

Original Research Article

Promoting WOM through Destination Image in the Era of Live-Streaming in Health and Wellness Tourism Context

Abstract

While many studies have explored the importance of destination image, few have examined the impact of tourists' perceptions of wellness tourism destinations, destination relationships and word of mouth. This study provides new insights by examining: i. The impact of **health and wellness tourism** destination impressions on destination relationships and word of mouth. ii. The impact of destination relationships on word of mouth. And iii. The mediating effect of destination relationships. A survey of 284 questionnaires was conducted in famous **health and wellness tourism** destinations in Sichuan, China. The study found that perceptions of destinations **images** positively influenced word-of-mouth through destination relationships with destination relationships playing a significant mediating effect **in a health and wellness tourism context**. Finally, this study also provides some management implications of **health and wellness tourism** such as destination managers and tourism enterprises which should create the impression of a helpful, honest, safe and secure destination image.

Keywords: destination image; destination relationship; word of mouth; **health and wellness tourism**; **live-streaming**

1. Introduction

In many regions, destination image is considered as an important marketing strategy for tourism destinations (Yen, 2019a) and is one of the core factors in building destination brand and competitive advantage (Souiden, Ladhari, and Chiadmi, 2017). As a result, more and more stakeholders, such as destination managers, government departments and tourism operators, are investing more in creating a unique and attractive destination impressions in order to attract tourists to their destinations and promote tourism development. At the meantime, more researchers are focusing on destination image and their role.

At present, in the era of the prevalence of the live-streaming, tourism is a comprehensive industry, the need for operators and tourists to cooperate with each other to better survive. Under the rapid development of the live-streaming, we have made gratifying achievements, but there are also problems and shortcomings such as

poor evaluation and timely treatment. Therefore, it is necessary to combine the actual development problems, make effective guidance and management, make better use of the live-streaming and tourism resources closely combined to create a new tourism state, product form and new consumption patterns (Yen, 2021; Yen, Shao, and Lin, 2021).

For example, Xichang, China, located in the south-western part of the Sichuan basin, is a famous wellness and health tourism destination in China because of its ecologically sound environment, the production of fresh fruits and vegetables in all seasons and the high number of days of sunshine in winter. In order to develop the tourism, the government is suggested to build the Castle Peak Airport and open up air routes to major first-tier cities such as Beijing, Shanghai and Guangzhou so that by 2022 the high speed rail line will be open and the necessary transport conditions for tourism will be in place (Yen, 2021). However, although Xichang has invested heavily in tourism development in the last five years to build tourism hardware, such as the Qionghai Lake Walkway, Qionghai Park and the Shopping Street, operational performance has not been as good as expected and the destination management is actively considering how to reverse the disadvantage. In terms of destination operations, the number of visitors and revenue of major tourist destinations remained down compared with 2015, and even a loss of destinations operated in 2019. Apart from the impact of the epidemic, destination authorities suspect that it is likely that the relationship between destinations and tourists is being managed. In other words, the destination relationship and the word-of-mouth effect may be one of the key factors in the development of tourism in Xichang at this stage.

Therefore, with increased stakeholder input and research, but without success in attracting tourists and driving local economic development, tourist perceptions of destination relationship as tourist perceptions of relationship with Xichang tourism, remain doubtful and may be one of the reasons for low tourist perceptions of word of mouth for Xichang tourism. This may be one of the reasons for the low perception of word of mouth. It is necessary to clarify the factors that influence the word of mouth of tourists, as well as the current status and impact of tourists' destination relationship perceptions. Moreover, one has argued that digital marketing can fulfil the requirements of marketing with the help of information and communication technology (ICT) tools such as the internet, Web 1.0 and 2.0, and digital platforms (Kumar, 2021). It seems that digital platforms could be a possible solution to a destination to promote its WOM.

In terms of factors influencing word of mouth, the literature has identified destination image as a key factor influencing visitor behavior (Oh, 1999; Yoon and Uysal, 2005) which include recommendation, word of mouth and re-visitation. Generally

speaking, tourists are more likely to rate a destination highly and even recommend it to others when they have a better impression of the natural landscape, leisure, culture, services and entertainment (Kani, Aziz, Sambasivan, and Bojei, 2017; Yen, 2019b ; Yen, 2019c). Another study also confirms that tourists' perceived destination image influence their word of mouth through destination relationships(Yen, 2019c). In other words, research in the field of tourism has confirmed that destination image affects destination relationships and word of mouth. However, the questions of how these findings apply to wellness and health tourism in Xichang and how to drive it are extremely important research topics.

