vibrant ethnic traditions. The region offers a wide range of tourism resources, including alpine valleys, modern glaciers, plateau lakes, stone forests, karst caverns, volcanic geothermal areas, primitive woods, diverse flora, cultural artifacts and monuments, traditional gardens, and ethnic minority cultures. Consequently, the Yunnan Provincial Government and its subordinate governments at all levels have prioritized the advancement and establishment of the local tourism sector. Qujing City as an excellent tourist city of Yunnan, has unique tourism resources and many famous monuments. Its natural landscape is mainly characterized by mountains and water, and beautiful scenery, among which Jiulong Waterfall Group, Luoping Rape Flower Scenic Spot, Duo River, Nizhu River Grand Canyon and other attractions are the most famous. The humanistic landscape, on the other hand, is dominated by ancient towns, villages, and temples, among which the Train Village, Xinping Yi Ancient Town, and Jiulong Temple are the most popular. Besides, Qujing is also an important representative of the Yi culture in Yunnan Province, where folk customs, culture and art, and history and culture are full of rich Yi characteristics, which are well worth tourists' in-depth exploration and experience. Qujing City received a total of 65,060,400 domestic tourists in 2022, an increase of 51.2% over the previous year, and the total tourism revenue reached 66,154,000,000 Yuan, an increase of 49.3% (Qujing City Bureau of Statistics, 2023).

The college student tourism group is a promising market for tourism due to its substantial size and unique characteristics, as well as its youthful energy and significant impact on other consumer groups in the tourism industry. The college student group is emerging as a focal point for the growth of tourism. Studying students' tourist consumption behavior and understanding its characteristics and patterns is crucial for scientifically understanding and effectively targeting students' tourism demand. This knowledge is essential for expanding China's tourism business and encouraging the comprehensive and healthy development of students. Until now, many college students have been very interested in traveling to Qujing due to its unique natural scene and

colorful minority culture. Besides, according to the "2022 China College Students' Consumption Behavior Research and Analysis Report" published by iMedia. According to research, the average median monthly income of college students reached 1,516 yuan. The most prominent feature of the college student group is the limited economic ability and economic sources, and the consumption concept and consumption habits are different from other groups, therefore, the college student group will have many unique performances in tourism consumption, which is worthy of in-depth investigation and research (Yan Han, 2015). Based on the former content, the focus of this paper is to study the characteristics and influencing factors of college students' tourism consumption behavior in the region.

2. Literature Review and Research Related

2.1 Tourism Consumer Behavior

Tourism consumption behavior refers to the action-oriented response based on the aspects of social, cultural, and fantasy, which is reflected in the necessary response and display to the tourist destination, the content of tourist activities, social experience, personal preferences, and so on (Jian Zhang, 2021).

The characteristics of tourism consumption behavior were investigated and analyzed, specifically, the characteristics of college students' destination preference, travel plans, and payment methods used during the travel process were studied, and the results showed that 65.36% of college students chose self-help tours, 55.22% chose to travel with their companions, and 76.89% chose to travel by tour bus. Kim kakyom, Oh ickkeun et al. (2019) concluded through a survey that college students' knowledge, ability, lifestyle, and family have a direct influence on the characteristics of tourism consumption behavior.

Deng Xinyi (2019) takes college students' consumption as the behavioral characteristics of the research object and applies the questionnaire survey method to investigate the characteristics of college students' tourism consumption behavior, and the survey results show that the purpose of relaxation, growth insight, and sightseeing tours accounted for 70.33%, the characteristic food as the motivation for the trip accounted for 25.68%, and interpersonal communication as the motivation for the trip accounted for 14.88%.

Continuously improve the quality of college students' tourism resources, improve college students' tourism services, and promote the healthy development of the college students' tourism industry, and also put forward measures to increase the development of college students' tourism market, optimize tourism routes, scientific pricing, etc. Abraham V (2019) proposed that tourism consumption is a kind of green consumption, and suggested that it is necessary to continuously optimize the tour resources and enrich the tourism products, to satisfy the different needs of consumers.

2.2 Relationship between tourism consumption behavior and tourism consumption motivation

Motivation is the intrinsic reason and driving force behind behavior, but the relationship between behavior and motivation is complex. Zhang Shufu (2004) "demand, motivation, behavior" model. The model fully explains the relationship between tourism motivation, demand, and behavior, that is, tourism motivation is formed based on tourism demand, and tourism motivation drives tourism consumption behavior.

