RIAT
Revista Interamericana de Ambiente y Turismo
Interamerican Journal of Environment and Tourism
Print version ISSN - 0717 - 6651, Online version ISSN - 0718 - 235X
http://dx.doi.org/10.4067/S0718-235X2022000100002
http://riat.utalca.cl
www.fen.utalca.cl

Research paper

Destination image: validation of a measurement scale

Imagen del destino: validación de una escala de medición

Laura Marlhene Hernández-García[1], Alejandro Delgado-Cruz[2*] and Yanelli Daniela Palmas-Castrejón[3]

[1] Bachelor in Tourism, Facultad de Turismo y Gastronomía, Universidad Autónoma del Estado de México, Toluca, México.
[2] PhD. in Administration and Senior Management, Facultad de Turismo y Gastronomía, Universidad Autónoma del Estado de México, Toluca, México.
[3] PhD. in Tourism Studies, Facultad de Turismo y Gastronomía, Universidad Autónoma del Estado de México, Toluca, México.
[*] Corresponding author: adelgadoc@uaemex.mx

Received: 2022-02-05 Accepted for publication: 2022-04-18 Published: 2022-06-30

ABSTRACT

Image is a factor that directly influences the decision to visit a destination. Nowadays, more and more destinations are emerging that have different characteristics, from the consolidated and massive sun and beach destinations. The objective is to validate an unconventional destination image measurement scale in the Mexican context. With the support of the scientific literature review, an instrument was designed and applied to 405 visitors from three destinations: Sultepec, Almoloya de Alquisiras and Texcaltitlán, municipalities belonging to the State of Mexico, Mexico. For data processing, the measurement and structural model was evaluated with the support of different tests of internal consistency, validity and structural equation modelling. The results show that the destination image is integrated by affective, cognitive and global components. In conclusion, the instrument in question showed highly satisfactory values to be considered reliable and valid.

Keywords: *Destiny image, affective image, cognitive image, global image, measurement scale.*

RESUMEN

La imagen es un factor que influye directamente en la decisión de visita de un destino. Hoy en día, emergen cada vez más destinos que cuentan con características, diferentes a los destinos consolidados y masivos de sol y playa. El artículo tiene por objetivo validar una escala de medición de la imagen del destino no convencionales en el contexto mexicano. Con apoyo de la revisión de literatura científica, se diseñó un instrumento el cual se aplicó a 405 visitantes de tres destinos: Sultepec, Almoloya de Alquisiras y Texcaltitlán, municipios pertenecientes al Estado de México, México. Para el tratamiento de datos se evaluó el modelo de medida y estructural con apoyo de diferentes pruebas de consistencia interna, validez y modelación de ecuaciones estructurales. Los resultados muestran que la imagen del destino se integra por componentes afectivos, cognitivos y globales. En conclusión, el instrumento en cuestión evidenció valores altamente satisfactorios para considerarse confiable y válido.

Palabras clave: Imagen del destino, imagen afectiva, imagen cognitiva, imagen global, escala de medición.

INTRODUCTION

Globalization, together with the new demands of the tourism market, indicate the need to develop marketing strategies and policies that promote a positive, coherent and attractive image of destinations, in order to be more competitive in the international scenario (Haarhoff, 2018; Králiková et al., 2020; Qu et al., 2011). In this sense, tourist destinations compete mainly on the basis of their own image and the comparison of this image with that of others. According to Beerli and Martín (2004), the destination image is made up of a set of affective and cognitive components, which influence tourist behavior, since it directly reflects the warmth or satisfaction perceived by visitors in a place, intervening in the intention to return or recommend the destination (Cruz et al., 2018; Králiková et al., 2020).

In recent years, destination image has been one of the most important and relevant topics in the scientific literature on tourism (Batista et al., 2020; Gallarza et al., 2002). Mainly, it has been revealed that the image of the destination is closely related to the preferences and intentions of tourists to visit, thus achieving greater positioning. Likewise, it has been pointed out that the attributes that constitute the destination image are context-specific, being unique and differentiated, while the experiences of individuals influence a return visit (Fakeye & Crompton, 1991; Kim & Richardson, 2003; Mohammad et al., 2016; Pike & Ryan, 2004).

The scientific literature also denotes a greater number of researches in destinations with a high level of positioning in the international market (Sanchez et al., 2020; Stylos et al, 2017). Despite the relevance of the destination image as an object of study, it is still necessary to explore more about the structure that characterizes the image of a destination, especially when it is a non-conventional destination with attributes totally different from the massive sun and beach destinations. An example of this is the destinations where domestic tourism is developed. These destinations offer non-traditional and alternative services based on their natural and cultural resources. Also, they are destinations where there is an influx of visitors and tourists who reside near the locality for cycling, hiking and handicraft shopping activities, among others (Chew & Jahari, 2014; Huete et al., 2019; Mohammad et al., 2016; Sun et al., 2015; Stylos et al., 2017).

