

Article

Investigating of social media travel photos on future destination choice: A mixed methodology approach

Chi Fai SiTou^{1,2,*}, Ja Young (Jacey) Choe², Amy Siu Ian So², Rob Law³

- ¹ Macao Greater Bay Artificial Intelligence Institute, Macau SAR, China
- ² Department of Integrated Resort and Tourism Management, Faculty of Business Administration, University of Macau, Macau SAR China
- ³ Asia-Pacific Academy of Economics and Management, Department of Integrated Resort and Tourism Management, Faculty of Business Administration, University of Macau, Macau SAR, China
- * Corresponding author: Chi Fai SiTou, rsitou@yahoo.com

CITATION

SiTou CF, Choe JY, Ian So AS, Law R. Investigating of social media travel photos on future destination choice: A mixed methodology approach. Smart Tourism. 2024; 5(2): 2754.

https://doi.org/10.54517/st.v5i2.2754

ARTICLE INFO

Received: 6 June 2024 Accepted: 12 September 2024 Available online: 24 September 2024

COPYRIGHT



Copyright © 2024 by author(s). Smart Tourism is published by Asia Pacific Academy of Science Pte. Ltd. This work is licensed under the Creative Commons Attribution (CC BY) license.

https://creativecommons.org/licenses/by/4.0/

Abstract: This study aims to examine the attractiveness of travel photos on social media and understand the relationship between travel photo sharing on social media and destination choice intention. A mixed methodology is used in this study. Twenty-nine semi-structured interviews and thematic analysis were conducted. The attractiveness of key travel photos was categorised as 'nature & landscape', 'way of life', 'architecture/buildings' and 'people' and these categories affected the future destination choices of social media viewers. This quantitative study uses data collected from 388 respondents via convenience sampling. Findings showed that the attractiveness of travel photos on social media exerts a significant effect on destination choice intention. In addition, celebrity-generated content mediates the relationship between travel photos and future destination choice intention. Destination marketers can promote places through the four identified travel photo categories using social media channels with celebrity-generated content.

Keywords: social media; travel photo; destination choice; celebrity-generated content; mixed method; mediating effects

1. Introduction

Social media (SM) follows the trend of the latest technology in its evolution on the Internet and allows people to become the 'media' in sharing information and collaborating [1]. SM applications, such as Facebook, Instagram, WeChat, Weibo and TikTok, enable users to communicate with friends, family members and strangers by posting and sharing comments, photos and videos.

A number of studies have examined the influence of word of mouth (WOM) or electronic word of mouth (eWOM) from user-generated content (UGC) on tourists' destination choices [2–4]. The results demonstrated that WOM and eWOM from UGC can significantly influence tourists' destination choices. In addition to WOM and eWOM, images and photos uploaded by tourists are also important, especially UGC on SM websites [5]. SM users have typically engaged in travel photo sharing to impart their feelings and thoughts [6]. In particular, tourists post UGC photos to express their perception of a destination [7]. Although travel photo sharing on SM has become very common in daily lives of users, the actual influence of the attractiveness of these photos on the destination choice of others requires further investigation. Notably, celebrity endorsements have been effective marketing strategies for promoting products [8], but the effectiveness of celebrity UGC on the relationship between photo and destination choice intention remains unverified [9].

This study aims to (1) identify key dimensions of the attractiveness of travel photos on social media, (2) examine the relationship between the attractiveness of travel photos on SM and destination choice intention and (3) assess the mediation effects of celebrity-generated content on the relationship between the attractiveness of travel photos on SM and destination choice intention.

2. Literature review

2.1. Attractiveness of travel photos on SM

A commonly used feature of SM websites is travel photo sharing [6,10,11]. SM users generally perform travel photo sharing to share their feelings and thoughts [6]. In particular, tourists post UGC photos to express their perception of a destination [7]. The attractiveness of photos is a subjective idea and affected by the crucial factor of picture composition [12,13]. In addition, attractiveness of photos is determined by the overall appeal of a photo [12,13].

Stepchenkova [7] divided destination photos into 20 categories and grouped them into 'nature & landscape', 'people', 'archaeological sites', 'way of life', 'traditional clothing', 'architecture/buildings', 'outdoor/adventure', 'wildlife', 'art objects', 'tourism facilities', 'urban landscape', 'domesticated animals', 'plants', 'leisure activities', and rituals', 'food', 'country 'transport/infrastructure', 'tours' and 'others' [7]. Mackay and Couldwell [14] explained that the interpretation of image creators and viewers is different. Pan et al. [15] demonstrated that travel photos in social media can enhance a viewer's knowledge on the destination choice. Therefore, understanding the effect of viewers' behaviours and the formulation of strategies for target travellers by marketers, especially in destination marketing in the hospitality industry, on the interpretation of travel photos is crucial. This study focuses on exploring the elements of attractiveness of travel photos shared on SM.