2.3 Theories of Tourism Motivation

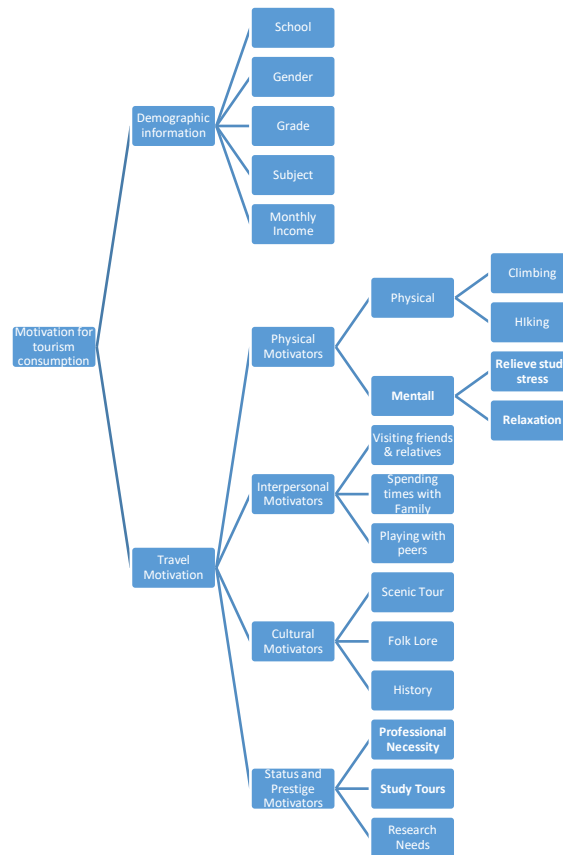
Lee and Pearce (2003) proposed a model of travel career patterns in which they argued that travel motivation can be categorized into three tiers. Three layers of travel motivation, each consisting of different travel motives. The most important common motives (e.g., novelty, escape/relaxation, enhancement of relationships) are contained in the core layer. This is proposed by the Japanese scholar Shingo Imai, who divides tourism motivation into several categories and then analyzes the tendency of tourism behavior based on the existing (Dai, 2019). On the one hand, there is the elimination of tension motivation. As modern life is quite stressful, traveling is a more effective way to relieve stress. For this reason, they choose to travel to a different place, which is one of the motives of tourism consumption.

The theory of tourism motivation was initially developed by the American scholar Thomas, who then divided tourism motivation into three types (Zhang et al., 2016). The first one is the motivation due to cultural and educational needs. This kind of motive is embodied in the humanistic landscape. That is, the humanistic landscape can better cultivate people's spirit and sentiment, thus promoting the motive of consumption. The second is the entertainment and rest motive, to enable themselves to have a more pleasant mood and choose tourism consumption, which can promote the healthy development of the body and mind.

Research on tourism motivation has different views. Some scholars at home and abroad analyze tourism motivation from the side. From different perspectives on tourism motivation, such as pointing out the problems in the division of tourism motivation, tourism motivation can be divided into five categories: Relaxation, motivation, understanding nature, experiencing culture, and feeling the national flavor. The needs of tourists are diversified. Their motivation is also multi-level (Hou, 2020).

Travel motivations can be categorized into four primary classes (Goeldner and Ritchie, 2007): physical motivators, cultural motivators, interpersonal motivators, and status and prestige motivators. These four categories of travel motivations also provide a main theory basement for this article, *Goeldner, C. R., & Ritchie, J. B. (2007)*.

2.4 Variables and Conceptual Framework



3. Research methodology

The purpose of this paper is to explore and analyze the factors that influence the motivation of college students' tourism consumption in Qujing City. To achieve this, the study employed a quantitative research methodology, which typically involves collecting numerical data to understand the underlying tendency and motivation. The primary tool for data collection was a questionnaire, distributed and collected through an online platform. This method allows for a broad reach and convenience in data collection, especially when dealing with a large population such as college students in Qujing City. The questionnaire used a 5-point Likert scale, a popular rating scale for measuring subjective attitudes and opinions. This scale provides a range of responses from one extreme to another (e.g., "strongly disagree" to "strongly agree"), allowing for nuanced responses and more accurate data. The data collected through these questionnaires were then statistically analyzed to explore and analyze the factors



influencing the motivation of college students' tourism consumption in Qujing City. The use of a quantitative methodology and statistical analysis allows for objective measurement and the ability to draw inferences about the population based on the sample data.

3.1 Purpose of the Research

The primary objective of this study is to explore and understand the tourism consumption patterns and psychology of college students in Qujing City. This investigation is particularly focused on identifying their preferred tourism consumption patterns. The study aims to provide a comprehensive understanding of the factors that drive the tourism consumption behavior of college students and the implications of these behaviors for the tourism industry in Qujing City.

The first part of the study involves a statistical analysis of the collected data to identify the characteristics of tourism consumption among college students in Qujing City. This analysis will provide insights into the types of tourism activities that are most popular among this demographic and the factors that influence their choices. The study also aims to analyze the elements that influence the motivation of university students' tourism consumption. This analysis will be based on various demographic information such as gender, grade, and other relevant factors. The study will also consider various travel motives for tourism consumption from the four parts: physical motivators, interpersonal motivators, cultural motivators, and status and prestige motivators; more specifically, such as relaxation, education, and exploration, among others. In addition to understanding the consumption patterns and motivations of college students, the study will also examine the growth and development of the tourism industry in Qujing City. This examination will provide insights into the current state of the industry and the potential opportunities for growth and development. Based on the findings from the analysis of consumption patterns and motivational factors, as well as the examination of the tourism industry, the study will propose specific strategies to target the university students' tourism market. These strategies will aim to enhance the appeal of Qujing City as a tourist destination for college students and to maximize the potential economic benefits for the city's tourism industry.

In conclusion, this study aims to provide a comprehensive understanding of the tourism consumption behaviors of college students in Qujing City and to use this understanding to inform the development of effective strategies for targeting this important market segment. The findings of this study will have significant implications for both academic research in tourism studies and practical applications in tourism marketing and management.