In Mexico, domestic tourism-based destinations are increasingly emerging as a local development alternative. Tourism in Mexico is a priority because of the economic and social impacts, mainly due to the income, Gross Domestic Product and employability generated per year. Even since 2016, the Secretaría de Turismo (Minister of Tourism) through the program "Viajemos todos por México" (Let's all travel for Mexico), has encouraged Mexicans to travel throughout the country. While in the National Tourism Strategy 2019-2024 this purpose prevails with the development of projects linked to the Sustainable Development Goals (SDGs).

For its part, the State of Mexico is being recognized for its alternative destinations due to the natural and cultural attractions it offers, with Ixtapan de la Sal and Valle de Bravo becoming popular. However, there are other emerging destinations such as Sultepec, Texcaltitlán and Almoloya de Alquisiras that are offering tourism activities, especially because they take advantage of their geographic location near the Nevado de Toluca. For this reason, there is a need to develop instruments to measure the image of these destinations, with the purpose of generating strategic schemes to capture local and regional markets, while at the same time taking care of the natural and cultural resources. For this reason, the objective of this article is to validate a scale for measuring destination image in the Mexican context. Specifically, the destinations studied are Sultepec, Texcaltitlán and Almoloya de Alquisiras, located in the south of the State of Mexico, Mexico, since they have the natural, cultural and tourist conditions to have an important influx of visitors.

The work is structured in four parts. The first part presents the literature review on the concepts and scales of measurement of destination image. The second part presents the methodology for the design, piloting and validation of the proposed instrument. In the third part, the results are presented.

LITERATURE REVIEW

Destination image

Destination image has been studied for more than 35 years, becoming one of the objects of study of interest not only for the scientific community, but also for government, business and professionals. Several researchers converge that the destination image is a mental construct where the knowledge, ideas, thoughts, beliefs and emotions that a person has about the destination is above a visual representation (Agapito et al., 2013; Batista et al., 2020; Ozdemir et al., 2012; Sun et al., 2015; Stylos et al., 2017).

One of the most widely accepted conceptions of destination image, is the one proposed by Baloglu and McCleary

(1999), who consider that the image is constituted by a cognitive component linked to the tangible elements of the destination and an affective component related to the feelings that the destination evokes on the individual. In the same vein, Beerli et al. (2002) point out that the image is characterized by subjective perceptions consisting of cognitive and affective aspects; while Gartner (1994) argues that the destination image is a multidimensional concept based on three dimensions: cognitive, affective and conative image, where the conative image refers to the visitor's behaviors in the future.

Several investigations have focused on the affective and cognitive components (Castro et al., 2020; Ceylan & Çizel, 2018; Mohammad et al., 2016). However, over time it has been observed that a third component, called global image, should be considered in the formation of the destination image. This type of image is composed of evaluations and affective responses that are a function of cognitive responses, such as the experience of visiting a destination, safety and cultural or natural attractions (Baloglu & McCleary, 1999; Miossec, 1977).

In short, it can be said that the destination image is made up of three aspects: cognitive, affective and global. The cognitive aspect is created through information acquired from the media such as brochures, newspapers and websites, as well as from marketing strategies or from a previous experience of the destination (Fakeye & Crompton, 1991; Chon, 1992; Castaño et al., 2006). From the cognitive aspect, the image of destinations is based on a set of attributes and resources available to visitors such as climate, nature, culture, infrastructure, creative and entertainment activities, among others (Stankova & Vasensk, 2015; Ceylan & Çizel 2018).

For its part, the image from the affective aspect refers to all the emotional responses that visitors have from the valuation or appreciation of the physical characteristics, benefits and benefits of the destination (Ceylan & Çizel, 2018; Haarhoff, 2018). So that the affective image is related to the friendliness of the residents, the service provided, the beauty of the landscape and the feelings they emanate (Sánchez et al., 2020; Camprubí et al., 2009).

Global image is based on visitor behavior integrating cognitive and affective components to react positively or negatively towards a destination (Beerli & Martin 2004; Bosque & Martín, 2008; Han & Hwang, 2016). Apart from the cognitive and affective components involved in the formation of the global image, personal and stimulating factors also play an essencial role. For example, personal factors include psychological motivations (leisure, escape, fun, purpose of the trip), socio-cultural values (culture and place of origin) and the influence of socio-demographic aspects (age, gender and level of education). Regarding the stimulus factors are those outcomes of experiences where familiarity with the destination from the media or other people is included (Stylidis et al., 2017; Camprubí et al., 2009; San Martín & Rodríguez, 2010).

In recent research, various destination image measurement scales are observed that have been developed considering mainly affective and cognitive aspects, as well as the contributions of Baloglu and McCleary (1999). It is also shown that most of the studies have been applied in consolidated sun and beach and cultural destinations (Table 1). Therefore, the need to validate instruments for destinations within non-conventional contexts is a priority in order to respond to the tourism demands of different Latin American countries, including Mexico.

