

Validating the Instrument Measuring the Influence of Information Authenticity and Travel Selfies on Malaysian Online Destination Images [†]

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Abstract: This paper aims to determine an instrument's validity in measuring the context of information authenticity that may influence online destination images through the eyes of selfie tourists. Selfie tourists have been reached via the snowball sampling technique through surveymonkey.com and the data were analysed using SmartPLS software version 3.3. The outcome favours the confirmatory factor analysis, convergent validity, discriminant validity, and the instrument's internal consistency analysis. This research is anticipated to cultivate literature on information authenticity, travel selfies, online destination images, and computer-mediated communication by providing a validated tool for future empirical research.

Keywords: validity; instrument; travel selfies; information authenticity; online destination image



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1. Introduction

Capturing travel selfies (*trafies*) and posting them on social media, more precisely, on Instagram, is a 21st-century trend amongst tourists worldwide. Tourists share their travel photos on social media as part of eWOM [1], and social media seems to be the leading platform accommodating selfies [2]. For example, #selfie, #travelfies, and #travelphotos are popular hashtags actual travellers use when posting travel selfies on Instagram, capturing viewers' attention. Despite the fact that the popularity of travel selfies is familiarized entirely by the popular media as a medium for destination marketing, the quest to authenticate the information shared by tourists (actual tourists and paid reviewers) and destination hosts for public view on social media, and how it could impact the destination's image, remains under-researched topics. Understanding the context of information authenticity within the tourism communication perspective is indeed crucial in this digital age, to rival disinformation and misinformation spread through social media, as penned by Rubin [3]. With the assumption that information authenticity could positively impact the destination image of a particular tourism destination, the present study began to explore the influence of information authenticity on the formation of online destination images by incorporating the context of travel selfies.

The context of destination images has been growing since the 1970s. Now, after the rise of research focusing on antecedents of destination images, user-generated content, and how tourists reproduce destination images through social media posts (see, i.e., [1,4–7]), the context of destination images can be expected to evolve uninterruptedly. Scholars have mutually accepted destination images as “the sum of beliefs, ideas and impressions that a person has towards a destination” [8] (p. 19).

Accepting this definition fully, renowned scholars have introduced attributes of destination images, such as a cognitive image [8]; affective image [9]; cognitive, affective, and conative [10]; and holistic and attributive, functional and psychological, and common

and unique [11]. The present study adapted three primary constructs from destination images: cognitive image, affective image, and overall image. Delving further into the context of information authenticity, few scholars have established their works within the communication realm (see, i.e., [12–16]). The present study precisely refers to information authenticity as the truthfulness of information and imageries shared by tourists via travel selfies for general view on social media. Aligned with the direction of the present study, the framework proposed by Gilpin et al. [13], which shapes authenticity in the social media context, seemed appropriate. Nevertheless, overall, a valid instrument that has proven to empirically depict the present topic remains scarce in the tourism literature. The present study strongly believes that a valid instrument is fundamental in gauging a particular study’s objectives. Therefore, this paper aims to validate the questionnaire developed based on the instruments designed and used by Crompton [8], Baloglu and McCleary [17], Beerli and Martin [18], Echtner and Ritchie [19], Ekinci and Hosany [20], Rawlins [21], Gilpin et al. [13], Ponzi, Fombrun, and Gardberg, [22], Kaakinen et al. [23], Michael et al. [4], and Khan and Jan [24]. The present study considered using the constructs developed by these scholars and adapted them within the scope of the study by incorporating the context of online computer-mediated communication and travel selfies. The questionnaire designed for the present study portrays the influence of information authenticity and travel selfies on Malaysian online tourism destination images through the eyes of selfie tourists. It is anticipated to provide a comprehensive overview of computer-mediated communication that occurs in the online landscape within the Malaysian selfie tourism context.

2. Methodology

As part of the quantitative research, the present study began with questionnaire development. The items for the construct were established by adapting the scales developed by several renowned scholars within the area. The instrument was drafted and developed with eight sections: socio-demographic, information authority, author’s identity, engagement, transparency, cognitive image, affective image, and overall destination image. Each item within the section depicts the objective to be measured within the scope of the study. The instrument was universally designed with several qualifying questions, open-ended questions, and exit points, as a measure to reach the targeted respondents. Table 1 illustrates the development of the instrument based on the sections, variables, and sources.

Table 1. Instrument Development.