2.2. Destination choices

Destination choice is defined as the process of choosing a place to travel to amongst other competitive choices [2,16,17]. A strong relationship exists between destination attributes and holiday destination selection due to the development in information technology and the availability of online search engines to influence decisions [18]. Traveller variables include previous destinations, life cycle, income, age, lifestyle and value systems, whilst marketing variables include product designs, pricing and promotional and channel decisions. Both travel and marketing variables are important in the destination choice of tourists. Although tourists seek the destination for travel throughout the process even before the trip, they also use the information to select the best fit amongst different places for the final destination choice [19–21]. Viewing travel photos for some age groups is considered part of their lifestyle; therefore, travel photos are a crucial traveller variable that can influence destination choices. At the same time, Internet users that share travel photos on SM can be considered a marketing variable [22,23]. Tourists will likely choose a destination when destination travel photos are familiar to them [24].

2.3. Celebrity-generated content on SM

Celebrities are actors, athletes, musicians and other public figures with brilliant careers [25]. Advertisers use celebrities to represent consumer goods in advertisements [26,27]. The use of celebrity endorsements in online environments has become increasingly important [28–30]. Celebrity endorsements are regarded as effective marketing strategies for promoting products [8].

The impact of celebrities in advertisements on consumer behaviour has been properly documented over the years. Previous studies showed that (1) celebrities can enhance the believability of advertisements and message recall [31,32] and (2) help create a positive attitude towards and a distinct personality for a brand [31,32] and (3) celebrity advertisements can generate a considerable likelihood of purchases for the endorsed brand [31,32]. Destination marketers in tourism have acknowledged the important role of celebrities in SM to appeal to potential tourists [33]. Thus, understanding the role of celebrity-generated content on SM on destination choice is worth exploring.

2.4. Hypothesis development and the conceptual framework

The relationship between attractiveness of photos and behaviour intentions has been examined in previous studies [34–37]. If destination travel photos are attractive to tourists, then tourists will likely visit the destination [38]. Several studies have revealed a positive relationship between the attractiveness of travel photos and destination intention [39–41]. However, explorations on understanding the relationship of attractiveness of travel photo, especially those on SM and destination intention, are limited. Hence, the following hypothesis is proposed:

Hypothesis 1: The attractiveness of travel photos on SM is positively related to future destination intention (see **Figure 1**).

Celebrity endorsements are regarded as effective marketing strategies for promoting products [8]. Thus, celebrities typically play promotional roles as endorsers, actors or spokespersons to boost sales [8]. The mediation effect of celebrity endorsement has been a commonly used brand strategy worldwide [42]. However, studies that examine the mediating role of celebrity endorsement on the link between attractiveness of travel photos and future destination choice, especially on SM, are limited. Hence, the second hypothesis is proposed.

Hypothesis 2: Celebrity-generated content on SM mediates the relationship between the attractiveness of travel photos on SM and future destination intention (see Figure 2).



Figure 1. Conceptual framework of the total effect model.

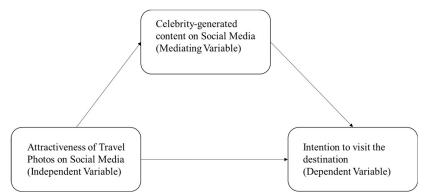


Figure 2. Conceptual framework of the mediation model.

3. Methodology

3.1. Qualitative study

3.1.1. Data collection

This qualitative study examined how SM photo-sharing practices can influence online users' destination choices and confirmed the dimensions of the attractiveness of travel photos. In-depth semi-structured interviews with 29 participants were conducted in Mainland China from December 2017 to January 2018. This study was conducted in Mainland China because Statista [43] indicated that 44.43% of the Chinese population was expected to access social networks by 2018, and this value has increased yearly. Snowball sampling was used in this study, and respondents were online users who connect to SM applications frequently. The participants were invited according to the interviewers' connections and interviewees introduced other interviewees from Zhuhai, China. The duration of each interview was approximately 1 hour.

Firstly, participants were asked to seek three travel photos on SM shared by others (e.g., friends, family members or strangers) that were attractive to them and then asked if they intend to visit that destination. Secondly, the interviewer asked the participants why they chose each travel photo as their destination choice (e.g., 'What attracted you to this photo and made you want to travel to that destination?'). Thirdly, the interviewer asked the participants about details of travel photos, such as people, nature and themes. Fourthly, the interviewer asked the participants about their feelings towards these travel photos. Lastly, the participants were requested to indicate the priority of their destination intention towards the selected travel photos. All interviews were audio recorded and transcribed verbatim in Mandarin or Cantonese and then translated to English.

3.1.2. Data analysis

Thematic analysis is commonly used in qualitative research for identifying, analysing and reporting patterns or themes in the data [44]. A six-step thematic analysis approach [45] was adopted for data analysis. Firstly, transcripts were reviewed several times to help researchers become familiarised with the data and take down notes during the initial phase. Secondly, researchers generated initial codes for interesting features in the data for the entire dataset that were relevant to each code. Thirdly, researchers collated these codes into 'dimensions' and gathered

the 'dimensions' relevant to each theme. Fourthly, researchers checked if the themes functioned in relation to the entire dataset and generated a thematic map for the analysis. Fifthly, researchers defined and named the themes. Lastly, researchers wrote a report on the discussion.

The majority of interviewees were female (69%). Half of the respondents were in their 20s, one-fourth were below 20 years old and one-fourth were in their 30s. Educational attainment of the majority of participants (82%) was at least at the college or university level. One-on-one in-person interviews were conducted from December 2017 to January 2018. The main travel photo sources were SM platforms, namely, WeChat (58%) and Weibo (20%). Travel photo sharing was generally performed by friends of participants (43%).