In addition, while the above research confirms that destination image affects destination relationships and word of mouth, the mediating effect has not been verified that creates a theoretical gap. Verifying the mediating effects of destination relationships and proposing countermeasures would not only fill the theoretical gap, but also help to clarify the key issues facing the development of tourism in Xichang. Accordingly, the objective of this paper is to verify the link between tourists' image of destinations, destination relationships and word of mouth and to clarify the mediating effects of destination relationships and propose countermeasures.

2.Method

2.1 Research framework

For the purpose of research, the research framework of this paper is shown in Figure 1, which includes two research dimensions: destination image and destination relationship quality, in which destination image covers sub-dimensions such as landscape, natural environment, cultural attraction, nightlife, shopping, entertainment and health and wellness atmosphere (Souiden et al., 2017; Chiu, Yen, and Chu, 2015; Chen and Phou, 2013);The relationship quality to a destination includes sub-dimensions such as destination satisfaction, destination trust and destination attachment. In terms of research hypothesis, according to the research on the relationship between destination image and destination quality (Chen and Phou, 2013; Chiu et al., 2015; Souiden et al., 2017; Yen, 2018), originally proposed a main hypothesis: in the relationship between tourists and destinations, Tourists' perception of the destination image of recreational tourism significantly affects the quality of their destination relationship. Among them, tourists' perception of the natural environment, cultural attraction, nightlife, shopping, entertainment, and health and wellness atmosphere of the tourist destination may significantly affect their perception of destination satisfaction, destination trust and destination attachment.

Figure 1 Research framework

2.2 Measuring tools

In terms of the development of measurement, twenty-eight items were undertaken based on literature review of [Yen \(2018\)](#), [Chen and Phou\(2013\)](#), [Chiu et al.\(2015\)](#), [Campos et al., \(2017\)](#), [Brown et al. \(2016\)](#) and other literatures, which including fifteen items of destination image, ten items of destination relationship quality and three items of words of mouth. Furthermore, 5-point of Likert's scale ranging from 5 (strongly agree) to 1 (strongly disagree) were adopted for rating the items, and the higher the score, the higher the degree of agreement to each measure items. In addition, gender, age, education level, average monthly income and frequency of trips are designed to understand the basic background of fans/visitors as demographic variables. After completing the development of measurement, the questionnaire was sent to the tourism experts and operators of health and wellness to evaluate the description of the wording and the difficulty for fans/visitors while answering, and asked for their suggestions for the coming corrections. Moreover, local scholars were also invited to revise the wording, confirm the semantic expression, and make appropriate revisions. Through the above steps, the measure items were completed.

2.3 Questionnaire survey

The empirical research base of this study is Qionghai Lushan National 4A-level Scenic Spot (Xichang Qionghai National Tourist Resort was referred to as Qionglu Scenic Spot for short), which is located in Xichang, Liangshan Prefecture, Sichuan Province, southwest of China. It is the largest Yi nation settlement in China, and it contains two special themes of "plateau lake wetland" and "Yi national culture". It is a tourist resort that integrates five leisure and holiday lifestyles, namely, the four seasons sunshine holiday, the lakeside wetland sports holiday, the lakeside slow bar entertainment holiday, the mountain forest Zen holiday and the Yi-feng-Chuan-yun cultural holiday. It covers an area of 80.6 square kilometers, mainly including

Qionghai Wetland Scenic Area and Lushan Scenic Area. Attract thousands of tourists to visit here every year, besides creating job opportunities related to tourism, it also promotes the development of local industries. The government has also continuously invested in the project construction, for example, Qionghai Wetland has been continuously planned and built from the first phase to the sixth phase, and it is hoped that Qionglu Scenic Area will be brought to sustainable development through these investments.