3.2 Population and sample

This study used 728,000 students enrolled in five universities in Qujing City (Qujing Normal College, Yunnan Energy Vocational and Technical College, Qujing Higher Institute of Medical Sciences, and Qujing Vocational and Technical College) as survey respondents. A random sampling technique was used in this study. Given the population size (N) of 728,000 students, a 95% confidence level (Z=1.96), a 5% margin of error (E=0.05), and an estimated proportion (p) of 0.5, we can calculate the minimum sample size (n) using the formula with finite population correction (FPC):

$$n = \frac{N * Z^2 * p * (1 - p)}{E^2 * (N - 1) + Z^2 * p * (1 - p)}$$

Substituting the given values into the formula:

$$n = \frac{728000 * (1.96)^2 * 0.5 * (1 - 0.5)}{(0.05)^2 * (728000 - 1) + (1.96)^2 * 0.5 * (1 - 0.5)}$$

After calculating the above expression, the result is $n \approx 384$.

Therefore, the minimum sample size required for the study, ensuring that the results are accurate within a 5% margin of error and a 95% confidence level, is approximately 384.

3.3 Data Collection Technology

In this study, the QR code of the questionnaire star was sent to the students enrolled in five universities in Qujing City. The university students only need to scan the QR code to directly access the questionnaire. The questionnaire will lead them to think about the influencing factors of tourism consumption motivation, and all questionnaires will be used to collect data and statistics through Questionnaire Star.

3.4 Data processing and analysis technology

(1). Once the questionnaire has been collected, invalid responses will be discarded and valid data will be organized and entered. The information is then analyzed using data analysis software.

(2). This study analyzed the data using a variety of statistical methods such as descriptive statistics, reliability and validity tests, validated factor analysis, and structural equation modeling.

3.5 Research instruments and variables used

A questionnaire was used as a research instrument in this study. The variables in the questionnaire were divided into two parts:

- (1). College students' motivation for tourism consumption.

(2). Factors influencing college students' motivation to spend money on tourism (school, gender, grade, subject, monthly income).

3.6 Reliability and Validity Testing

This paper uses SPSS software to test the number of questionnaires. The test is based on the values of reliability Cronbach alpha coefficient and validity KMO: when the value is lower than 0.7, it means that the questionnaire design is not ideal; when the value is 0.7-0.8, the questionnaire needs to be adjusted; when the value is 0.8-0.9, it means that the questionnaire design is more ideal, and when the value is 0.9, it means that the questionnaire design is perfect (Wu et al., 2021). The reliability statistic of the questionnaire in Table 4 shows that the alpha reliability coefficient is 0.869, which is satisfactory in terms of reliability.

The validity test is mainly based on KMO and P-value. It is necessary to check "KMO and Bartlett's sphericity test" when conducting statistical analysis, and the results are shown in Table 1 below.

Table 1: KMO and Bartlett's test

| | | |
|--|----------|----------|
| Kaiser-Meyer-Olkin metric for sampling adequacy | | 0.891 |
| | 3321.235 | 3260.691 |
| Bartlett's sphericity test | 480 | 435 |

From the results of KMO and Bartlett's test in Table 5, we can find that the KMO value is 0.891 and the p-value is 0.000, indicating that the questionnaire design is valid and the findings can be used in the analysis.

4. Research results

4.1 Demographic information

In the valid sample of this survey, 48.0% of female college students and 52.0% of male college students, which shows that the proportion of male and female college students is equal.

Table 2: Gender Composition

| | | Frequency (people) | Percentage (%) |
|----------------------|--------|--------------------|----------------|
| Valid samples | Female | 288 | 48.00 |
| | Male | 312 | 52.00 |
| | Total | 600 | 100.00 |

The survey data about the disciplines to which the students' majors belonged showed that science accounted for 11.0%, engineering accounted for 6.0%, medicine



accounted for 5.83%, economics accounted for 20.61%, literature accounted for 3.67%, management accounted for 16.0%, philosophy accounted for 2.67%, tourism accounted for 3.0%, history accounted for 2.17%, law accounted for 4.0%, education accounted for 5.5%, and art accounted for %. This survey mainly focuses on the disciplines of science, economics, management, and art.

Table 3: Student's major discipline

| | Frequency (people) | Percentage (%) |
|---------------------------------|--------------------|----------------|
| Science | 66 | 11.0 |
| Engineering | 36 | 6.0 |
| Medicine | 35 | 5.83 |
| Economics | 124 | 20.67 |
| Literature | 22 | 3.67 |
| Management | 96 | 16.0 |
| Valid samples Philosophy | 16 | 2.67 |
| Travel | 18 | 3.0 |
| History | 13 | 2.17 |
| Legal Studies | 24 | 4.0 |
| Pedagogy | 33 | 5.5 |
| Artistic Studies | 120 | 20 |
| Total | 600 | 100.0 |

The survey data on the number of grades shows that 39.0% were first-year students, 25.0% were sophomores, 24.0% were juniors, and 12.0% were seniors. This shows that the most valid samples were from first-year students to seniors.

Table 4: Grade Level Composition

| | Frequency | Percentage |
|-----------------------------|-----------|------------|
| Freshman year | 234 | 39% |
| Sophomore | 150 | 25% |
| Valid samples Junior | 144 | 24% |
| Senior Year | 72 | 12% |
| Total | 600 | 100% |

The income of college students mainly comes from living expenses given by parents, scholarships, hard work and study, and part-time jobs after school. The survey data on the average monthly income of students show that 28.0% of students earn less

than RMB 1,000, 36.0% earn RMB 1,000-2,000, 18.0% earn RMB 2001-3,000, and 18.0% earn more than RMB 3,000. It can be seen that the average monthly income of college students in Qujing City is below RMB 2,000.