Eighty-seven travel photos were collected from participants. Various themes can be identified for each travel photo on the basis of respondents' feelings on these travel photos. Stepchenkova [7] classified travel photos into 20 categories. Each travel photo can be associated to a maximum of four different categories or destination attributes.

3.1.3. Results of thematic analysis

Ten themes were identified from 87 travel photos using thematic analysis.

1) Nature exploration

Respondents selected attractive travel photos on SM related to nature exploration. Four subthemes comprise this domain, namely, excitement, challenges, exploration and adventure. Respondents were attracted to adventurous sports, such as snow mountain climbing and parachute jumping, which connect people with nature. Natural landscapes, such as mountains and deserts, were larger than the people in these travel photos.

2) Calmness for the heart

Respondents selected attractive travel photos on SM related to calmness for the heart. Four themes comprise this domain, namely, calmness, peace, silence and harmony. The travel photos showed large areas of grasslands, mountains, lakes and the ocean. People were typically absent in these travel photos. Respondents wanted to escape from their busy lives and reality by traveling to the destination to give their heart peace and quiet.

3) Warm sunshine

Respondents selected attractive travel photos on SM related to warm sunshine. Three subthemes comprise this domain, namely, sunshine, warmth and cleanliness. Travel photos showed sunlight, including sunrise and sunset. Respondents also reported a sense of warmth and cleanliness from the sunshine. People were generally absent in these travel photos. Respondents wanted to escape from the busy activities of city life.

4) Freedom and relaxation

Respondents selected attractive travel photos on SM related to freedom and relaxation. Three subthemes comprise this domain, namely, freedom, relaxation and a wide view. The travel photos showed wide views without boundaries. People were generally excluded from these travel photos. Respondents wanted to be the first to view the images in the travel photos.

5) Comfortable feeling

Respondents selected attractive travel photos on SM related to comfortable feelings. Three subthemes comprise this domain, namely, comfort, warmth and silence. These travel photos showed colourful and varied items, and people were typically absent in these photos.

6) Romantic enjoyment

Respondents selected attractive travel photos on SM related to romantic feelings and hedonistic impulses. Three subthemes comprise this domain, namely, romance, enjoyment and leisure. People appeared in some travel photos. Flying balloons seemed to be symbolic items demonstrating romantic and relaxing moments.

7) Historical memories

Respondents selected attractive travel photos on SM related to history and memories. Two subthemes comprise this domain, namely, old buildings and memories. Old school buildings and train stations were used as backgrounds, and people were typically absent in these travel photos. Old school buildings and train stations appeared to be symbolic elements that enable respondents to recall cherished memories.

8) Historical mystery

Respondents selected attractive travel photos on SM related to history and mystery. Two subthemes comprise this domain, namely, world heritage and memories. Travel photos showed world heritage sites, such as Angkor Wat and old Shanghai buildings. World heritage sites are symbolic items that encourage respondents to explore and discover their mysteries.

9) Beautiful and stylish building design

Respondents selected attractive travel photos on SM related to concepts of beauty. Two subthemes comprise this domain, namely, stylish designs and beauty. Travel photos showed stylish building designs in Asia and Europe. People were typically absent in these travel photos. Some travel photos highlighted the detailed features of building façades, whilst others showed broad views of a series of buildings.

10) Happy memories

Respondents selected attractive travel photos on SM related to happiness and memories. Two subthemes comprise this domain, namely, happy moments and memories. Travel photos mainly showed people. Respondents were acquainted with the people in these travel photos. The people in the travel photos were symbolic items that demonstrate respondents' feelings of missing interacting with them.

The thematic analysis results showed that the dimensions of each travel photo are merged again into the four dimensions of 'nature & landscape' (63%), 'way of life' (39%), 'architecture/buildings' (26%) and 'people' (23%).

Attractions in the 'nature and landscape' category were mainly landscapes, including mountains, oceans and grasslands. Destinations in these travel photos were from western China, specifically, Yunnan and Sichuan. In addition, the majority of participants said that photos were attractive to them because they induced feelings of calmness, peace and relaxation. Moreover, some participants mentioned that feelings of adventure and exploration were also sources of attraction.

The participants indicated that attractions in the 'way of life' category are living

conditions of local people and daily activities related to local cultures and customs. The majority of participants mentioned that feelings of local people in these destinations are highly attractive features of travel photos.

The majority of participants in the 'architecture/building' category identified attractions as the major travel spots of famous places, such as Sleeping Beauty's castle in Disneyland in Shanghai and a church with a tower near London Bridge. According to participants, buildings in key tourist destinations reflected feelings of enjoyment with family and friends.

The majority of participants in the 'people' category identified people as important elements of travel photos. Participants mentioned that people in these travel photos did not reflect loneliness but experienced fun whilst interacting with family and friends during the trip.

Key themes of the 'nature and landscape' travel photo category pertained to the four domains of nature exploration, calmness for the heart, warm sunshine and freedom and relaxation. Key themes of the 'way of life' travel photo category pertained to the three domains of comfortable feeling, romantic enjoyment and historical memories. Key themes of the 'architecture/buildings' travel photo category pertained to the three domains of historical mystery, beautiful and stylish building designs and freedom and relaxation. Key themes of the 'people' travel photo category pertained to the three domains of nature exploration, happy memories and freedom and relaxation.