However, the government's investment in scenic spot projects for years has been greatly reduced by the COVID-19 epidemic and the forest fire in Lugu Mountain this year, resulting in operating losses in 2019 and 2020. The manager has to re-examine the managerial problems and future direction of Qionglu scenic spot. Among them, the relationship between destination image and visitors is the main focus. According to this, Xichang City, Sichuan Province is developing health and wellness tourism. This study chooses Xichang City, Sichuan Province as an empirical research base, which meets the actual needs of destination management and research objectives. The following sections will display the population, sample size, sampling method and sampling survey respectively.

In the population aspect, the tourists who actually visited Qionghai, Xichang, Sichuan Province were taken as the population and can be conducted while sampling survey. As for the size of samples, it is theoretically suggested that at least 384 samples should be sampled at 95% confidence level and 5% sampling error. However, scholars suggest that the number of sample questionnaires should be more than 10 times the number of questions in the survey practice (Yen, 2018). When considering data analysis, scholars have suggested that the size of samples should be at least 200 by SEM analysis. To sum up, there are 28 questions of our questionnaire, and at least 280 samples of the sample size would be better.

In terms of sampling method, this study adopts quota sampling method based on the research purpose, the feasibility of investigation and the results of field visits, and the criteria were based on gender and age of visitors who visiting the sites while survey. Regarding to empirical investigation, the interviewers of this study conduct the possible respondents at the main entrance and exit of Qionghai Scenic Area, including bus stops and parking lots of Qionghai Hotel, rest areas of amorous feelings towns and commercial streets and Qionghai Park during the holiday period from July to August 2020. In order to ensure the quality of the survey, researchers have trained the interviewers before the formal survey, so that interviewers can be familiar with the purpose, contents and methods of the survey, and be familiar with the ways to deal with various problems. The survey can be conducted safely and smoothly, and high-quality data was met. In addition, the researchers also participated in the scene in

person, taking photos and collecting evidence to ensure that the questionnaire was answered by visitors. The formal investigation period is from July 2020 to August 2020. There are 320 copies distributed, 298 copies were recovered and 284 valid samples were met, which yielding an effective rate of about 95%.

As to the sample characteristics, female accounted for 52.5%, male 45.1% and others are not available. Age, 20-40 years old accounted for 32.4%, 41-50 years old accounted for 36.6%; 31% are over 51 years old. In terms of education level, 9.9% are below junior high school, 35.9% are above senior high school, 41.2% are above junior high school, and 11.3% are above bachelor degree. Most of the respondents are above junior high school. In terms of occupation, civil servants account for about 4.9%, and manufacturing employees account for 68.7%. 19% of employees in business and service industry, 3.5% in agriculture and 2.5% in others. In terms of monthly average income, the monthly income below 3,000 yuan accounted for 26.4%, that of 3001-6000 accounted for 26.1%, that of 6001-8000 accounted for 34.2%, that of over 8,000 accounted for 12%, and that of respondents was mainly below 6,001-8000. The average income is 5020RMB. In terms of the number of visits, the first visit accounts for about 32.4%, and the second visit accounts for about 67.6%.

3.Result

3.1 Data pooling

First, in order to determine whether the data accords with the normal distribution, this study conducts narrative statistical analysis, and the analysis results are shown in Table 1. The mean value is between 3.66 and 3.80, the standard deviation is between 0.626 and 0.713, the absolute value of skewness coefficient is less than 3(-.343 to.046) and the absolute value of peak coefficient is less than 10(-.046 to.632), and the sample data does not violate the normality hypothesis. Therefore, this study continues to analyze the validity and reliability of the data.

TABLE1. Descriptive statistics (n=284)

| Concept | Factor | Items | M | SD | Sk | Ku |
|-------------------|---------------------------|-------|------|------|-------|------|
| Destination Image | Culture and Entertainment | A1 | 3.75 | .655 | -.148 | .444 |
| | | A2 | 3.80 | .666 | -.182 | .453 |
| | | A3 | 3.76 | .663 | -.200 | .491 |
| | | A4 | 3.67 | .706 | -.221 | .625 |
| | | A5 | 3.68 | .683 | -.088 | .234 |
| | Wellness and Health | A7 | 3.74 | .648 | -.159 | .488 |
| | Feature | A8 | 3.73 | .645 | -.161 | .497 |