Table 5: Average monthly income

| | Frequency (people) | Percentage (%) |
|-------------------------------------|-----------------------|----------------|
| Less than 1000 RMB | 168 | 28.0 |
| 1000-2000 RMB | 216 | 36.0 |
| Valid samples 2000-2000 Yuan | 108 | 18.0 |
| More than 3000 RMB | 108 | 18.0 |
| Total | 600 | 100.0 |

Combined with the survey of tourism consumption behavior of university students in Qujing City, it can be found that their consumption tendency needs to include Professional necessity, activities organized by school clubs, understanding of history and culture, Relaxation, relief of academic stress, and other aspects. Here, the Likert scale is used to classify the importance of needs into five levels: 5 points for very important, 4 points for more important, 3 points for more important, 2 points for general, and 1 point for unimportant. Through the questionnaire survey to understand the importance of each college student's tourism consumption needs, when its mean value is larger, the more obvious tourism consumption motivation, and vice versa, the less obvious. The results are as follows:

Table 6: Descriptive statistics of college students' consumption motivation

| N | Minimal value | Maximum value | Average value | Standard deviation | N |
|-------------------------------|------------------|------------------|------------------|-----------------------|-------|
| Professional necessity | 600 | 1 | 5 | 3.02 | 1.240 |
| Study tours | 600 | 1 | 5 | 3.64 | 1.230 |
| Scenic tour | 600 | 1 | 5 | 3.54 | 1.221 |
| Relieve study stress | 600 | 1 | 5 | 3.29 | 1.178 |
| Relaxation | 600 | 1 | 5 | 3.48 | 1.197 |
| Valid N (list status) | 600 | | | | |

According to the five-point Likert scale method (Wu, 2013), a mean value greater than or equal to 3 is more important, so here, the index items with a mean value greater than or equal to 3 are regarded as obvious travel consumption motives. The indicators of college students' obvious travel consumption motives are Professional

necessity, Study tours, Study tours Scenic tours, visiting mountains, relief of academic stress, and Relaxation. In contrast, other indicators could be more obvious.

4.2 Hypotheses Testing

4.2.1 Building Mathematical Models

This study applies multivariate linear analysis to regression analysis of the main motivational characteristics and basic information in the survey data of college students' tourism consumption, to better grasp the relationship between motivational characteristics and their influencing factors (basic information). The main motivational characteristics (professional needs, study tours, visiting scenic spots, relieving study pressure, and relaxing) are set as the dependent variables, and the basic information (school, gender, grade, subject, and monthly income) is set as the independent variable, and the variables are named, and the linear regression model is established and analyzed according to the dependent variables.

Table 7: Variable Name Descriptions

| Variable Name | Variable Name | Description |
|---------------|---|----------------------|
| Y | Professional necessity, Study tours, travel to scenic spots, relieve study pressure, Relaxation | Dependent variable |
| X1 | School | Independent variable |
| X2 | Gender | |
| X3 | Grade | |
| X4 | Subjects | |
| X5 | Revenue | |

Linear regression model based on 7 dependent variables and corresponding independent variables:

Model ① (Professional necessity): $Y_1 = A_0 + A_1X_1 + A_2X_2 + A_3X_3 + A_4X_4 + A_5X_5$

Model ② (Study tours): $Y_2 = A_0 + A_1X_1 + A_2X_2 + A_3X_3 + A_4X_4 + A_5X_5$

Model ③ (tour of scenic spots): $Y_3 = A_0 + A_1X_1 + A_2X_2 + A_3X_3 + A_4X_4 + A_5X_5$

Model ④ (Relieve academic stress): $Y_4 = A_0 + A_1X_1 + A_2X_2 + A_3X_3 + A_4X_4 + A_5X_5$

Model ⑤ (Relaxation): $Y_5 = A_0 + A_1X_1 + A_2X_2 + A_3X_3 + A_4X_4 + A_5X_5$

In models 1 to 5 A_0 is used as a constant, while A_1 to A_5 are used as regression coefficients, and X_1 to X_5 are independent variables.

4.2.2 Regression analysis of college students' travel consumption motives

The motivation characteristics of college students' travel consumption were set as the dependent variables: Professional necessity, Study tours, Study tours, Scenic

tours, touring mountains, relief of academic stress, and Relaxation; the influencing factors were set as the independent variables: school, gender, grade, discipline, and monthly income. The influence relationship between independent variables and dependent variables was analyzed by linear regression.

4.2.3 Regression analysis of motivational characteristics of "Professional Necessity"

Table 8: Results of model ① examination

| Models | R | R-side | Adjustment of R-side | Standard Error in Estimation |
|--------|-------|--------|----------------------|------------------------------|
| ① | 0.390 | 0.152 | 0.143 | 1.220 |

a. Predictor variables: (constant), average monthly income, grade, subject, gender, school.