Table 1. Objective image measurement scales

Author	Objetive	Site	Variables	Scale
Chon (1992)	Provide the results of an empirical analysis study that supports the evaluative congruence model.	Virginia, USA	Cognitive image Affective image	Likert scale from 1 to 5 intervals
Castaño et al. (2006)	Analyze the influence of various psychosocial factors on the image that visitors have of a destination.	Madrid, Spain	Destiny image cognitive image	Likert scale from 1 to 5 intervals
Stankova y Vasensk (2015)	Propose the formation of a positive image of Bulgaria as a tourist destination and focus on heritage culture.	Bulgaria	Factors of supply and demand induce the formation of the image	Not specified
Mohammad, et al. (2016)	Determine how the dimensions of the image of the destination impact tourist satisfaction and intention to return to visit in the social network Foursquare.	Isfahan, Iran	Overall Image Affective image Cognitive image Conative image	Likert scale from 1 to 5 intervals

Author	Objetive	Site	Variables	Scale
Stylidis et al. (2017)	Examine if an integrated destination image model, considering the affective and cognitive aspect, is applicable to predict the overall destination image and behavioral intentions of residents and tourists of a destination.	City of Eilat, Israel	Cognitive component Affective component Overall Image	Likert scale from 1 to 7 intervals
Haarhoff (2018)	Determine whether the perception of the resorts has an influence on the visitation levels of the resorts.	Kimberley, the Northern Cape	Tourist perception Destination image Overall image	Not specified
Ceylan and Çizel (2018)	Develop and validate an integrated destination image measurement scale covering the three dimensions of destination image construction.	Turkey	Cognitive dimensions Conative dimensions Affective dimensions	Likert scale from 1 to 7 intervals
Huete et al. (2019)	Develop and test a theoretical model of destination image formation that addresses the influence of information sources on the formation of the overall image of a cultural destination, specifically on different components (cognitive, affective and unique images).	Segobriga Archeological Park, Spain	Cognitive image Affective image Unique image Overall image	Likert scale from 1 to 5 intervals
Sánchez et al. (2020)	Analyze the perception of the attributive components and personal factors that determine the formation of the tourist image of the destination.	Mazatlan, Mexico	Tourist image Personal factors Stimulus factors	Likert scale from 1 to 5 intervals

METHODOLOGY

Design

This was a quantitative, non-experimental, cross-sectional study, since the dimensions that make up the image of the destination were studied without manipulation and at a single moment. A three-stage procedure was used to validate the measurement scale.

In the first stage, a review of the specialized scientific literature on the subject of destination image was carried out in order to identify the main dimensions and define them in conceptual and operational terms. In this same stage, a pilot test was conducted in the study context and experts in the field were consulted to refine the design of the items and the measurement scale. The second stage was the field work, where the sample number was delimited and data were collected through the application of the instrument. In the last stage, the data were processed with the support of internal consistency tests, validation and structural equation modeling.

Context

The municipalities of Sultepec, Texcaltitlán and Almoloya de Alquisiras are located in the south of the State of Mexico, which in turn is located in the central part of the country. The three municipalities are approximately 76 kilometers from Toluca de Lerdo, capital of the State of Mexico. Due to their proximity, these destinations share similar characteristics and are different from conventional and mass-produced destinations. Mainly, they are distinguished by providing tourist services based on their natural and cultural resources, seeking harmony between nature and the visitor. Based on the Índice Municipal de Actividad Económica (Municipal Index of Economic Activity) provided by the Subsecretaría de Turismo del Estado de México (Underminister of Tourism of the State of Mexico), the temporary accommodation and food and beverage preparation services sector in 2019 of the municipalities as a whole generated 52.2 million Mexican pesos annually, evidencing its impact on the economic development of the region.

Sample and data collection

The population consists of 3,000 visitors per month in the municipalities of Sultepec, Texcaltitlán and Almolo-

ya de Alquisiras in the State of Mexico. The sampling was non-probabilistic and the selection technique of the participants was by volunteers who made a visit or stay between the months of March and September 2021. Thus, the sample consisted of 405 observations.

Data collection consisted of a self-administered survey. The questionnaire was applied physically at the destinations and online through a Google Forms form, during the month of September 2021. The fieldwork followed an ethics protocol on anonymity, confidentiality and use of data, taking as a basis the standards of the American Psychological Association (APA, 2019).

Respondents were young men and women aged 21 to 30 years (48.63%), single and married (71%), residents of localities in the State of Mexico (45.2%) and near the destinations studied, as well as entities in the western area (35.8%) of the country. Most of them are workers in the public sector (44.5%), with undergraduate studies (37.5%), high school (27%). The sample corresponds to a profile of visitors, since they are people who only travel without staying overnight and usually arrive by their own or public transportation. Respondents usually travel with their family and friends, engaging in social (47.8%) and cultural (39.2%) activities (Table 2).