| | | | | | | |
|----------------------|--------------------------|------|------|------|-------|-------|
| | | A9 | 3.75 | .640 | -.290 | .734 |
| | | A10 | 3.70 | .713 | .046 | -.046 |
| | | A11 | 3.67 | .686 | .015 | .124 |
| | | A12 | 3.69 | .670 | -.033 | .222 |
| | Environment Feature | A13 | 3.76 | .694 | -.145 | .247 |
| | | A14 | 3.77 | .687 | -.202 | .369 |
| | | A15 | 3.76 | .709 | -.092 | .092 |
| | | A21 | 3.73 | .642 | -.243 | .622 |
| | Destination Satisfaction | A22 | 3.70 | .662 | -.166 | .412 |
| | | A23 | 3.74 | .686 | -.135 | .275 |
| | | A24 | 3.69 | .668 | -.343 | .592 |
| Destination | | A25 | 3.68 | .678 | -.249 | .423 |
| Relationship Quality | Destination Trust | A26 | 3.68 | .702 | -.148 | .220 |
| | | A27 | 3.71 | .688 | -.217 | .372 |
| | | A28 | 3.67 | .626 | -.226 | .566 |
| | Destination Attachment | A29 | 3.69 | .627 | -.258 | .632 |
| | | A210 | 3.66 | .645 | -.250 | .522 |

M: Mean; SD: Standard Deviation; Sk: Skewness; Ku: Kurtosis

In terms of data validity, this study uses factor analysis to test the construct validity, and the analysis results are shown in Table 2 and Table 3. In this study, the maximum variance method is used to analyze the factors, and the factors with characteristic values greater than 1 are extracted. After deleting the sixth question (the commonality is less than 0.5), The result of factor analysis of destination image totally extracts three factors, such as environmental characteristics, cultural and entertainment characteristics and health and wellness characteristics (see Table 2). In the same step, the destination relationship extracts three factors: destination trust, destination satisfaction and destination attachment (see Table 3). The collation of references of this research question has theoretical basis and meets the requirements of content validity; After being checked and corrected by experts and operators, it meets the requirements of expert validity and face validity; After the factor analysis, the Kaiser-Meyer-Olkin (KMO) of the plane is greater than 0.6, the spherical verification is remarkable, the commonality is greater than 0.5, the factor load behind the axis is greater than 0.7, and there is no phenomenon of cross-factor attribution for individual items. The measurement items of the relationship between destination image and destination meet the requirements of construction validity.

Secondly, this study conducts reliability analysis for the factors extracted after factor analysis, and the analysis results are summarized in Table 2 and Table 3. The Cronbach's Alpha values of the three factors of the destination image are 0.937, 0.931

and 0.935 respectively, which are all greater than 0.7. The three factors of environmental characteristics, cultural entertainment, and health and wellness characteristics have good internal consistency. Similarly, the reliability values (Cronbach's Alpha) of destination trust, destination satisfaction, and destination attachment are 0.951, 0.935, and 0.949, which are all greater than 0.7. The three factors have good internal consistency. Based on this, this research was able to carry out subsequent measurement model and structural equation modelling analysis.

TABLE 2. Factor analysis for destination image

| Items | F1:Environmental Feature | F2:Culture and Entertainment | F3:Wellness and Health Feature |
|------------------|--------------------------|------------------------------|--------------------------------|
| A1 | .373 | .728 | .362 |
| A2 | .399 | .754 | .334 |
| A3 | .408 | .769 | .310 |
| A4 | .245 | .782 | .235 |
| A5 | .290 | .698 | .388 |
| A7 | .290 | .491 | .692 |
| A8 | .278 | .445 | .793 |
| A9 | .365 | .414 | .769 |
| A10 | .441 | .211 | .762 |
| A11 | .781 | .241 | .327 |
| A12 | .821 | .298 | .243 |
| A13 | .806 | .328 | .259 |
| A14 | .771 | .373 | .309 |
| A15 | .735 | .344 | .293 |
| Eigenvalues | 4.168 | 3.955 | 3.238 |
| Variance % | 29.768 | 28.248 | 23.127 |
| Cronbach's Alpha | .937 | .931 | .935 |
| KMO | | .929 | |
| Bartlett(df) | | 4340(91) | |
| p | | .000 | |