3.2. Quantitative study

3.2.1. Data collection

Convenience sampling was used to collect data. Data were collected from January to March 2019 using online and paper-and-pencil surveys. A total of 216 questionnaires were collected through an online survey application (i.e. WJX.CN). Meanwhile, 172 questionnaires were collected in Macau and Hong Kong for the pen-and-pencil survey. A total of 388 valid questionnaires were collected and used for quantitative analysis. Cape Verde, a country isolated from the world with only 700,000 tourists in 2018, was selected as the future destination for travel photos [46] because it demonstrates characteristics of the four key categories of 'nature and landscape', 'way of life', 'architecture/buildings' and 'people', which were identified from the previous qualitative study. Therefore, Cape Verde can be strengthened using the travel photos as key reasons for future destination intention. 'Nature and landscape', 'way of life', 'architecture/buildings' and 'people' travel photos from Cape Verde were selected from the Internet. Two pairs of keywords, one fixed with 'Cape Verde' and another combined with one of four key categories 'nature and landscape', 'way of life', 'architecture/buildings' and 'people' were used for the Google search. Two photos were then selected to represent each of the four key travel photo categories. The two selected photos representing each of the four key travel photo categories were tested and confirmed by a group of 30 respondents. Only respondents who have never heard of Cape Verde were asked to answer the survey to ensure that travel photos were the respondents' key reasons for their intention to visit Cape Verde.

Measurement items were adopted from previous studies [47,48] and modified according to the context of this study. The questionnaire consists of four sections, namely, attractiveness of travel photos, respondents' celebrity-generated content, respondents' intention to visit Cape Verde in the future and respondents' demographic information (See Table 1). The questionnaire was originally designed in English, translated by an academic professional to Chinese and retranslated to English [49]. Respondents were asked to rate their opinion on the attractiveness of travel photos on SM, celebrity-generated content and intention to visit Cape Verde in the future using a five-point Likert scale (ranging from 5 = strongly agree to 1 =strongly disagree). A pilot test was conducted to evaluate the reliability and validity of the research instruments before data were collected. A draft of the questionnaire was distributed to 30 randomly selected individuals in Macau. Cronbach's alpha reliability analysis performed on the items for 'the attractiveness of travel photos' and 'celebrity-generated content' obtained a value of 0.71 and 0.80, respectively, thereby indicating acceptable reliability [50]. Certain wordings were revised and adjusted according to the pilot test before the final version of the questionnaire was developed.

3.2.2. Data analysis

The four subhypotheses were further analysed and denoted hypotheses 1a, 1b, 1c and 1d. These hypotheses focus on the total effect of the relationship between the attractiveness of Cape Verde travel photos on SM under the categories of 'nature & landscape', 'way of life', 'architecture/buildings' and 'people' and intention to visit Cape Verde in the future. Hypotheses 2a, 2b, 2c and 2d focus on the mediating effect of celebrity-generated content on SM on the relationship between the attractiveness of Cape Verde travel photos on SM under the categories of 'nature & landscape', 'way of life', 'architecture/buildings' and 'people' as well as intention to visit Cape Verde as a future destination.

Regression was adopted to test the effect of the developed hypotheses, and the PROCESS model was employed to investigate the interactive influences [49]. SPSS version 25 [51,52] was utilised to analyse the data collected from the questionnaire. Andrew Hayes' PROCESS (v3.4.1) macro was applied to examine the mediation effect of celebrity-generated content on SM on the relationship between the attractiveness of the identified travel photos on SM and destination intention, with Cape Verde as the destination.

4. Results

4.1. Respondent profile

Table 1 presents that most of the respondents (60%) are female (40% are male), 19 to 28 years old (58%), not married (81%) and an educational attainment at the bachelor's degree level (80.4%). Respondents were mainly students (60%) and company employees (21%). Furthermore, the majority of respondents (91%) earned less than US\$ 2,500. Amongst the 388 respondents, 311 were from Mainland China (81%) and 56 were from Macau (14%). The traveling behaviour of respondents was typically two to three times a year (47%), followed by once a year (30%). SM usage

of the respondents was commonly 1 to 4 hours a day (37%), followed by 5 to 8 hours a day (34%).

Table 1. Respondents' social demographics and travel-related characteristics.

Characteristics	Description	No. $(no = 388)$	Percent (100%)
Gender	Male	156	40.2%
	Female	232	59.8%
Age	18 years old or below	79	20.4%
	19-28 years old	225	58.0%
	29-38 years old	46	11.9%
	39-52 years old	37	9.5%
	53-70 years old	1	0.3%
Marital Status	Married	75	19.3%
	Single	313	80.7%
Education	Master's degree or higher	38	9.8%
	Bachelor's degree	312	80.4%
	High School or lower	38	9.8%
Occupation	Company employee	80	20.6%
	Government Officer	17	4.4%
	Self-employed	19	4.9%
	Business owner	2	0.5%
	University/College Student	233	60.1%
	Unemployment	1	0.3%
	Housewife	7	1.8%
	Retired	3	0.8%
	Others	26	6.7%
Monthly Income	US\$ 1000 or lower	289	74.5%
	US\$ 1001–2500	62	16.0%
	US\$ 2501-3500	16	4.1%
	US\$ 3501 or higher	21	5.4%
Origin of Place	Mainland China	311	80.1%
	Macau	56	14.4%
	Others	21	5.4%
Number of times to travel yearly	Less than 1 time	58	14.9%
	1 time	117	30.2%
	2–3 times	183	47.2%
	4 times and more	30	7.7%
Number of hours to use social media daily	Over 8 hours	49	12.6%
	5 to 8 hours	130	33.5%
	1 to 4 hours	142	36.6%
	Less than 1 hour	34	8.8%
	Does not use social media daily	33	8.5%