Section	Variable	No of Items	Sources
A	Socio-Demographic	6	Self-constructed
B	Information Authority	11	[13,22,24]
C	Author’s Identity	7	[13,23,24]
D	Engagement	7	[13,21]
E	Transparency	7	[13,21]
F	Cognitive Image	21	[4,8,17–20]
G	Affective Image	5	[17]
H	Overall Destination Image	6	[4,17]

Section A gathers information about the demographic profile of selfie tourists; several qualifying and disqualifying questions were also included in this section. Section B gathers information on the selfie tourist’s trust towards the authors’ expertise and credibility on social media. Section C depicts the selfies tourist’s trust towards the authors’ authentic identity. The engagement variable gathers information on the selfie tourist’s trust of the interaction between the author and members in social media communication. Section E gathers information on the selfie tourist’s trust towards the level of openness in social media communication. Section D, the cognitive image, gathers information about the selfie tourist’s belief and factual knowledge regarding Malaysian tourism destinations’ physical attributes as portraits in travel selfies on social media. Affective images gather information

about the selfie tourist's inner or subjective feeling towards Malaysian tourism destinations based on travel selfies posted on social media. Finally, the overall destination image gathers information about the selfie tourist's behavioural intention based on the cognitive and affective impression made towards the tourism attraction through travel selfies. For all items in Sections B to H, a five-point Likert scale was used.

As a measure to ensure the dependability of the instrument drafted, validity tests were first conducted ahead of the pilot test. Ghauri and Gronhaug [25] declared that validity represents how accurately the instrument could engulf the objective of the study. Two types of validity test were covered to ensure the dependability of the instrument in the present study: content validation and construct validation. Content validity has been done through expert review by referring the instrument to several expert panels, varying from subject matter experts, methodology experts, and language experts, ahead of the pilot study. The experts referred to are academic and tourism industry panellists. Based on their constructive remarks, the instrument was revised and sent out for the pilot test. The pilot test was conducted via an online survey created through surveymonkey.com. A total of 100 selfie tourists were reached through the universally designed questionnaire. The snowball sampling technique, part of non-probability sampling, was used to reach the participants and obtain data with the highest point of generalization. The snowball sampling method was deemed suitable for the respondents as the target group that the present study aimed to reach was secluded. To ensure data quality, potential respondents were clearly notified about the study requirement on the main screen of the online survey. Upon completion of the data collection process for the pilot test, the construct validity test comprising convergent validity and discriminant validity was conducted and the results are presented in Tables 3 and 4. Due to the study's exploratory nature, SmartPLS software version 3.3 was used during the analysis processes, as suggested by Hair et al. [26], and we considered this software to be expedient for examining small samples and when testing both convergent and discriminant validity.

3. Findings

Table 2 presents the demographic profile of the respondents. In total, 66% of our respondents were female, with 66 responses received, followed by 34 responses from male respondents. Most of the respondents are known to be earning between RM 3001 and RM 4000, which carries a weight of 53%, followed by 31 respondents earning less than RM 3000 and 3 responses received from those with no income. The majority of our responders are between the ages of 31 and 40, with a total of 58 responses received followed by 42 responses from those aged between 18 and 30 years old. The result shows that the mainstream respondents are employed in the private sector, with 67%, or 67 respondents, followed by business personnel and government servants, with 17 responses and 10 responses, respectively. As for marital status, 61 respondents, or 61%, are known to be single, followed by 39 respondents who are married. Lastly, most of our respondents reported to have completed their tertiary education (76 respondents), followed by 24 respondents who have completed a higher degree.

Mata et al. [27] performed a PLS-SEM confirmatory factor analysis (CFA) using Smart-PLS software to establish a scale's structural validity. Correspondingly, the present study decided to employ CFA due to the nature of the instrument, which was developed based on references from previous scholars. As recommended, the result from the present study reached the minimum value of 0.5 for all the loading factors' performance. Both the *t*-value and *p*-value for the present study were accepted and significant at the $p < 0.001$ level. In addition, Hair et al. [28] suggested that two types of validity must be met in confirming the measurement model: convergent validity and discriminant validity. As per the authors, convergent validity includes the average variance extracted (AVE) and composite reliability (CR). Ngah et al. [29] highlighted that convergent validity can be established should the factor loading and AVE reach more than 0.50, and the CR more than 0.75. Table 3 below exhibits the convergent validity result, comprising the AVE, CR, and Cronbach's alpha

values. The factor loading for all items (64 items) within the study passed the minimum value of 0.50. Items that failed to reach the minimum value were removed and the analysis was recommenced. AVE and CR for this study were achieved after both reached more than 0.50 for AVE and more than 0.75 for CR, as defined by Hair et al. [28].

Table 2. Demographic profile.