TABLE 3. Factor analysis for destination relationship quality

| Items | F1:Destination Trust | F2:Destination Satisfaction | F3:Destination Attachment |
|-------|----------------------|-----------------------------|---------------------------|
| A21 | .302 | .792 | .394 |
| A22 | .310 | .818 | .359 |
| A23 | .355 | .796 | .342 |
| A24 | .818 | .420 | .249 |
| A25 | .788 | .485 | .231 |

| | | | |
|------------------|-------------|-----------|-------------|
| A26 | .828 | .167 | .386 |
| A27 | .806 | .281 | .414 |
| A28 | .376 | .390 | .792 |
| A29 | .389 | .396 | .759 |
| A210 | .320 | .375 | .820 |
| Eigenvalues | 3.333 | 2.898 | 2.712 |
| Variance % | 33.334 | 28.978 | 27.124 |
| Cronbach's Alpha | .951 | .935 | .949 |
| KMO | | .933 | |
| Bartlett(df) | | 3390 (45) | |
| p | | .000 | |

3.2 Analysis of measurement model

In this study, the conceptual framework (including two dimensions of destination image and destination relationship) is taken as the hypothetical model, and confirmatory factor analysis is carried out by AMOS22.0 software. In this study, convergent validity, composite reliability; CR) and discriminate validity measure the quality of measurement tools. The results (Table 4) show that the χ^2 value of the destination image measurement model is 618 (df=235; p=0), $\chi^2/df = 2.63$ (reasonable value $\chi^2/df < 5$), goodness of fit index (GFI)= 0.857 (ideal value, GFI>0.9); adjusted goodness of fit index (AGFI)= 0.817 (ideal value, AGFI>0.8); comparative fit index (CFI)= 0.953 (ideal value, CFI>0.9); root mean square error of approximation (RMSEA)= 0.076 (reasonable value, RMSEA<0.08), and the model is moderately well matched. In terms of reliability and validity of the scale, all standardized factor loads (λ) are positive and less than 1, and all standardized coefficients (λ) are greater than 0.5 and reach a significant level. The scale has good convergence validity. The combined reliability is greater than 0.7, The average extraction variation is greater than 0.5, and the scale has good reliability. Accordingly, this paper can continue to carry out hypothesis testing. In the aspect of discriminative validity, this study measures the discriminative validity of the construct in two ways: variable coefficient of correlation, the relationship between correlation coefficient and AVE. The results show (as shown in Table 5) that the correlation coefficients among all variables are significant and less than 1. It shows that the relationship between the two facets is related and distinguishable, that is, it has discriminative validity. In addition, the AVE values of all facets are greater than the correlation coefficient, which shows that the measurement tools used in this study have good discrimination validity. Therefore, the measurement tools used in this study have adequate convergent validity and discriminate validity. This study is able to carry out the follow-up structural model analysis.

TABLE 4. Results of CFA

| Concept | Factor | Indicator | λ | t-values | SMC | CR | AVE/ RAVE | |
|---------------------------|--|-------------|-----------|----------|--------|-------|--------------|-------|
| Destination | | A1 | .927 | | 0.859 | 0.929 | 0.728 | |
| Image | Culture and Entertainment | A2 | .931 | 28.663 | 0.867 | | 0.853 | |
| | | A3 | .934 | 28.897 | 0.872 | | | |
| | | A4 | .708 | 15.241 | 0.501 | | | |
| | | A5 | .734 | 16.238 | 0.539 | | | |
| | | A7 | .868 | | 0.753 | 0.939 | 0.795 | |
| | Wellness and Health Feature | A8 | .936 | 23.662 | 0.875 | | 0.891 | |
| | | A9 | .940 | 23.924 | 0.884 | | | |
| | | A10 | .816 | 17.973 | 0.666 | | | |
| | Environment Feature | A11 | .785 | | 0.616 | 0.933 | 0.737 | |
| | | A12 | .830 | 21.151 | 0.689 | | 0.859 | |
| | | A13 | .896 | 17.299 | 0.802 | | | |
| | | A14 | .918 | 17.884 | 0.843 | | | |
| | | A15 | .858 | 16.344 | 0.737 | | | |
| | Destination Relationship Quality | Destination | A21 | .906 | | 0.82 | 0.936 | 0.829 |
| | | | A22 | .919 | 25.037 | 0.844 | | 0.910 |
| Satisfaction | | A23 | .906 | 24.155 | 0.82 | | | |
| | | A24 | .940 | | 0.884 | 0.952 | 0.831 | |
| | | A25 | .930 | 29.906 | 0.864 | | 0.912 | |
| Trust | | A26 | .853 | 22.924 | 0.728 | | | |
| | | A27 | .921 | 28.973 | 0.849 | | | |
| Destination Attachment | | A28 | .946 | | 0.896 | 0.950 | 0.863 | |
| | | A29 | .918 | 29.118 | 0.843 | | 0.929 | |
| | | A210 | .923 | 29.616 | 0.851 | | | |