Table 2. Characterization of the sample

Variable	Value	Frequency (*f*)	Percentage (%)
Sex	Man	201	49.63
	Woman	204	50.37
Place of residence	Same Mexico State		
	Amatepec	4	0.98
	Coatepec de Harinas	4	0.98
	Almoloya de Alquisiras	29	7.16
	Ixtapan de la Sal	15	3.7
	Metepec	3	0.74
	Sultepec	49	12.09
	Toluca	50	12.34
	Texcaltitlán	26	6.41
	Tejupilco	55	13.58
	Tenancingo	8	1.97
	Temascaltepec	12	2.96
	Other State		
	Mexico City	21	5.1
	Guadalajara	2	0.49
	Morelos	15	3.7
	Puebla	2	0.49
	Zacualpan	4	0.98
	Other country		
	United States of America	6	1.48
Age	Under 17 years old	7	1.72
	18 to 20 years	55	13.58
	21 to 25 years old	109	26.91
	26 to 30 years	88	21.72
	31 to 35 years	53	13.08
	36 to 40 years	46	11.35
	41 to 45 years	16	3.95
	46 to 50 years	21	5.18
	More than 50 years	14	3.45
Civil status	Single	138	34.07
	Married	149	36.79
	Divorced	16	3.95
	Widower	10	2.46
	Free Union	92	22.71
Education level	No studies	0	0
	Primary	3	0.74
	Secondary	23	5.67
	High school or high school	111	27.4
	Technical career	79	19.5
	Bachelor	153	37.77
	Master	35	8.64
	Doctorate	1	0.24
Occupation	Student	89	21.97
	Housewife	31	7.65
	Entrepreneur or owner of your own business	89	21.97
	Worker in the private sector (company)	32	7.9
	Worker in the public sector	157	38.76
	Other	7	1.72
Reason for the trip	Holidays	62	15.3
	visit relatives	179	44.19
	work or business	129	31.85
	Other	36	8.88
Who do you travel with?	Only	61	15.06
	Partner	66	16.29
	Family	174	42.96
	Friends	92	22.71
	Other	12	2.96
Travel method	Public transport	101	24.93
	Own transport	289	71.35
	Rented or rented transport	7	1.72
	Borrowed transportation	8	1.97
Lodging	Hotel	26	6.41
	Lodging house	3	0.74
	Cabin	30	7.4
	House of a relative or friend	186	45.92
	Other	160	39.5
Dwell time	Only for the day (no overnight stay)	225	55.55
	1 day	88	21.72
	2 days	59	14.56
	3 days	10	2.46
	4 or more	23	5.67
What activities do you mainly do?	Cultural	158	39.01
	Social	194	47.9
	Natural	53	13.08

Instrument

The instrument was designed based on a review of scientific literature, pilot testing and content analysis by experts. The instrument consisted of two sections, the first included the 27 items for the measurement of the destination image variable (Table 3) through a five-point Likert-type scale, where 1 "strongly disagreed", 2 "disagreed", "moderately agreed", 4 "agreed" and 5 "strongly agreed". The second section included the variables for the characterization of the sample, such as: sex, age, place of residence, marital status, level of education, occupation, reason for the trip, lodging, length of stay and activities performed (Table 2).

Table 3. Conceptual and operational definition of the variables

Variable	Concept	Code	Items
			In this place, I can feel:
Affective image (AI)	Emotional responses that individuals express towards a certain destination (Agapito et al., 2013; Baloglu & McCleary 1999; Han & Hwang, 2016; Pike & Ryan, 2004).	AI_ 01	Pleasant experiences
		AI_ 02	Relaxation or tranquility
		AI_ 03	That I get out of the everyday
		AI_ 04	Emotion
		AI_ 05	Pleasure
		AI_ 06	Happiness
		AI_ 07	Fun
		AI_ 08	Optimism or a positive attitude
			I think that this place has:
Cognitive image (IC)	Responses made up of thoughts, ideas, beliefs and knowledge that an individual has about the characteristics and attributes of a destination (Baloglu & McCleary 1999; Bosque & Martin, 2008; Pike & Ryan, 2004).	IC_ 09	Beautiful landscapes
		IC_ 10	Natural attractions
		IC_ 11	Cultural attractions
		IC_ 12	Nice weather
		IC_ 13	Easy access to get
		IC_ 14	Affordable prices
		IC_ 15	Cleaning
		IC_ 16	Places to take pictures
		IC_ 17	Places to buy souvenirs or souvenirs
		IC_ 18	Variety of eating establishments
		IC_ 19	Variety of establishments to stay / stay
		IC_ 20	Quality services
		IC_ 21	Rich gastronomy
		IC_ 22	Variety of recreational activities
		IC_ 23	Has a hospitable or warm community
			After your visit, what general image do you have of the place:
Global image (IG)	Global responses that integrate cognitive and affective components and that influence visitor behavior to react positively or negatively towards a destination (Beerli & Martin 2004; Han & Hwang, 2016).	IG_ 24	It was satisfying
		IG_ 25	Has a good reputation
		IG_ 26	It is excellent to visit again
		IG_ 27	It is excellent to recommend it to others

Data processing

In the data processing, the evaluations of the measurement and structural model were carried out. In the first evaluation, the internal consistency of the variables was checked through Cronbach's alpha (α), rho_A and composite reliability. Factor analysis was also employed where structure, convergent and discriminant validity were verified through the average variance extracted (AVE), the Fornell-Larker criterion (1981) and the Heterotrait-Monotrait Ratio (HTMT) (Henseler et al., 2015). Subsequently, the significance of the coefficients of the items and of each variable was identified with support from partial least squares structural equation modeling (SEM-PLS) (Hair et al., 2017). This data treatment was supported by JASP software (JASP Team, 2021) SPSS version 26 (IBM, 2019) and SmartPLS version 3.2.9 (Ringle et al., 2015).