4.2. Travel photos under the 'nature & landscape' category

Figure 3 shows the total effect of the attractiveness of Cape Verde travel photos on SM under the 'nature & landscape' category on intention to visit Cape Verde as a future destination (total effect: 0.38, 95% CI = 0.28-0.49). These findings are consistent with Hypothesis 1a.

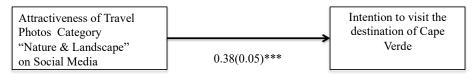


Figure 3. Total effect model.

Note: Path values are path coefficients (SE) and *** indicates that the correlation is significant at the 0.001 level (two-tailed).

Figure 4 demonstrates the mediating effect of celebrity-generated content on SM on the relationship between the attractiveness of the Cape Verde travel photos on SM under the 'nature & landscape' category and intention to visit Cape Verde as a future destination. The indirect effect was tested using nonparametric bootstrapping with 5000 samples. The indirect effect (IE = 0.1187) was statistically significant in the above case, with 95% CI = 0.0657–0.1707. These results support Hypothesis 2a.

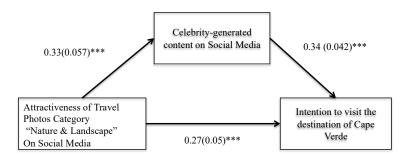


Figure 4. Mediation model.

Note: Path values are path coefficients (SE) and *** indicates that the correlation is significant at the 0.001 level (two-tailed).

4.3. Travel photos under the 'people' category

Figure 5 shows the total effect of the attractiveness of Cape Verde travel photos on SM under the 'people' category on intention to visit Cape Verde as a future destination (total effect: 0.39, 95% CI = 0.31-0.47). These findings support Hypothesis 1b.

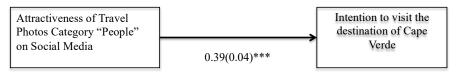


Figure 5. Total effect model.

Note: Path values are path coefficients (SE) and *** indicates that the correlation is significant at the 0.001 level (two-tailed)0.

Figure 6 illustrates the mediating effect of celebrity-generated content on SM on the relationship between the attractiveness of the Cape Verde travel photos on SM

under the 'people' category and intention to visit Cape Verde as a future destination. The indirect effect was tested using nonparametric bootstrapping with 5000 samples. The indirect effect (IE = 0.0934) was statistically significant in the above case, with 95% CI = 0.0535–0.1412. These findings are consistent with Hypothesis 2b.

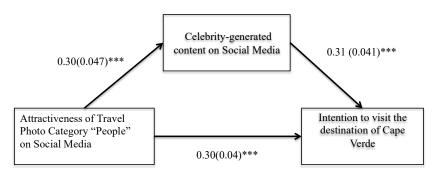


Figure 6. Mediation model.

Note: Path values are path coefficients (SE) and *** indicates that the correlation is significant at the 0.001 level (two-tailed).

4.4. Travel photos under the 'architecture/buildings' category

Figure 7 shows the total effect of the attractiveness of Cape Verde travel photos on SM under the 'architecture/buildings' category on intention to visit Cape Verde as a future destination (total effect: 0.41, 95% CI = 0.33-0.50). These findings support Hypothesis 1c.

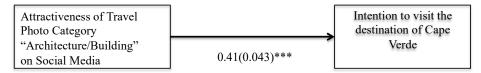


Figure 7. Total effect model.

Note: Path values are path coefficients (SE) and *** indicates that the correlation is significant at the 0.001 level (two-tailed).

Figure 8 presents the mediating effect of celebrity-generated content on SM on the relationship between the attractiveness of the Cape Verde travel photos on SM under the 'architecture/buildings' category and intention to visit Cape Verde as a future destination. The indirect effect was tested using nonparametric bootstrapping with 5,000 samples. The indirect effect (IE = 0.1039) in the above case was statistically significant, with 95% CI = 0.0577–0.1591. These findings are consistent with Hypothesis 2c.

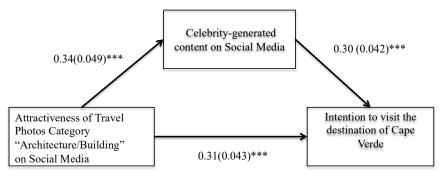


Figure 8. Mediation model.

Note: Path values are path coefficients (SE) and *** indicates that the correlation is significant at the 0.001 level (two-tailed).

4.5. Travel photos under the 'way of life' category

Figure 9 illustrates the total effect of the attractiveness of Cape Verde travel photos on SM under the 'way of life' category on intention to visit Cape Verde as a future destination (total effect: 0.43, 95% CI = 0.34–0.52). These findings are consistent with Hypothesis 1d.