Variable	Frequency	Percentage (%)
Gender		
Male	34	34
Female	66	66
Income		
No Income	3	3
Less than RM 3000	31	31
RM 3001–RM 4000	53	53
RM 4001–RM 5000	6	6
RM 5001 and above	7	7
Age		
18–30	42	42
31–40	58	58
41–50	0	0
51–60	0	0
61 and above	0	0
Occupation		
General Government Servant	10	10
Private Sector Employee	67	67
Business and Self Employed	17	17
Home Maker	0	0
Student	6	6
Retiree	0	0
Unemployed	0	0
Marital Status		
Single	61	61
Married	39	39
Divorced/Widowed	0	0
Education Level		
Higher Degree—Masters/PhD	24	24
Tertiary Education—Diploma/Degree	76	76
Secondary/High School Education	0	0
Primary/Elementary Education	0	0

With the Cronbach’s alpha value exceeding the minimum value of 0.70, as required by Hair et al. [30], all items were found reliable through internal consistency analysis. Hence, the instrument is deemed fit to proceed with discriminant validity.

Table 3. Convergent validity.

Items	CR	AVE	Rho_A	Cronbach’s Alpha
Information Authority	0.906	0.520	0.884	0.883
Author’s Identity	0.903	0.572	0.879	0.875
Engagement	0.930	0.656	0.914	0.913
Transparency	0.922	0.628	0.903	0.901
Cognitive Image	0.966	0.578	0.964	0.963
Affective Image	0.917	0.688	0.893	0.887
Overall Destination Image	0.943	0.735	0.929	0.927

Discriminant validity can be tested using three prime tests: cross loading, Fornell–Larcker criterion, and heterotrait–monotrait (HTMT). This present study approached discriminant validity through HTMT. Franke and Sarstedt [31] uttered that, HTMT values should be less than 0.85 to fulfil the validity test. Table 4 indicates the HTMT values for information authority, author’s identity, engagement, transparency, affective image, cognitive image and overall destination image, which is less than 0.85. The result approves the validity test requirement.

Table 4. Discriminant Validity.

Items	1	2	3	4	5	6	7
Information Authority							
Author’s Identity	0.451						
Engagement	0.395	0.791					
Transparency	0.390	0.802	0.815				
Cognitive Image	0.131	0.277	0.301	0.395			
Affective Image	0.105	0.262	0.320	0.345	0.703		
Overall Destination Image	0.138	0.281	0.346	0.396	0.613	0.740	

4. Discussion

The objective of this study was to investigate the validity of a research instrument that aims to measure the influence of information authenticity and travel selfies on Malaysian online tourism destination images. Instrument validity, encompassing CFA, content validity, and construct validity, and instrument reliability, comprising internal consistency, were tested to fulfil the aim of the study. The result suggests that the instrument established in this study is reliable, valid, and capable of producing the relevant statistical results upon application. This study has employed PLS-SEM measurements through SmartPLS version 3.3 (Joe F. Hair, Mobile, AL, USA). It provides greater statistical power to the research and can analyse complex structural equations consisting of many indicators and constructs [32]. Notably, the fundamental Cronbach’s alpha value of more than 0.7 assures the reliability of the item used to measure the construct [33]; the present study thus projected that the result was satisfactory, indicating that all the seven constructs had a high level of reliability. This suggests that the instrument can be relied upon to explain the subject matter.

As part of convergent validity, the fundamental rules—these being an external loading rating value greater than 0.5 [34], a CR value greater than 0.75 [28], and an AVE value for each construct greater than 0.7 [35]—were rigorously monitored. Hence, convergent validity for the present study was established. HTMT, as part of discriminant validity, requires values less than 0.85 [36] or 0.90 [37]. Given that the HTMT values from the present study are all below 0.9, discriminant validity was established, proving that the constructs are not highly correlated. Some items were eliminated in the initial phase for failure to meet the minimum requirement regarding the factor loading rating, and so the data were retested. After accomplishing the test requirement, the overall result implies that all of the constructs and items reported in the study are valid and reliable.

5. Conclusions

The present study has employed and validated seven constructs—information authority, author’s identity, engagement, transparency, affective image, cognitive image, and overall destination image—which were evaluated through the eye of selfie tourists. As part of the theoretical contribution, the validated instrument has integrated the role of information authenticity as represented by the information authority, author’s identity, engagement, transparency, and destination images—represented by cognitive and affective images—through the eyes of actual selfie tourists. Exclusively, this study is anticipated to nourish the literature on information authenticity, travel selfies, destination images, and computer-mediated communication, by providing a validated instrument for future empirical research. The findings from this study will also be an eye-opener for destination

hosts and prospective tourists about the rise of information authenticity within the online landscape, which could directly or indirectly impact online destination image. Forthcoming scholars interested in the subject area are welcome to use the instrument, giving great attention to sample size, mode of data collection, and the target respondents.

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