Notes: λ : Standardized factor loadings; SMC: Square multiple correlation; CR: Composite reliability; AVE: average variance extracted; RAVE: Root of average variance extracted; All t-statistics are significant at 0.01 level; ($\chi^2 = 618$, $df = 235$, $p = .000$, $\chi^2 / df = 2.63$, $GFI = .857$, $AGFI = .817$, $CFI = .953$, $RMSEA = .076$)

Table 5 Results of discriminate validity

| Items | M | SD | Destination Image | | | Destination Relationship Quality | | |
|-------|---|----|-------------------|----|----|----------------------------------|----|----|
| | | | CE | WF | EF | DS | DR | DA |

| | | | | | | | | |
|----|-------|------|--------|--------|--------|--------|--------|------|
| CE | 18.65 | 2.98 | .853 | | | | | |
| WF | 14.92 | 2.42 | .802** | .891 | | | | |
| EF | 18.64 | 3.08 | .751** | .745** | .859 | | | |
| DS | 11.11 | 1.87 | .742** | .775** | .714** | .910 | | |
| DR | 14.70 | 2.30 | .752** | .755** | .774** | .891** | .912 | |
| DA | 11.01 | 1.81 | .737** | .679** | .749** | .801** | .880** | .929 |

**p<0.01; CE:Culture and Entertainment; WF:Wellness and Health Feature; EF: Environment Feature; DS: Destination Satisfaction; DR: Destination Trust; DA: Destination Attachment

3.3 Analysis of structural model

Based on the results of confirmatory factor analysis, this study carries out the parameter estimation and hypothesis verification of the proposed model, and the verification results are shown in Table 6. Overall, the model fits well ($\chi^2 = 671$, $df = 236$, $P = 0.000$, $\chi^2/df = 2.63$, $GFI = 0.848$, $AGFI = 0.807$, $CFI = 0.947$, $CFI = 0.947$). The result of parameter estimation shows that among the three destination image components. The characteristics of environment and health and wellness are significant and positively affect destination satisfaction and trust, while the characteristics of cultural environment and environment are significant and positively affect destination attachment. Accordingly, hypothesis 1b, hypothesis 1c, hypothesis 2b, hypothesis 2c, hypothesis 3a and hypothesis 3c are supported. This means that both health and wellness feature, and environment feature can positively impact one of the dimensions of destination relationship quality named destination satisfaction (H1b and H1c). Moreover, the second dimensions of destination relationship quality named destination trust can be influenced by both wellness and health feature, and environment feature again (H2b and H2c). Besides, culture and entertainment is found on significantly impacting destination attachment, the third dimensions of destination relationship quality (H3a and H3c). Specially, the predictive power of destination satisfaction is 0.711, the predictive power of destination trust is 0.538 and the predictive power of destination attachment is 0.721.