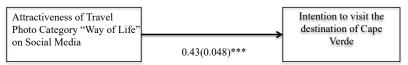


Figure 9. Total effect model.

Note: Path values are path coefficients (SE) and *** indicates that the correlation is significant at the 0.001 level (two-tailed).

Figure 10 demonstrates the mediating effect of celebrity-generated content on SM on the relationship between the attractiveness of the Cape Verde travel photos on SM under the 'way of life' category and intention to visit Cape Verde as a future destination. The indirect effect was tested using nonparametric bootstrapping with 5000 samples. The indirect effect (IE = 0.0957) was statistically significant in the above case, with 95% CI = 0.0511-0.1498. These findings support Hypothesis 2d.

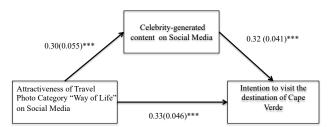


Figure 10. Mediation model.

Note: Path values are path coefficients (SE) and *** indicates that the correlation is significant at the 0.001 level (two-tailed).

5. Discussion and Implications

5.1. Discussion

The quantitative investigation reinforces the impact of the four categories from the qualitative study. The attractiveness of travel photos on SM can be identified as four categories that influence tourists' behavioural intentions. Key themes of the 'nature & landscape' travel photo category pertained to four domains, including nature exploration, calmness for the heart, warm sunshine and freedom and relaxation. Key themes of the 'way of life' travel photo category pertained to three domains, including comfortable feeling, romantic enjoyment and historical memories. Key themes of the 'architecture/buildings' travel photo category pertained to three domains, including historical mystery, beautiful and stylish building designs and freedom and relaxation. Key themes of the 'people' travel photo category pertained to three domains, including nature exploration, happy memories and freedom and relaxation. Moreover, the impact of celebrity-generated content on SM on

destination choice intention is verified. Therefore, the attractiveness of travel photos on SM indirectly affects the destination intention through celebrity-generated content on SM as a mediating variable. The results of the quantitative study showed that all four categories significantly and indirectly affect this relation. Celebrity-generated content on SM can also be an effective means for developing intention towards a destination choice through travel photos.

5.2. Implications

Previous studies revealed that travel photos can affect past and potential tourists' perception attitudes towards a destination and intention to visit [47]. This study demonstrated an in-depth understanding of various types of travel photos, especially in SM. The results of this study can provide a theoretical reference for identifying specific types of travel photos affecting tourists' behavioural intentions and help destination marketers identify the most influential domain themes amongst the top four categories of 'nature & landscape', 'way of life', 'architecture/buildings' and 'people' in terms of implications in the industry. Destination marketers can use these domain themes in their online advertising to create and share destination travel photos on SM and attract viewers to future destinations. Celebrity-generated content can also be employed as marketing tools for enhancing the attractiveness of travel photos on SM. Destination marketers can promote destinations through the four identified travel photo categories using SM channels with celebrity-generated content. For instance, celebrities, such as Cristiano Ronaldo with over 400 million followers, typically upload photos onto Instagram. DMO can recruit celebrity endorsements for posting destination photos to encourage fans' interest indirectly to travel to that destination through SM. Although the chances of traveling with a celebrity to the destination are extremely slim, the very possibility of this provides fans a sense of intimacy and communication with their favourite celebrities [53]. Thus, social media is an effective tool in social relationships with celebrities.

6. Limitations and future studies

Firstly, although the majority of respondents discussed the influencing elements of travel photos on SM sites, such as WeChat and Weibo, other SM channels, including Facebook, Instagram and Twitter, may affect the drivers of domain themes. Secondly, the selected country of Cape Verde as a future destination in the quantitative study may not be generalisable for other destinations. This study may only apply travel photos on SM to destination intention of countries with features similar to those of Cape Verde. Thirdly, the findings may not be generalisable for other cultures given that this study is conducted in the Chinese context. Future investigations can address these limitations. A moderated mediation model can be developed to understand other effects, such as the intense use and type of SM applications. Additional studies are also necessary to understand the purpose of creators' intentions to share travel photos on SM that can influence viewers to complete the function of travel photos derived from visual rhetoric as the theoretical perspective of this study.

Author contributions: Conceptualization, CFST and ASIO; methodology, CFST and ASIO; software, CFST; validation, CFST and ASIO; formal analysis, CFST; investigation, CFST; data curation, CFST; writing—original draft preparation, CFST; writing—review and editing, CFST, JYC, ASIO and RL; visualization, CFST; supervision, JYC, ASIO and RL. All authors have read and agreed to the published version of the manuscript.

Conflict of interest: The authors declare no conflict of interest.