Table 9: Analysis of variance for model ①

| Models | | Square and | df | Mean Square | F | Sig |
|--------|-----------|------------|-----|-------------|-------|-------|
| ① | Return to | 31.894 | 5 | 6.379 | 4.288 | 0.001 |
| | Residuals | 734.944 | 494 | 1.488 | | |
| | Total | 766.838 | 499 | | | |

a. Predictor variables: (Constant), Average monthly income, Grade, Subject, Gender, School

b. Dependent variable: Professional Necessity

From the analysis of model ①, the R-squared is 0.152, and the model fit is good. From the characteristics of "Professional necessity", it means that the factors of "school, gender, grade, subject, and average monthly income" have a 15.2% influence on college students' travel consumption behavior. The regression model passed the F-test ($F=4.288$, $p=0.001$), and the regression equation was significant ($p<0.01$), indicating that at least one of the factors has an impact on the "Professional necessity" motivation characteristic of college students' travel consumption.

Table 10: Regression results of model ①

| Models | Non-standardized coefficient | | Standardization factor | | |
|--------|------------------------------|----------------|------------------------|---|------|
| | B | Standard Error | Trial Version | t | Sig. |
| | | | | | |

| | | | | | | |
|---|------------------------|-------|-------|--------|--------|-------|
| ① | (Constant) | 2.803 | 0.252 | | 11.143 | 0.000 |
| | School | 0.088 | 0.039 | 0.100 | 2.263 | 0.024 |
| | Gender | 0.223 | 0.122 | 0.081 | 1.832 | 0.068 |
| | Grade | 0.139 | 0.052 | 0.118 | 2.669 | 0.008 |
| | Subjects | 0.030 | 0.014 | -0.093 | 2.104 | 0.036 |
| | Average monthly income | 0.080 | 0.052 | 0.068 | 1.543 | 0.024 |

From the regression results of model ①, the four variables of school, grade, discipline, and average monthly income are significant ($p < 0.05$). The coefficients of the variables are 0.088, 0.223, 0.030, and 0.080, respectively, indicating that these four factors positively influence the motivational characteristics of "Professional necessity" in college students' travel consumption. The coefficients of these four factors positively influence the "Professional necessity" motivation characteristics of college students' tourism consumption. According to the regression results of model ①, the model formula is written: $Y_1 = 2.803 + 0.088X_1 + 0.223X_2 + 0.139X_3 + 0.030X_4 + 0.080X_5$.

4.2.4 Regression Analysis of Motivation Characteristics of "Study Tours"

Table 11: Results of model ② examination

| Models | R | R-side | Adjustment of R-side | Standard Error in Estimation |
|--------|--------|--------|----------------------|------------------------------|
| ② | 0.386a | 0.149 | 0.140 | 1.222 |

a. Predictor variables: (constant), average monthly income, grade, subject, gender, school.

Table 12: Analysis of variance for model ②

| Models | Square and | df | Mean Square | F | Sig | |
|--------|------------|---------|-------------|-------|-------|--------|
| ② | Return to | 17.836 | 5 | 3.567 | 2.389 | 0.037a |
| | Residuals | 737.642 | 494 | 1.493 | | |
| | Total | 755.478 | 499 | | | |

a. Predictor variables: (Constant), Average monthly income, Grade, Subject, Gender, School

b. Dependent variable: Study tours

From the analysis of model ②, the R-squared is 0.149, which is a good fit for the model. From the motivation characteristics of "Study tours", it means that the factors of "school, gender, grade, subject, and average monthly income" have a 14.9% influence on college students' travel consumption behavior. The regression model passed the F-test ($F = 2.389$, $p = 0.037$), and the regression equation was significant

($p < 0.05$), indicating that at least one of the factors had an impact on the motivational characteristics of "Study tours" in college students' travel consumption.

Table 13: Regression results of model ②

| Models | Non-standardized coefficient | | Standardization factor | | |
|------------------------|------------------------------|----------------|------------------------|--------|-------|
| | B | Standard Error | Trial Version | t | Sig. |
| ② (Constant) | 3.853 | 0.252 | | 15.291 | 0.000 |
| School | -0.068 | 0.039 | -0.078 | -1.743 | 0.082 |
| Gender | 0.018 | 0.122 | 0.007 | 0.149 | 0.881 |
| Grade | 0.099 | 0.052 | 0.084 | 1.894 | 0.059 |
| Subjects | 0.033 | 0.014 | 0.101 | 2.270 | 0.024 |
| Average monthly income | 0.009 | 0.052 | 0.007 | 0.165 | 0.039 |

From the regression results of model ②, the two variables of discipline and average monthly income are significant ($p < 0.05$). The coefficients of the variables are 0.033 and 0.009, respectively, indicating that the factors of discipline and average monthly income have a positive influence on the motivational characteristics of "Study tours" in college students' travel consumption. Write the model equation based on the regression results of model ② in Table 26: $Y_2 = 3.853 - 0.068 X_1 + 0.018 X_2 + 0.099 X_3 + 0.033 X_4 - 0.009 X_5$.

4.2.5 "Regression analysis of the characteristics of motivation for "Scenic tour"

Table 14: Results of model ③ examination

| Models | R | R-side | Adjustment of R-side | Standard Error in Estimation |
|--------|--------|--------|----------------------|------------------------------|
| ③ | 0.373a | 0.139 | 0.130 | 1.200 |

a. Predictor variables: (constant), average monthly income, grade, subject, gender, school.