TABLE 6. Results of SEM

| Paths | Destination Satisfaction | Destination Trust | Destination Attachment |
|------------|--------------------------|-------------------|------------------------|
| H1a: CE-DS | 0.139(1.71) | | |
| H1b: WF-DS | 0.475***(5.92) | | |
| H1c: EF-DS | 0.288***(3.97) | | |

| | | | |
|----------------|-------|----------------|----------------|
| H2a:CE-TR | | 0.096(1.01) | |
| H2b:WF-TR | | 0.399***(4.3) | |
| H2c:EF-TR | | 0.290***(3.41) | |
| H3a:CE-DA | | | 0.425***(5.37) |
| H3b:WF-DA | | | 0.039(0.52) |
| H3c:EF-DA | | | 0.437***(6.05) |
| R ² | 0.711 | 0.538 | 0.721 |

*p<0.05; **p<0.01; ***p<0.001; CE: Culture and Entertainment; WF: Wellness and Health Feature; EF: Environment Feature; DS: Destination Satisfaction; DR: Destination Trust; DA: Destination Attachment; $\chi^2 = 671$, df=236, p=0.000, $\chi^2 / df = 2.63$, GFI=0.848, AGFI= 0.807, CFI= 0.947, RMSEA= 0.081

3.4 Analysis of mediating effect

In the study, the mediation effect of the study model was tested using the Bootstrap method of interval estimation using AMOS 22.0 software. In particular, the maxima likelihood method of estimation was used in the significance test of the indirect effect, and 2000 samples repeatedly sampled through the Bootstrap method with the confidence interval of Bias-Corrected set at 95%. Consequently, the results of the mediating effect were collated in Tables 7 and Table 8.

Firstly, the model fit was largely consistent with or close to theoretical requirements ($\chi^2=73$, df=15, p=.000, $\chi^2/df= 4.88$, GFI= 0.938, AGFI= 0.850, CFI= 0.975, RMSEA= 0.117) after 2000 iterations of the Bootstrap method. In terms of the relationship between the variables, destination image significantly and positively influences word-of-mouth and destination relationship quality, and destination relationship quality significantly and positively influences word-of-mouth which hypothesis 1, hypothesis 2 and hypothesis 3 were supported. Destination image not only affects word-of-mouth directly, but also impact word-of-mouth through the mediator, destination relationship quality, and the predictive power is 0.557 for word-of-mouth and 0.678 for destination relationship.

Table 7 Results of Mediated analysis (Bootstrap method)

| Path | Estimates | t-value |
|-------------------------------|-----------|---------|
| DI-WO | .500*** | 5.330 |
| DI-DRQ | .823*** | 10.819 |
| DRQ-WO | .279*** | 2.996 |
| R ² _{WO} | .557 | |
| R ² _{DRQ} | .678 | |

***p<0.01

Table 8 Results of Mediated Effects (Bootstrap method)

| Path | Product of Coefficients | | Bias-Corrected 95% CI | |
|------------------|-------------------------|------|-----------------------|-------|
| | Estimates | SE | Lower | Upper |
| DI-WO | | | | |
| Indirect effects | .229*** | .134 | .078 | .420 |
| Direct effects | .500*** | .079 | .305 | .685 |
| Total effects | .729*** | .141 | .647 | .807 |

***P<0.01

Next, in terms of the mediating effect, the indirect effect was 0.229 ($p < 0.01$) with the upper and lower limits of the Bias-Corrected 95% confidence interval ranging from 0.078 to 0.420 which excludes 0 and has a p-value of less than 0.01, indicating that the indirect effect of the proposed model was significant. Consequently, the destination relationship quality acts as a mediator between destination image and word of mouth was met.

In terms of the direct effect of destination image on word of mouth, the estimated value is 0.500, the upper and lower value of the Bias-Corrected 95% confidence interval is 0.305 to 0.685, which excludes 0 and has a p-value of less than 0.01. This indicates a significant direct effect of destination image on word of mouth. Finally, regarding to the total effect of mediation, the estimated value was 0.729 and the upper and lower value of the Bias-Corrected 95% confidence interval is ranged from 0.647 to 0.807, excluding 0 and with a p-value less than 0.01. It means that a significant total effect of destination image on word of mouth can be confirmed.

In other words, the three dimensions of destination images affect word-of-mouth not only directly (direct effect) but also through the destination relationship quality (indirect effect). And the destination relationship quality has a partially mediating effect with the mediating effects all reaching significant levels.