References

- 1. Leung D, Law R, van Hoof H, et al. Social Media in Tourism and Hospitality: A Literature Review. Journal of Travel & Tourism Marketing. 2013; 30(1–2): 3–22. doi: 10.1080/10548408.2013.750919.
- 2. Tham A, Croy G, Mair J. Social Media in Destination Choice: Distinctive Electronic Word-of-Mouth Dimensions. Journal of Travel & Tourism Marketing. 2013; 30(1–2): 144–155. doi: 10.1080/10548408.2013.751272.
- 3. Ramirez E, Gau R, Hadjimarcou J, et al. User-generated content as word-of-mouth. Journal of Marketing Theory and Practice. 2018; 26(1–2): 90–98. doi: 10.1080/10696679.2017.1389239.
- 4. Nguyen H, Martin BAS, Kerr G. Effects of Materialism on Brand-Related User-Generated Content and Positive WOM on Social Media. Australasian Marketing Journal. 2021; 31(2): 135–141. doi: 10.1177/18393349211054230.
- 5. Zeng B, Gerritsen R. What do we know about social media in tourism? A review. Tourism Management Perspectives. 2014; 10: 27–36. doi: 10.1016/j.tmp.2014.01.001.
- 6. Li F. Understanding Chinese tourists' motivations of sharing travel photos in WeChat. Tourism Management Perspectives. 2019; 33.
- 7. Stepchenkova S, Zhan F. Visual destination images of Peru: Comparative content analysis of DMO and user-generated photography. Tourism Management. 2013; 36: 590–601. doi: 10.1016/j.tourman.2012.08.006.
- 8. Roy S. Meaning transfer in celebrity endorsements: an explanation using metaphors. Journal of Marketing Communications. 2016; 24(8): 843–862. doi: 10.1080/13527266.2016.1197294.
- 9. Yılmazdoğan OC, Doğan RŞ, Altıntaş E. The impact of the source credibility of Instagram influencers on travel intention: The mediating role of parasocial interaction. Journal of Vacation Marketing. 2021; 27(3): 299–313. doi: 10.1177/1356766721995973.
- 10. Joinson AN. Looking at, looking up or keeping up with people? In: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems; 2008. doi: 10.1145/1357054.1357213.
- 11. Wang J, Wang S, Xue H, et al. Green image and consumers' word-of-mouth intention in the green hotel industry: The moderating effect of Millennials. Journal of Cleaner Production. 2018; 181: 426–436. doi: 10.1016/j.jclepro.2018.01.250.
- 12. Savakis AE, Etz SP, & Loui AC. Evaluation of image appeal in consumer photography. In: Human vision and electronic imaging V. SPIE; 2000. Volume 3959. pp. 111–120.
- 13. San Pedro J, Siersdorfer S. Ranking and classifying attractiveness of photos in folksonomies. In: Proceedings of the 18th international conference on World wide web; 2009. doi: 10.1145/1526709.1526813.
- 14. MacKay KJ, Couldwell CM. Using Visitor-Employed Photography to Investigate Destination Image. Journal of Travel Research. 2004; 42(4): 390–396. doi: 10.1177/0047287504263035.
- 15. Pan X, Rasouli S, Timmermans H. Investigating tourist destination choice: Effect of destination image from social network members. Tourism Management. 2021; 83: 104217. doi: 10.1016/j.tourman.2020.104217.
- 16. Crompton J. Structure of vacation destination choice sets. Annals of Tourism Research. 1992; 19(3): 420–434. doi: 10.1016/0160-7383(92)90128-C.
- 17. Decrop A, Snelders D. A grounded typology of vacation decision-making. Tourism Management. 2005; 26(2): 121–132. doi: 10.1016/j.tourman.2003.11.011.
- 18. Keshavarzian P, Wu C. A qualitative research on travellers' destination choice behavior. International Journal of Tourism Research. 2017; 19(5): 546–556. doi: 10.1002/jtr.2128.
- 19. Mohsin A, Ryan C. Determinants of Destination Choice: The Role of Socio-demographic Variables. Tourism Recreation Research. 2004; 29(3): 27–33. doi: 10.1080/02508281.2004.11081454.