Table 15: Analysis of variance for model ③

| Models | Square and | df | Mean Square | F | Sig |
|-----------|------------|----|-------------|-------|--------|
| Return to | 32.480 | 5 | 6.496 | 4.509 | 0.000a |

| | | | | |
|---|-----------|---------|-----|-------|
| ③ | Residuals | 711.720 | 494 | 1.441 |
| | Total | 744.200 | 499 | |

- a. Predictor variables: (Constant), Average monthly income, Grade, Subject, Gender, School
 b. Dependent variable: Scenic tour

From the analysis of the model ③, the R-squared is 0.139, which is a good fit for the model. From the characteristics of "Scenic tour", it means that the factors of "school, gender, grade, subject, and average monthly income" have a 13.9% influence on college students' travel consumption behavior. The regression model passed the F-test (F=4.509, p=0.000), and the regression equation was significant (p<0.01), indicating that at least one factor influences the motivational characteristics of "Scenic tour" in college students' travel consumption.

Table 16: Regression results of model ③

| Models | Non-standardized coefficient | | Standardization factor | | |
|------------------------|------------------------------|----------------|------------------------|--------|-------|
| | B | Standard Error | Trial Version | t | Sig. |
| ③ (Constant) | 3.513 | 0.248 | | 14.192 | 0.000 |
| School | 0.124 | 0.038 | 0.144 | 3.254 | 0.001 |
| Gender | -0.068 | 0.120 | -0.025 | -0.569 | 0.569 |
| Grade | -0.030 | 0.051 | -0.026 | -0.592 | 0.554 |
| Subjects | 0.001 | 0.014 | 0.001 | 0.017 | 0.986 |
| Average monthly income | 0.186 | 0.051 | 0.161 | 3.637 | 0.000 |

From the regression results of model ③, the two variables of school and average monthly income are significant (p<0.05), and the coefficients of the variables are 0.124 and 0.186, respectively, indicating that these two factors have a positive influence on the motivational characteristics of "Scenic tour" in college students' travel consumption. Write the model equation based on the regression results of model ③:

$$Y_3 = 3.513 + 0.124X_1 - 0.068X_2 - 0.030X_3 + 0.001X_4 + 0.186X_5$$

4.2.6 Regression analysis of the characteristics of "Relieve academic stress" Motivation

Table 17: Results of model ④ examination

| Models | R | R-side | Adjustment of R-side | Standard Error in Estimation |
|--------|--------|--------|-------------------------|---------------------------------------|
| ④ | 0.348a | 0.121 | 0.112 | 1.215 |

a. Predictor variables: (constant), average monthly income, grade, subject, gender, school.

Table 18: Analysis of variance of the model ④

| Models | Square and | df | Mean Square | F | Sig | |
|--------|---------------|---------|----------------|-------|-------|--------|
| ④ | Return to | 34.577 | 5 | 6.915 | 4.685 | 0.000a |
| | Residuals | 729.173 | 494 | 1.476 | | |
| | Total | 763.750 | 499 | | | |

a. Predictor variables: (Constant), Average monthly income, Grade, Subject, Gender, School

b. Dependent variable: Relieve academic stress

From the analysis of the model ④, the R-squared is 0.121, which is a good fit for the model. From the characteristics of "Relieve academic stress", it means that the factors of "school, gender, grade, subject, and average monthly income" have a 12.1% influence on college students' travel consumption behavior. The regression model passed the F-test (F=4.685, p=0.000), and the regression equation was significant (p<0.01), indicating that at least one of the factors affected the "Relieve academic stress" motivation characteristic of college students' travel consumption.

Table 19: Regression results of model ④

| Models | Non-standardized coefficient | | Standardization factor | | | |
|--------|---------------------------------|-------------------|------------------------|--------|--------|-------|
| | B | Standard Error | Trial Version | t | Sig. | |
| ④ | (Constant) | 2.171 | 0.251 | | 8.667 | 0.000 |
| | School | 0.010 | 0.039 | 0.012 | -0.008 | 0.994 |
| | Gender | 0.559 | 0.121 | 0.203 | 4.609 | 0.000 |
| | Grade | 0.073 | 0.052 | 0.062 | 1.418 | 0.157 |
| | Subjects | -0.009 | 0.014 | -0.027 | -0.611 | 0.541 |
| | Average monthly income | 0.118 | 0.052 | 0.006 | 0.147 | 0.004 |

From the regression results of model ④, the two variables of gender and average monthly income are significant ($p < 0.05$), and the coefficients of these variables are 0.559 and 0.118 respectively, indicating that these two factors have a positive influence on the motivational characteristics of "Relieve academic stress" in college students' travel consumption. Write the model equation based on the regression results of model ④ in Table 38:

$$Y_4 = 2.171 + 0.010X_1 + 0.559X_2 + 0.073X_3 - 0.009X_4 + 0.118X_5$$

4.2.7 Regression analysis of the characteristics of "Relaxation" motivation

Table 20: Results of model ⑤ examination

| Models | R | R-side | Adjustment of R-side | Standard Error in estimation |
|--------|--------|--------|----------------------|------------------------------|
| ⑤ | 0.320a | 0.102 | 0.093 | 1.14 |

a. Predictor variables: (constant), average monthly income, grade, subject, gender, school.