RESULTS

Measurement model evaluation

First, the overall reliability of the instrument was examined through Cronbach's alpha (α). This coefficient made it possible to estimate the internal consistency as a function of the number of items and the proportion of total variance of the test corresponding to the covariance between the items (Cronbach, 1951). The value of Cronbach's alpha is verified on a scale ranging from zero to one, whose resulting coefficient must be greater than 0.700 to be acceptable (Oviedo & Campos, 2005). The result indicates that the instrument in question satisfactorily meets the reliability criterion by obtaining a value of 0.959. On the other hand, there was no need to eliminate items that would affect internal consistency (Table 4).

Table 4. Frequentist individual item reliability statistics

Item	If item dropped Cronbach's α	Item-rest correlation	Mean
IA_ 01	0.958	0.600	3.267
IA_ 02	0.958	0.577	3.257
IA_ 03	0.958	0.574	3.286
IA_ 04	0.957	0.638	3.277
IA_ 05	0.957	0.649	3.279
IA_ 06	0.958	0.592	3.299
IA_ 07	0.957	0.634	3.284
IA_ 08	0.958	0.618	3.296
IC_ 09	0.957	0.737	3.516
IC_ 10	0.956	0.741	3.511
IC_ 11	0.956	0.741	3.481
IC_ 12	0.956	0.737	3.526

Item	If item dropped Cronbach's α	Item-rest correlation	Mean
IC_ 13	0.957	0.721	3.499
IC_ 14	0.956	0.762	3.459
IC_ 15	0.957	0.725	3.484
IC_ 16	0.956	0.778	3.484
IC_ 17	0.957	0.736	3.457
IC_ 18	0.956	0.740	3.420
IC_ 19	0.956	0.750	3.415
IC_ 20	0.957	0.731	3.427
IC_ 21	0.956	0.767	3.444
IC_ 22	0.956	0.754	3.430
IC_ 23	0.956	0.772	3.435
IG_ 24	0.959	0.453	3.356
IG_ 25	0.959	0.427	3.323
IG_ 26	0.959	0.463	3.360
IG_ 27	0.959	0.471	3.353

The second test was the factor analysis and the goodness of fit was corroborated by Bartlett's test of sphericity and the Kaiser Meyer Olkin index (KMO). The goodness of fit exposes the feasibility of the data with respect to the sample size for optimal dimension reduction. In Bartlett's sphericity one must have a significance level below 0.050 and in the KMO one has to reach a value above 0.800 (Kaiser, 1974; Lloret et al., 2014). The instrument in question reported a significant value in Bartlett's test of sphericity, it was significant ($\chi 2=14458.045$; g.l.=325; $p<0.001$ and a KMO of 0.915, which allowed a sample adequacy.

After the above corroborations, it was appropriate to perform the exploratory factor analysis, using maximum likelihood analysis as the extraction method and varimax analysis with Kaiser normalization as the rotation method. Of the 27 possible components, the factorial structure considered three efficient explanatory factors when obtaining initial eigenvalues above the value of one; where the other components located below the inflection point were discarded, thus evidencing the principle of parsimony. In addition, it was found that the three extracted factors as a whole reached an explained variance of 75.9% (Table 5), a percentage that shows great efficiency of the dimensions to be interpreted.

Table 5. Factor characteristics

Factor	SumSq. Loadings	Proportion var.	Cumulative
Factor 1	10.48	0.388	0.388
Factor 2	6.729	0.249	0.637
Factor 3	3.290	0.122	0.759

Table 6 shows the values of each item, whose factor loadings were higher than 0.500, a criterion from which they are considered acceptable (Lloret et al., 2014). With such results, it can be said that the instrument that measures the destination image dimensions is supported by construct validity.

Table 6. Factorial structure

Item	Cognitive image (CI)	Affective image (AI)	Global image (GI)
IA_ 01		0.891	
IA_ 02		0.884	
IA_ 03		0.830	
IA_ 04		0.897	
IA_ 05		0.901	
IA_ 06		0.851	
IA_ 07		0.901	
IA_ 08		0.883	
IC_ 09	0.838		
IC_ 10	0.841		
IC_ 11	0.848		
IC_ 12	0.840		
IC_ 13	0.808		
IC_ 14	0.846		
IC_ 15	0.802		
IC_ 16	0.838		
IC_ 17	0.771		
IC_ 18	0.806		
IC_ 19	0.803		
IC_ 20	0.808		
IC_ 21	0.820		
IC_ 22	0.838		
IC_ 23	0.829		
IG_ 24			0.830
IG_ 25			0.821
IG_ 26			0.922
IG_ 27			0.869

Note: Applied rotation method is varimax.

Once the factorial structure was identified, the internal consistency of each dimension was verified. In this case, it was done through Cronbach's Alpha (α), rho_A and composite reliability; whose values are above 0.700 (Hair et al., 2017). Convergent validation was also met by obtaining in all constructs values of the average variance extracted (AVE) greater than 0.500 (Henseler et al., 2016). On the other hand, discriminant validity was ascertained based on the Fornell and Larcker (1981) criterion and the heterotrait-monotrait matrix (HTMT). In the first case, it was verified that the square root of the AVE was greater than the value of the correlations between variables (Table 7); while in the second case, it was checked that the HTMT ratio was below 0.900 (Hair et al., 2017) (Table 8).

