

# EXPLORATORY MODEL OF PERCEIVED TOURISM IN THE COVID-19 ERA

**Javier Carreon Guillen, National Autonomous University of Mexico**  
**Cruz Garcia Lirios, Luis Amigo Catholic University**  
**Celia Yaneth Quiroz Campas, Luis Amigo Catholic University**  
**Elias Alexander Vallejo Montoya, University of Sonora**  
**Francisco Espinoza Morales, Luis Amigo Catholic University**  
**Victor Hugo Merino Cordoba, Luis Amigo Catholic University**  
**Carmen Ysabel Martinez de Merino, Autonomous University of Sinaloa**  
**Luiz Vicente Ovalles Toledo, Guajira University**  
**Clara Judith Brito Carrillo, Guajira University**

## ABSTRACT

*The pandemic was attacked by anti-COVID-19 policies through distancing and confinement strategies that impacted tourism. The objective of the present study was to explore the dimensions of the perception of tourism in a scenario of risk of contagion, disease and death by coronavirus SARS CoV-2. A documentary, cross-sectional and exploratory study was carried out with a selection of 345 public transport users. A factorial structure of four factors was found that explained 77% of the total variance. In relation to the literature consulted, the scope and limits of the study are discussed.*

**Keywords:** Agenda, COVID-19, Model, Public Transport, Tourism.

## INTRODUCTION

The literature concerning the reactivation of tourism debates between models that include exogenous determinants such as climate change policies and models of endogenous factors such as the stock market history of companies or the execution of biosafety protocols. Given this scenario, hybrid model proposals consist of anticipating risk scenarios based on hybrid factors that are usually involved in cognitive variables such as habitus or satisfaction.

In the emerging economies of the organization for economic cooperation and development, tourism represents a significant percentage in the Gross Domestic Product, as well as in the Economically Active Population. Spain, followed by Portugal and Hungary depend on this activity. These are economies based on tourist services that suppose a reactivation of their economy from the link between exogenous factors such as air regulation policies and endogenous factors such as biosafety protocols.

In Latin America, before the emergence of the pandemic caused by the SARS-COV-2 coronavirus and the COVID-19 disease that have so far claimed the lives of 150,000 people, Mexico was the tourist destination with the highest traffic with 45.5 million visitors per year followed by Argentina with 6.9 million and Brazil with 6.6 million (Bermudez-Ruiz et al., 2019). Cancun was the most visited city with 6.4 million and an economic impact of USD 5.2 billion,

followed by Mexico City with 3.9 million visitors and a foreign exchange impact of USD 1.96 billion, as well as the Riviera Maya with 2.9 million tourists and an effect of 2,940 million USD (Sandoval, 2019).

In Mexico, the tourism sector accounts for 33% of its Gross Domestic Product (GDP), this positioned it in 8th and 6th place in the world ranking in 2018 and 2019 with 35 and 39 million visitors in both consecutive periods (Carreon, 2019).

However, the impact of the pandemic on the Latin American economy has been devastating. It is estimated that from January to April 2020, the main stock indexes in the region lost up to 50% of their share value. The Mexican Price and Quotation Index (IPC) lost 25% of its value, Brazil's Ibvespa reduced its quotation price by 45%, Chile's IPSA decreased its quotation by 35%. Merval from Argentina 40% and COLCAP from Colombia 45%.

In the case of tourism in Mexico, the Riviera Maya in Quintana Roo lost 98.5% of international visitors and Acapulco 98.7% of domestic tourists. In contrast, during the period from 2012 to 2019, 99% of customers searched for information about tourist destinations on the Internet, 74.8% planned and booked their next trip and stay, with 68.8% who made your payment online.

Given this panorama of tourism in the face of Covid-19, this paper aims to contrast a hybrid model of the cognitive determinants of satisfaction with the tourist reactivation experience, considering a review of the literature on the external and internal factors that determine the reactivation and have been reported in the literature. Next, the problem is addressed taking into account that the structural equation model incorporates the relationships of external and internal variables with respect to the satisfactory experience as an indicator of the reactivation of tourism. Thus, business intelligence regarding the effects of the pandemic on the recession and reactivation of the economy based on tourism (percentages of GDP and EAP) identifies the transport network as a determining factor. In this sense, the measurement of mobility has been guided by quality standards such as zero emissions of carbon dioxide into the atmosphere.

The studies of the recession, reactivation and tourist mobility derive from the economic reactivation of related sectors such as transport in general and air transport in particular. Taking into account its external and internal determinants, the investigations of the tourist reactivation pose an interconnected scenario in which the airlines would be linked to the hospitality industry through strategic alliances.

Solis & Munoz (2020) suggest that an air intelligence network in its dimensions of connectivity, centrality and intermediation would allow anticipating scenarios of tourist reactivation as long as air freedom policies open up competition between transnational and local companies in order to encourage the offer of flights to tourist destinations. From a model of Autoregressive Vectors (VAR) in which the endogenous variables simultaneously determine the target variable, considering its history of values, allowing all variables to be assumed as endogenous and found that the return on capital is the determinant of the Aeromexico crisis, collaterally affecting the reactivation of local tourism in the destinations of its domestic flights.