- 20. Karl M, Reintinger C, Schmude J. Reject or select: Mapping destination choice. Annals of Tourism Research. 2015; 54: 48–64. doi: 10.1016/j.annals.2015.06.003.
- 21. Nyman E, Westin K, Carson D. Tourism destination choice sets for families with wheelchair-bound children. Tourism Recreation Research. 2017; 43(1): 26–38. doi: 10.1080/02508281.2017.1362172.
- 22. Gartner WC. Image formation process. Journal of Travel & Tourism Marketing. 1993; 2(2): 191–216. doi: 10.1300/J073v02n02 12.
- 23. Tasci ADA, Kozak M. Destination brands vs destination images: Do we know what we mean? Journal of Vacation Marketing. 2006; 12(4): 299–317. doi: 10.1177/1356766706067603.
- 24. Croy WG. Planning for Film Tourism: Active Destination Image Management. Tourism and Hospitality Planning & Development. 2010; 7(1): 21–30. doi: 10.1080/14790530903522598.
- 25. Friedman HH, & Friedman L. Endorser effectiveness by product type. Journal of Advertising Research. 1979; 19(5): 63-71.
- 26. McCracken G. Who is the Celebrity Endorser? Cultural Foundations of the Endorsement Process. Journal of Consumer Research. 1989; 16(3): 310. doi: 10.1086/209217.
- 27. Seno D, Lukas BA. The equity effect of product endorsement by celebrities. European Journal of Marketing. 2007; 41(1/2): 121–134. doi: 10.1108/03090560710718148.
- 28. Escalas JE, Bettman JR. Managing Brand Meaning through Celebrity Endorsement. Review of Marketing Research. 2015: 29–52. doi: 10.1108/s1548-643520150000012002.
- 29. Djafarova E, Trofimenko O. 'Instafamous'—credibility and self-presentation of micro-celebrities on social media. Information, Communication & Society. 2018; 22(10): 1432–1446. doi: 10.1080/1369118x.2018.1438491.
- 30. Geng R, Wang S, Chen X, et al. Content marketing in e-commerce platforms in the internet celebrity economy. Industrial Management & Data Systems. 2020; 120(3): 464–485. doi: 10.1108/imds-05-2019-0270.
- 31. Patel P, & Basil M. The effects of celebrity attractiveness and identification on advertising interest. In: Academy of Marketing Science Annual Conference. Springer, Cham; 2017. pp. 579–589.
- 32. Wright SA. Reinvestigating the Endorser by Product Matchup Hypothesis in Advertising. Journal of Advertising. 2015; 45(1): 26–32. doi: 10.1080/00913367.2015.1077360.
- 33. Gretzel U, & Sigala M. Advances in Social Media for Travel, Tourism and Hospitality. Oxon: Routledge; 2017.
- 34. Langlois JH, Kalakanis L, Rubenstein AJ, et al. Maxims or myths of beauty? A meta-analytic and theoretical review. Psychological Bulletin. 2000; 126(3): 390–423. doi: 10.1037/0033-2909.126.3.390.
- 35. Zebrowitz LA, Hall JA, Murphy NA, et al. Looking Smart and Looking Good: Facial Cues to Intelligence and their Origins. Personality and Social Psychology Bulletin. 2002; 28(2): 238–249. doi: 10.1177/0146167202282009.
- 36. Zebrowitz LA, & Rhodes G. Sensitivity to "bad genes" and the anomalous face overgeneralization effect: Cue validity, cue utilization, and accuracy in judging intelligence and health. Journal of nonverbal behavior. 2004; 28(3): 167–185. doi: 10.1023/B:JONB.0000039648.30935.1b.
- 37. Gao P, Wang X, Chen H, et al. What is beautiful is not always good: influence of machine learning-derived photo attractiveness on intention to initiate social interactions in mobile dating applications. Connection Science. 2020; 33(2): 321–340. doi: 10.1080/09540091.2020.1814204.
- 38. Zhang H, Fu X, Cai LA, et al. Destination image and tourist loyalty: A meta-analysis. Tourism Management. 2014; 40: 213–223. doi: 10.1016/j.tourman.2013.06.006.
- 39. Chew EYT, Jahari SA. Destination image as a mediator between perceived risks and revisit intention: A case of post-disaster Japan. Tourism Management. 2014; 40: 382–393. doi: 10.1016/j.tourman.2013.07.008.
- 40. Hallmann K, Zehrer A, Müller S. Perceived Destination Image. Journal of Travel Research. 2013; 54(1): 94–106. doi: 10.1177/0047287513513161.
- 41. Kanwel S, Lingqiang Z, Asif M, et al. The Influence of Destination Image on Tourist Loyalty and Intention to Visit: Testing a Multiple Mediation Approach. Sustainability. 2019; 11(22): 6401. doi: 10.3390/su11226401.
- 42. Knoll J, Matthes J. The effectiveness of celebrity endorsements: a meta-analysis. Journal of the Academy of Marketing Science. 2016; 45(1): 55–75. doi: 10.1007/s11747-016-0503-8.
- 43. Statista. Social network penetration in China from 2015 to 2022. 2017. Available online: https://www.statista.com/statistics/277622/user-penetration-rate-of-social-networks-in-china/ (accessed on 5 June 2024).
- 44. Boyatzis RE. Transforming qualitative information: Thematic analysis and code development. Sage; 1998.
- 45. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006; 3(2): 77–101. doi:

- 10.1191/1478088706qp063oa.
- 46. UNWTO. Available online: https://www.unwto.org/ (accessed on 5 June 2024).
- 47. Kim H, Stepchenkova S. Effect of tourist photographs on attitudes towards destination: Manifest and latent content. Tourism Management. 2015; 49: 29–41. doi: 10.1016/j.tourman.2015.02.004.
- 48. Filieri R, Lin Z, Pino G, et al. The role of visual cues in eWOM on consumers' behavioral intention and decisions. Journal of Business Research. 2021; 135: 663–675. doi: 10.1016/j.jbusres.2021.06.055.
- 49. Pham NT, Tučková Z, Chiappetta Jabbour CJ. Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. Tourism Management. 2019; 72: 386–399. doi: 10.1016/j.tourman.2018.12.008.
- 50. Chi CGQ, Qu H. Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. Tourism Management. 2008; 29(4): 624–636. doi: 10.1016/j.tourman.2007.06.007.
- 51. Bentler PM, & Wu EJ. EQS 6.1 for Windows. Encino, CA: Multivariate Software INC. 2005.
- 52. Byrne BM. Structural Equation Modeling with Mplus. Routledge; 2013. doi: 10.4324/9780203807644.
- 53. Hartmann T, Goldhoorn C. Horton and Wohl Revisited: Exploring Viewers' Experience of Parasocial Interaction. Journal of Communication. 2011; 61(6): 1104–1121. doi: 10.1111/j.1460-2466.2011.01595.x.