Table 7. Internal consistency, convergent and discriminant validity

Variable	Alfa de Cronbach	rho_A	Composite reliability	AVE	Affective image (AI)	Cognitive image (CI)	Global image (GI)
Affective image (AI)	0.975	0.976	0.979	0.851	0.923*		
Cognitive image (CI)	0.973	0.973	0.975	0.725	0.365	0.851*	
Global image (GI)	0.944	0.946	0.960	0.857	0.420	0.277	0.926*

*The diagonal shows the value of the square root of the extracted variance explained (AVE).

Table 8. Heterotrait-Monotrait Ratio (HTMT)

Variable	AI	CI	GI
Affective image (AI)	-		
Cognitive image (CI)	0.374	-	
Global image (GI)	0.437	0.288	-

Structural model evaluation

The adjustment and validity of the structural model was performed through the bootstrapping function with a total of 5,000 cases. Table 9 shows the z and p values for each of the items and variables, showing significance ($z \geq 1.960$; $p < 0.001$).

The goodness of fit of the model through the SRMR yielded a value of 0.078 (Hair et al., 2017).

Together, it was corroborated that the regression coefficients in the model were greater than 0.100 (Hair et al., 2017). As shown in Table 10, these values were greater than 0.294; demonstrating with this, the belonging of the instrument to measure the destination image as a second-order variable and of its constructs as first-order variables.

Table 9. Factor loadings

Factor	Indicator	Estimate	Std. Error	z-value	p-value	95% Confidence interval Lower	Uper
Affective image (AI)	IA_01	0.593	0.025	24.163	< 0.001	0.545	0.641
	IA_02	0.579	0.025	23.451	< 0.001	0.531	0.628
	IA_03	0.581	0.027	21.478	< 0.001	0.528	0.633
	IA_04	0.608	0.024	25.005	< 0.001	0.56	0.655
	IA_05	0.602	0.024	25.327	< 0.001	0.555	0.649
	IA_06	0.6	0.026	22.664	< 0.001	0.548	0.652
	IA_07	0.602	0.024	24.935	< 0.001	0.555	0.649
	IA_08	0.605	0.025	24.104	< 0.001	0.555	0.654
Cognitive image (CI)	IC_09	0.726	0.035	20.946	< 0.001	0.658	0.794
	IC_10	0.712	0.034	21.077	< 0.001	0.646	0.778
	IC_11	0.702	0.033	21.337	< 0.001	0.638	0.767
	IC_12	0.708	0.034	21.031	< 0.001	0.642	0.774
	IC_13	0.658	0.033	19.977	< 0.001	0.594	0.723
	IC_14	0.661	0.03	21.696	< 0.001	0.601	0.72
	IC_15	0.604	0.03	20.025	< 0.001	0.545	0.663
	IC_16	0.672	0.031	21.697	< 0.001	0.612	0.733
	IC_17	0.587	0.03	19.459	< 0.001	0.528	0.646
	IC_18	0.598	0.029	20.476	< 0.001	0.541	0.656
	IC_19	0.607	0.03	20.516	< 0.001	0.549	0.665
	IC_20	0.624	0.03	20.476	< 0.001	0.564	0.684
	IC_21	0.656	0.031	21.214	< 0.001	0.595	0.717
	IC_22	0.648	0.03	21.562	< 0.001	0.589	0.707
	IC_23	0.65	0.03	21.524	< 0.001	0.591	0.71
Global image (GI)	IG_24	0.575	0.026	22.362	< 0.001	0.525	0.626
	IG_25	0.602	0.028	21.336	< 0.001	0.547	0.657
	IG_26	0.64	0.025	25.552	< 0.001	0.591	0.689
	IG_27	0.633	0.027	23.786	< 0.001	0.581	0.685
Destination image (DI)	AI	1.13	0.226	5.006	< 0.001	0.687	1.572
	CI	0.583	0.087	6.694	< 0.001	0.412	0.754
	GI	0.699	0.106	6.571	< 0.001	0.49	0.907

Table 10. Structural model coefficients

Variable	Original sample	Sample mean	Standard deviation	t-value	p-value	R^2	R^2_{aj}
Affective image (AI)	0.741	0.739	0.034	21.814	< 0.001	0.550	0.548
Cognitive image (CI)	0.877	0.878	0.016	54.604	< 0.001	0.770	0.769
Global image (GI)	0.543	0.539	0.060	9.106	< 0.001	0.294	0.293

CONCLUSIONS

The image of a destination is a subjective social construction, since it is based on the visitor's interpretation according to his or her emotions, feelings, thoughts and experiences. Likewise, it is considered one of the most influential aspects for visitors when choosing a destination for recreational activities, vacations or days off, as well as to get away from the routine of their daily lives. Therefore, the perceived image can determine the success or failure of a destination.

In this sense, non-conventional and newly developed destinations need to know what their image of visitors is like. Firstly, because they need inputs to develop commercial strategies and, secondly, because their planning must correspond to the demand of their market.