Table 21: Analysis of variance for model ⑤

| Models | Square and | df | Mean Square | F | Sig | |
|--------|------------|---------|-------------|--------|--------|--------|
| ⑤ | Return to | 72.985 | 5 | 14.597 | 11.235 | 0.000a |
| | Residuals | 641.815 | 494 | 1.299 | | |
| | Total | 714.800 | 499 | | | |

a. Predictor variables: (Constant), Average monthly income, Grade, Subject, Gender, School

b. Dependent variable: Relaxation

From the analysis of the model ⑤, the R-squared is 0.102, and the model fit is good. In terms of "Relaxation", it means that the factors of "school, gender, grade, subject, and average monthly income" have a 10.2% influence on college students' travel consumption behavior. The regression model passed the F-test ($F=11.23$, $p=0.000$), and the regression equation was significant ($p < 0.01$), indicating that at least one of the factors affected the "Relaxation" motivation characteristic of college students' travel consumption.

Table 22: Regression results of model ⑤

| Models | Non-standardized coefficient | | Standardization factor | | |
|--------|------------------------------|----------|------------------------|---|------|
| | B | Standard | Trial | t | Sig. |
| | | | | | |

| | | | Error | Version | | |
|---|------------------------|-------|-------|---------|-------|-------|
| | (Constant) | 1.877 | 0.235 | | 7.986 | 0.000 |
| ⑤ | School | 0.169 | 0.036 | 0.200 | 4.662 | 0.000 |
| | Gender | 0.108 | 0.114 | 0.040 | 0.947 | 0.344 |
| | Grade | 0.174 | 0.049 | 0.153 | 3.588 | 0.000 |
| | Subjects | 0.041 | 0.013 | 0.129 | 3.025 | 0.003 |
| | Average monthly income | 0.144 | 0.049 | 0.127 | 2.964 | 0.003 |

From the regression results of model ⑤, the four variables of school, grade, subject, and monthly income are significant ($p < 0.05$). The coefficients of the variables are 0.169, 0.174, 0.041, and 0.144, respectively, indicating that these four factors positively influence the "Relaxation" motivation characteristic in college students' travel consumption. The coefficients were 0.169, 0.174, 0.041, and 0.144, respectively, indicating that these four factors positively influence the motivational characteristics of "Relaxation" in college students' travel consumption. Write the model equation based on the regression results of model ⑤ in Table:

$$Y_5 = 1.877 + 0.169X_1 + 0.108X_2 + 0.174X_3 + 0.041X_4 + 0.144X_5$$

4.3 Analysis of Comprehensive Factors Influencing College Students' Tourism Consumption Behavior

To grasp the influence factors more comprehensively, the following is a comprehensive analysis based on the survey data and combined with the results of behavioral motivation regression. The descriptive statistics of the factors affecting college students' tourism consumption.

Table 23: Descriptive Statistics of Factors Influencing College Students' Travel Consumption

| | N | minimum value | maximum value | Mean | Standard Deviation |
|------------------------------------|-----|---------------|---------------|------|--------------------|
| place of interest (tourism) | 600 | 1 | 5 | 3.55 | 1.151 |
| gap | 600 | 1 | 5 | 3.55 | 1.160 |
| timing | 600 | 1 | 5 | 3.73 | 1.349 |
| transportation | 600 | 1 | 5 | 3.63 | 0.977 |
| prices | 600 | 1 | 5 | 3.65 | 1.436 |
| service | 600 | 1 | 4 | 2.40 | 0.813 |
| surety | 600 | 1 | 5 | 3.50 | 1.286 |

| | | | | | |
|---|-----|---|---|------|-------|
| Are you busy with your personal studies? | 600 | 1 | 5 | 2.96 | 1.149 |
| spending power | 600 | 1 | 5 | 3.64 | 1.278 |
| travel companionship | 600 | 1 | 5 | 2.39 | 1.504 |
| Individual physical condition | 600 | 1 | 5 | 2.84 | 0.998 |
| Valid N (list status) | 600 | | | | |

It can be seen that the seven factors of attractions, distance, time, transportation, price, safety, and spending power have the greatest influence on college students' tourism consumption behavior.

(1) Attractions Product Factors

From the survey, it can be learned that 53.0% of Qujing University students traveled within the city, 35.0% within the province, 9.0% outside the province, and 3.0% to other places. Since college students in Qujing prefer traveling within the city, the current major attractions within the range include Berlin Zen Temple, Qujing Zoo, Zhanhuang Shizhu Mountain, and Huozhai Village, etc.

(2) Distance and time factors

The above survey shows that college students travel with a partner most (43.6%), while traveling alone also occupies a certain proportion (14.2%), mainly in the weekend travel (42.0%), so the travel time is relatively short, and close travel has become the first choice of college students.

(3) Transportation factor

From the survey on the means of transportation for college students' tourism, 44% of them take public transportation, 29.4% take tourist buses, 14.0% take trains or high-speed trains, 7.0% ride bicycles, 2.8% take airplanes, and 2.8% take self-driving tours. It can be seen that economic and affordable public transportation has become the first choice of college students for short-distance travel, and some attractions that are inconvenient for college students to travel by public transportation are bound to have a certain impact on college students' tourism consumption.

(4) Attractions Price and spending power factors

The average monthly income of college students determines the acceptable price range, so the price setting of scenic spots is the most concerning issue for college students. It shows that most of the travel consumption funds come from family support and surplus living expenses. From the survey of college students' spending power, 8.0% are within 100 yuan, 38.0% are 100-300 yuan, 31.0% are 301-500 yuan, 16.0% are 501-1000 yuan, and 7.0% are more than 1000 yuan. It can be seen that most college students spend between 301-500 yuan on traveling. From this level of spending, it can be seen

that to save money, most college students go back and forth in one day, do not stay in a hotel, and try to control their spending as much as possible.