In contrast, other research warns that exogenous factors are the determinants of tourism reactivation. Before the pandemic, the experience of the transfer and the image of the destination were two determining factors of the intentions and decisions of tourists to travel, but with the advent of the coronavirus, the management, promotion and quality system of tourist services has been oriented towards biosafety protocols.

Garcia et al. (2018) demonstrated that earthquakes, through the affectation of tourist heritage, affect local reactivation. Based on a review of the literature, they found that the logistics of

government policies, strategies and programs in terms of risk prevention and restoration are determinants of the image of tourist destinations. The processing of data related to the frequency of earthquakes made it possible to anticipate risk scenarios, as well as tourism reactivation, considering the institutional capacities for restoration and promotion of tourism heritage.

Felix et al. (2020) carried out a taxonomy and nomenclature of tourism reactivation strategies in the face of the pandemic. He found two dimensions, one related to government action focused on management and the other allusive to businessmen linked to biosafety. The authors conclude that business intelligence based on the codification of strategies will encourage studies in universities and institutes in order to open the discussion and lines of research for the reactivation of tourism.

However, other hybrid works that include exogenous determinants such as public policies to promote destinations and tourism heritage, as well as endogenous factors observable in the cognitive determinants of the decision to travel and stay, explain the flows and anticipate reactivation scenarios tour.

Freire & Marcheno (2020) carried out a systematic review on economic reactivation strategies where access and use of the Internet was a factor associated with tourism policies. Business intelligence in developed countries, such as France, has contributed to the revival of tourism in the capital Paris. The reasons for travel and the destination were analyzed to establish lines of Internet destination search behavior with the expectations of satisfaction of tourists who have positively experienced their stay.

Gonzalez (2021) evaluated the degree of knowledge regarding biosafety in hotel services, finding six dimensions related to the use of equipment, personal protection, customer service, work coexistence, surface hygiene and social security. At an operational level, employees carry out the protocol aimed at reactivating tourism in the study location.

Therefore, models that only include exogenous factors have shown the prediction of risk scenarios and tourism activation, but without considering the decisions of tourists and businessmen regarding biosecurity protocols in the face of the pandemic. In contrast, the models of endogenous factors have only considered the reactivation of companies in compliance with biosafety standards, rather than the connection networks between cities and tourist destinations. Business intelligence in the sector seems to oscillate between exogenous information and endogenous data, but hybrid proposals that incorporate both dimensions have competitive advantages over autoregressive models or simultaneous equations.

In this sense, the structural equation models allude to the two dimensions, considering them as formative hybrids to explain the determining and/or reflective relationships to anticipate the risk scenarios for tourist reactivation in the midst of the pandemic.

This section reviews the quality standards for zero-emission mobility in the face of the effects of climate change on the service economy in general and tourism in particular. The determinants of mobility are highlighted as exogenous factors to the reactivation of tourism. The CO2 levels in the OECD economies show Luxembourg as the country with the greatest areas of opportunity, followed by Australia and the United States. On the contrary, the economies with the greatest opportunity to sell carbon bonds are Turkey, Mexico and Sweden.

The relationship between transport with high quality standards (speed, zero emissions) with respect to the image of the destination has been estimated by the Intergovernmental Panel against Climate Change, which established in 2006 the estimation of mobility based on time variables of transfer, transport and travel length. It is possible to see that the variables of transfer time and average speed refer to the mobility skills of carriers and users, as well as the logistics of

the infrastructure and the transport system (Rosas et al., 2019). In this way, the calculation of carbon dioxide emissions into the atmosphere has been proposed as a management tool that in the case of the Organization for Economic Cooperation and Development (OECD) in its report corresponding to 2015 a gap is noted between its member countries and the other regions (Quiroz, 2019).

Therefore, at the local level, municipalities and communities are exposed to increased carbon dioxide emissions and their effects on environmental public health, as is the case of the prospective scenario for 2040 in which the mobility of freight transport fuels service economies will intensify and will be the main challenge for anti-climate change policies and zero emission programs. This is how the study of peri-urban mobility is central in the administration of public, environmental and food security of a city and the communities around it (Amemiya et al., 2018).

The variables related to mobility show that both external and internal factors would explain and anticipate risk scenarios such as the recession in tourism, or the reactivation of activities associated with tourism and with it the local economy. Business intelligence focused on the analysis of carbon dioxide emissions into the atmosphere suggests that these exogenous variables are associated with other endogenous variables such as transport habitus. This section presents the hybrid variables that synthesize the exogenous and endogenous factors that determine recession, reactivation and tourist mobility. It is based on the assumption that mobility policies, together with the strategic planning of companies and the needs, preferences and expectations of tourists, converge in a social construction known as habitus.