Increasingly, the State of Mexico is being recognized for its alternative destinations such as Sultepec, Texcaltitlán and Almoloya de Alquisiras for offering tourism activities. Thus, the studies need inputs to know how to generate projects and proposals for the activation of tourism based on its image.

This work contributes with an approach to the measurement of destination image. To achieve this, the contributions of scientific literature were considered, identifying that destination image can be approached from three dimensions: cognitive, affective and global. The proposed instrument showed satisfactory levels of the indicators of the measurement and structural model, to be considered strongly reliable and valid.

In practical terms, the instrument can be used to measure destination image in similar contexts. However, as it is a first approach, proposals with greater robustness to expand the items and scale of measurement are strongly recommended.

Among the future lines of research, studies of explanatory and predictable scope are needed to study destination image, which is not well consolidated in the Mexican context. Other lines could associate destination image with other variables that occur fortuitously in destinations of this type. For example, with social issues such as problems of insecurity, violence, quality of life and gender equity, as well as conditioning factors caused by the COVID-19 pandemic.

Finally, the limitations of the research revolve around the nature of the context studied, as it cannot be generalized to other destinations since each one of them has different geographical, socio-cultural and tourist characteristics.

REFERENCES

APA (2019). Publication Manual of the American Psychological Association (7th ed.). Washington, DC., American Psychological Association.

Agapito, D., Valle, P. O., & Mendes, J. C. (2013). The cognitive-affective-conative model of destination image: A confirmatory analysis. Journal of Travel & Tourism Marketing, 30(5), 471-481. https://doi.org/10.1080/10548408.2013.803393

Baloglu, S., & McCleary, K. (1999). A model of destination formation. Annals of Tourism Research, 26(4), 868-897. https://doi.org/10.1016/S0160-7383(99)00030-4

Batista, E., Perez, E. C., & Serrano, B. (2020). Bibliometric study of tourism destination image in Science Direct. Revista Interamericana de Ambiente y Turismo, 16(1), 97-105. http://dx.doi.org/10.4067/S0718-235X2020000100097

Beerli, A., Díaz, G., & Pérez, P. (2002). The configuration of the university image and its relationship with the satisfaction of students. Journal of Educational Administration, 40, 486–

505. https://doi.org/10.1108/09578230210440311

Beerli, A., & Martín, J. D. (2004). Tourists' characteristics and the perceived image of tourist destination: a quantitative analysis a case study of Lanzarote, Spain. Tourism Management, 25(5), 623-636. https://doi.org/10.1016/j.tourman.2003.06.004

Bosque, I. R., & Martin, H. S. (2008). Tourist Satisfaction: A cognitive-affective model. Annals of Tourism Research, 35(2), 551-573. https://doi.org/10.1016/j.annals.2008.02.006

Camprubí, R., Guia, J., & Comas, J. (2009). La formación de la imagen turística inducida: un modelo conceptual. PASOS Revista de Turismo y Patrimonio Cultural, 7(2), 255-270. https://doi.org/10.25145/j.pasos.2009.07.018

Castaño, J. M., Moreno, A., & Crego, A. (2006). Factores psicosociales y formación de imágenes en el turismo urbano: un estudio de caso sobre Madrid. Pasos Revista de Turismo y Patrimonio Cultural, 4(3), 287-299. https://doi.org/10.25145/j.pasos.2006.04.020

Castro, J. C., Palacios, J. M., & Plazarte, L. V. (2020). Imagen del destino desde la perspectiva del turista. Turismo y Sociedad, 26, 45-66. https://doi.org/10.18601/01207555.n26.02

Ceylan, B. & Çize, B. (2018). Testing destination image scale invariance among British, German and Russian tourists: a multigroup confirmatory factor analysis. Advances in Hospitality and Tourism Research, 6(2), 119-146. https://doi.org/10.30519/ahtr.449176

Chew, E. Y., & Jahari, S. A. (2014). Destination image as a mediator between perceived risks and revisit intention: A case of post-disaster Japan. Tourism Management, 40, 382-393. https://doi.org/10.1016/j.tourman.2013.07.008

Chon, K. (1992). The role of destination image in tourism: An extension. The Tourist Review, 47(1), 2-8. https://doi.org/10.1108/eb058086

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16(3), 297-334. https://doi.org/10.1007/BF02310555

Cruz, E. R., Bermúdez, G., & Tous, D. (2018). Destination image, satisfaction and destination loyalty in cruise tourism: the case of Malaga (Spain). Tourism & Mangement Studies, 14(1), 58-68. http://dx.doi.org/10.18089/tms.2018.14105

Fakeye, P. C., & Crompton, J. L. (1991). Image differences between prospective, first time, and repeat visitors to the Lower Rio Grande Valley. Journal of Trave Research, 30(2), 10-16. https://doi.org/10.1177/004728759103000202

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39-50. https://doi.org/10.1177/002224378101800104

Gallarza, M.G., Gil, I., & Calderón, H. (2002). Destination image: towards a conceptual framework. Annal of Tourism Research, 9(1), 56-78. https://doi.org/10.1016/S0160-7383(01)00031-7

Gartner, W. C. (1994). Image formation process. Journal of travel and Tourism Marketing, 2(3), 191-216. https://doi.org/10.1300/J073v02n02_12

Haarhoff, R. (2018). Tourist perceptions of factors influencing destination image: a case study of selected Kimberley resorts. African Journal of Hospitality, Tourism and Leisure, 7(4).