(5) Safety factor

According to surveys, it is evident that although most students prefer to travel with friends, there is still a significant portion, approximately 14.2%, of college students who travel alone. In the case of remote attractions with inconvenient transportation, college students often have limited options for travel companions and may choose to proceed alone.

4.4 Promoting countermeasures of Qijing University students' tourism consumption

4.4.1 Innovative development of diversified tourism products

According to the characteristics of college students' tourism consumption behavior, it can be seen that the city's tourism consumption accounts for 53.0%, therefore, we should focus on developing and optimizing the local tourism products in Qijing City, taking into account the famous historical sites and folk customs in the route design, catering to the tourism needs and preferences of college students as much as possible. The following four aspects of diversified tourism product development are leisure tourism products, study tourism products, integrated immersion experience products, and local customs tourism products.

Highlighting leisure tourism products as the main line of business

Development of study tour products

Developing and Integrating Immersive Experience Products

Innovative local flavor tourism product

4.4.2 Optimizing traffic routes and saving time

According to the characteristics of college students' travel behavior, 70% of them usually choose weekends and public holidays for their travel. Among the transportation modes, 44% of college students take buses, and 29.4% take coaches, which makes buses the first choice of short-distance travel for college students. Therefore, there is a need to optimize traffic routes and save travel time, focusing on the optimization of routes on weekends and public holidays.

4.4.3 Increase in the number of direct public transportation operating vehicles and special tourist routes

From the results of the questionnaire survey, more than half of the college students like to choose to travel in the city, therefore, it is necessary to increase the number of direct buses to attractions and the number of buses to tourism lines to improve the travel efficiency of college students.

Firstly, it is recommended to open up attraction line buses in areas where colleges and universities are concentrated, to provide students with direct access to

attractions; secondly, for colleges and universities with more college students, increase the number of buses and tourist line buses; once again, set up attraction tour guide posts or electronic tour guides on the buses and tourist line buses to make use of college student's time on the buses, to introduce product information of various attractions, and to recommend high-quality tourist products for college students

4.4.4 Appropriate discounts on student fares through promotional activities

Although most attractions have student tickets for sale, the price is still high, a considerable portion of college students still can not accept the high price of tickets, which makes it very easy to turn away college students.

Suggestion 1, attractions design annual membership tickets, or academic year system tickets (such as four-year undergraduate, valid for four years; three-year system of specialties, valid for three years) and different academic year systems to give different preferential rates.

Suggestion 2: Encourage the implementation of regional tourist attraction package tickets, monthly tickets, annual cards, and tourist bus services. For example, the establishment of a city student travel pass system, that is, college students only need to buy a ticket at one stop, the city-wide attractions can be used, the longer the discounts.

4.4.5 Improvement of Tourism Safety

The descriptive statistics of the factors affecting college students' tourism consumption, also show that the price will have an impact on college students' tourism consumption. According to the characteristics of college students' travel behavior, they usually travel with their friends, so they need to do a good job in basic safety measures, constantly innovate the content and methods of travel safety education, and enhance the school education of travel safety.

- (1) Improve basic security measures for tourism
- (2) Continuously innovate the content and methods of tourism safety education
- (3) Increase tourism safety education in universities and colleges

5. Conclusion and discussion

The following conclusions are drawn from the research of this paper.

Firstly, based on the existing research theories, this paper researches the tourism consumption behavior of college students in Qujing City, designs a questionnaire, takes 600 students from four universities in Qujing City as the survey object, and learns about college students' tourism consumption behavior from the aspects of "basic information of college students, characteristics of college students' tourism behavior, motivation of college students' tourism consumption, factors affecting college students' tourism consumption, and suggestions of college students' tourism consumption". "The survey was conducted to understand college students' tourism consumption behavior. In this



way, we can grasp the characteristics, motives, and influencing factors of college students' tourism consumption behavior in Qujing City.

Secondly, combined with the results of the survey, based on an in-depth analysis of the characteristics of college students' tourism consumption behavior, linear regression analysis was applied to analyze their motivation survey data, and the regression results showed that professional needs, study tours, touring the mountains, relieving study pressure and relaxing are the most obvious motives for college students' tourism consumption behavior, and these motives are subject to the different degrees of their school, gender, grade, discipline, and average monthly income factors. These motives will be affected by their school, gender, grade, discipline, and average monthly income factors to different degrees. At the same time, college students' consumption behavior is most affected by seven factors: attraction to products, distance, time, transportation, price, safety, and consumption ability. Thus, we can further develop the college students' tourism consumption market based on these characteristics and influencing factors of college students' tourism consumption behavior in Qujing City.

Thirdly, for the current tourism market in Qujing City in terms of attraction products, travel road away and time, means of transportation, price, and safety, combined with the characteristics of tourism consumption behavior of university students in Qujing City and the factors affecting them, it puts forward the innovation and development of diversified tourism products, optimization of transportation routes and time-saving, increase of attractions bus directly to the operating vehicles, appropriate concessions for students' fares through promotions, and improvement of tourism safety coefficient. Countermeasures.



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