3.5 Discussion

The results of the empirical analysis of this study found that a total of three factors of destination image were extracted, such as environmental features, cultural and recreational features and recreation features, with environmental features and cultural and recreational being in line with established studies (Yen, 2019a; Chen and Phou, 2013; Chiu et al., 2015; Campos et al., 2017) are broadly in line. Unlike the established studies, the recreation features factors extracted in this study are innovative findings that not seen in other studies, highlighting that managers of wellness tourism destinations should pay more attention to the creation of wellness features in addition to the impression construction of environmental features and cultural and recreational features in general tourism destinations and use this to

enhance the highlights and differences of wellness tourism destinations.

Then, the results of the factor analysis of destination relationships extracted a total of destination satisfaction, destination trust and destination attachment which is consistent with established research (Yen, 2019a; Chen and Phou, 2013; Chiu et al., 2015; Campos et al., 2017). It shows that recreation tourism destinations should pay attention to tourists' perceptions of satisfaction, trust, and attachment to recreation tourism destinations when developing tourism. As these three elements are determinants of the quality of their relationship with the destination.

Furthermore, destination image positively influences word of mouth through the full mediation of destination relationships. And the results of the analysis are consistent with existing studies (Yen, 2019a; Chen and Phou, 2013; Chiu et al., 2015; Campos et al., 2017). This means that when tourists perceive higher destination image, the better the quality of their relationship with the destination, the more they are likely to give positive reviews and recommendations of the destination.

Lastly, in terms of mediating effects, the results of the analysis confirm the partial mediating role of destination relationships. It shows that, for a large enough sample size, destination image directly influences word of mouth and also mediates it through the destination relationship with all three effects reaching significant levels. In particular, wellness features are included in the destination image for the first time component with almost the same coefficients as environmental features and cultural and recreational features, indicating that their influence and contribution to destination perception is not less important than either which should be taken seriously by government departments and destination managers. However, destination trust is obviously more important than destination satisfaction and destination attachment in terms of the three components of the destination relationship. As its coefficient (0.824,) is significantly larger than the other two (0.617 and 0.689). These findings not only fill in the gaps in existing research, but also confirm that the mediating effect of the destination relationship does indeed lead to better visitor word of mouth. Specifically, the predictive power of destination managers in predicting word-of-mouth through destination images alone was 50% while the predictive power of predicting word-of-mouth through destination relationships was 72.9% which would be more favorable for destinations to engage in word of mouth marketing.

4. Conclusion and Recommendation

Based on the above analysis, this study found that through live streaming activities, tourists can better understand the destination image and establish a good relationship

with the destination. Secondly, in the context of live streaming activities, tourists' perceived destination images can be summarized into three categories, namely, the images of cultural environment, health and wellness features and environmental features. This result highlights the importance of the health and wellness characteristics of health and wellness tourism destinations; Destination relations can be classified into three categories: destination satisfaction, destination trust and destination attachment. The analysis results are consistent with the literature. Finally, the hypothesis test results show that not all destination images can significantly promote the relationship between tourists and destinations. If health and wellness destination managers want to promote tourists' destination satisfaction and trust through live streaming activities, they should first focus on the image of health and wellness characteristics, followed by environmental characteristics. Secondly, if the managers of recreational destinations want to enhance tourists' attachment to destinations through live streaming activities, they need to shape the environmental characteristics and cultural environment image of recreational destinations.

According to this, this study suggests that when the destination manager plans the live streaming marketing, the script should emphasize and highlight the characteristics of health and wellness tourism, so that fans can quickly distinguish the differences between health and wellness tourism destinations and other destinations, so that it is easier to gain the satisfaction and trust of fans' destinations. Secondly, the live streaming anchor should emphasize the environmental characteristics of the destination in addition to reminding the characteristics of health and wellness care. Arouse fans' trust in the destination. In addition, if fans want to be attached to health and wellness tourism destination, the cultural requirements of live streaming are very important. The live streaming anchor should emphasize the cultural characteristics of ethnic areas and the scarcity of precious assets, which will help to improve fans' attachment to health and wellness tourism destination. Finally, this study has explored the relationship between the destination image of fans in the live streaming situation and the destination, and future research can explore the follow-up behaviors of fans, such as positive word-of-mouth and willingness to revisit. Future research can also focus on new media and explore how live streaming can lead to web page views and related factors affecting destination image.

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