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM). Thousand Oaks, CA: Sage publications.

Han, H., & Hwang, J. (2016). Investigating healthcare hotel travelers' overall image formation: Impact of cognition, affect, and conation. Tourism and Hospitality Research, 18(3), 346-356. https://doi.org/10.1177/1467358416670936

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8

Huete, N., Martínez, M. P., López, V. R., & Izquiedo, A. (2019). Archeological tourist destination image formation: influence of information sources on the cognitive, affective and unique image. Frontiers in Psychology, 10, 2382. https://doi.org/10.3389/fpsyg.2019.02382

IBM (2019). IBM SPSS Statistics for Macintosh (Version 26.0) [Computer software]. https://www.ibm.com

JASP Team (2021). JASP (Version 0.16) [Computer software]. https://jasp-stats.org

Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39(1), 31-36. http://dx.doi.org/10.1007/BF02291575

Kim, H., & Richardson, S. L. (2003). Motion picture impacts on destination images. Annals of Tourism Research, 30(1), 216-237. https://doi.org/10.1016/S0160-7383(02)00062-2

Králiková, A., Peruthová, A., & Ryglová, K. (2020). Impact of Destination Image on Satisfaction and Loyalty. Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, 68(1), 199–209. https://doi.org/10.11118/actaun202068010199

Lloret, S., Ferreres, A., Hernández, A., & Tomás, I. (2014). El análisis factorial exploratorio de los ítems: Una guía práctica, revisada y actualizada. Anales de Psicología, 30(3), 1151-1169. http://dx.doi.org/10.6018/analesps.30.3.199361

Mioossec, J. (1977). L'image touristique comme introduction à la géographie du tourisme. Annales de Géographie, 84(473), 55-70. https://doi.org/10.3406/j.geo.1997.17568

Mohammad, M., Alsadat, R., & Tavakoli, H. (2016). The effect of destination image on tourist satisfaction, intention to revisit and WOM: empirical research in foursquare social media. e-Tourism. https://doi.org/10.1109/ECDC.2016.7492964

Oviedo, H. C., & Campo, A. (2005). Aproximación al uso del coeficiente alfa de Cronbach. Revista Colombiana de Psiquiatría, 34(4), 572-580.

Ozdemir, B., Aksu, A., Ehtiyar, R., Cizel, B., Cizel, R. B., & Icigen, E. T. (2012). Relationships among tourist profile, satisfaction and destination loyalty: Examining empirical evidences in Antalya Region of Turkey. Journal of Hospitality Marketing & Management, 21(5), 506-540. https://doi.org/10.1080/19368623.2012.626749

Pike, S., & Ryan, C. (2004). Destination positioning analysis through a comparison of cognitive, affective, and conative perceptions. Journal of Travel Research, 42, 333-342. https://doi.org/10.1177/0047287504263029

Qu, H., Kim, L. H., & I, H. H. (2011). A model of destination branding: integrating the concepts of the branding and destination image. Tour Manage, 32, 465-476. https://doi.org/10.1016/j.tourman.2010.03.014

Ringle, C. M., Wende, S., & Becker, J. M. (2015). SmartPLS (Version 3.3.3) [Computer software]. https://www.smartpls.com

San Martín, H., & Rodríguez, I. (2010). Los factores estímulos y personales como determinantes de la formación de la imagen de marca de los destinos turísticos: un estudio aplicado a los turistas que visitan un destino vacacional. Cuadernos de Economía y Dirección de la Empresa, 13(43), 37-64. https://doi.org/10.1016/s1138-5758(10)70009-8

Sánchez, V. V., Félix, B. E., & Velarde, J. R. (2020). La imagen turística de Mazatlán, México: según la percepción de los turistas nacionales. Dimensiones Turísticas, 4(6), 91-118. https://doi.org/10.47557/SSHR8137.

Stankova, M. & Vasensk, I. (2015). Competitiveness and tourism development – in search for the statement of the positive image of Bulgaria as destinations. Ekonomika, 61(3), 43-60. https://doi.org/10.5937/ekonomika1503043S

Stylidis, D., Shani, A., & Belhassen, Y. (2017). Testing an integrated destination image model across residents and tourists. Tourism Management, 58, 184-195. https://doi.org/10.1016/j.tourman.2016.10.014

Stylos, N., Bellou, V., Andronikidis, A., & Vasilliadis, C. A. (2017). Linking the dots among destination images, place attachment, and revisit intentions: A study among British and Russian tourists. Tourism Management, 60, 15-29. https://doi.org/10.1016/j.tourman.2016.11.006

Sun, M., Ryan, C., & Pan, S. (2015). Using Chinese travel blogs to examine perceived destination image: The case of New Zealand. Journal of Travel Research, 54(4), 543-555. https://doi.org/10.1177/0047287514522882