The exogenous and endogenous factors related to the recession, reactivation and tourist mobility have been observed in the social sciences as habitus. It is deliberate, planned and systematic intentions, decisions and behaviors around the use of transport and orientation towards a destination. The intelligence of tourism businesses suggests that working with hybrid or construct factors is more relevant given the proliferation of research that includes exogenous and endogenous variables as determinants of tourist mobility.

Tourist mobility, understood as a habitus observable in 1) aesthesis (aesthetic dispositions), 2) hexis (expressive dispositions), 3) ethos (ethical dispositions), and 4) eidos (logical dispositions) (Garcia, 2008). The mobility habitus has been understood as four dispositions related to the logic of transfer, the aesthetics of displacement, the ethics around security and daily expressiveness (Garcia, 2011). It is a process that is inherited in the interrelationship between users, walkers, bystanders, guards, operators or spectators with respect to the quality of the public, concession or private transport service, as well as the image of the departure and arrival points of the passengers. Transport units (Garcia et al., 2013).

The ethical dispositions (ethos) refer to a series of learnings of the values and principles that guide a journey and the intentions of transfer based on the image of a public destination (Garcia et al., 2015).

The logical dispositions (eidos) allude to skills of appreciation of the environment, discursive positioning and appropriation of spaces with an intention of cost and benefit (Garcia et al., 2015).

The aesthetic dispositions (aesthesis) suggest the inclusion of images and discourses related to a transfer, the transport units, the interrelation with the other actors involved in the process of intentional displacement (Hernandez et al., 2014).

The expressive dispositions (hexis) connote a series of subjective manifestations, shared appreciations around the meaning of a transport and the places of destination, as well as the meanings around the transfer purposes (Limon et al., 2017).

In this way, peri-urban mobility has been analyzed from the meanings and appropriation of means of transport as symbolic scenarios of safety, comfort, leisure, recreation or coexistence (Llamas et al., 2018).

However, the structure of factors that supposes a multidimensional process such as the habitus of peri-urban mobility suggests at least the exploration of the relationships between the indicators such as; tastes, preferences, expectations, needs, perceptions, appreciations, appropriations, uses and customs around the collective transport system and public destinations (Martinez et al., 2018).

A theoretical approach to the problem highlights the variables that include three matrices related to habitus, human capital and decision-making around the use of public transport. It is possible to notice that the study of peri-urban mobility is focused on the use of the means of transport, which depends on decision-making and this on socio-cultural and socio-cognitive variables that would explain the prevalence of one type of transport over others, overcrowding and conflicts between operators and users at the time of the transfer, but studies of peri-urban mobility highlight four main factors. In this way, the habitus of peri-urban mobility is the result of the relationships between the four factors, provided that the collective transport system facilitates the interrelation towards a public, historical and significant center for the actors involved (Quintero et al., 2018). This is so because the collective transport system is not only a scene of symbols and meanings around public centers. In addition, it is a scenario of interrelation between different actors that are not limited to security or quality of service (Rivera et al., 2015).

However, the quality of the collective transport service is also the result of its efficiency, effectiveness and effectiveness (Rivera et al., 2018). Therefore, it is necessary to observe the factors that allow us to anticipate a conflict-free scenario (Tun et al., 2017). Or, at least a safe public service that translates into user confidence in the system and its administration (Villegas et al., 2018). The mobility habitus synthesizes the exogenous and endogenous factors that determine the crises, reactivation and prosperity of tourism, both at institutional, business and customer levels. The social sciences that study the phenomenon have synthesized these variables in predictive models that anticipate risk scenarios and eventually contingent or emerging situations such as the reactivation of tourism in the face of the pandemic.

This section warns that the image of the destination, online promotions and the expectation of satisfaction explain the global, Latin American and national tourism system, although it's sustainable dimension demands requirements for a satisfactory experience (Garcia, 2020). In this sense, international standards refer to the use of low emission transport or at least transparent diffusion of emissions.

Systematic reviews and meta-analyses related to tourist mobility have identified two dimensions related to the image of the destination and the satisfactory experience as its two main determinants (Adams, 2020). In this sense, the models and instruments that measure this phenomenon have been built from the theoretical and conceptual frameworks of habitus and its aesthetic, expressive, ethical and rational dispositions.

The Religious Tourism Model (MTR) explains the axes, the trajectories and the relationships between the determining variables; social motivation, religion, educational level, culture and rural environment, being the Religious Motivations Scale (RMS) the instrument that measures the phenomenon from the beliefs and reasons attributed to the image of the destination and processed as expectations of satisfactory experiences (Salvatore, 2020).

The Tourism Support Model (MAT) also proposes the same determinants, but with a contingency impact mediator variable, thus explaining the probabilities of choosing a destination

based on its image before, during and after a risk event and in concomitance with the sociodemographic, educational and labor variables (Quiroz, 2020).

The Tourist Loyalty Model (MLT) specifies the direct and indirect trajectories of environmental variables such as the natural ecosystem, culture and social relations mediated by the perception of ecological tourism (Martinez, 2019). That is, loyalty is explained from the influence of the environment on the expectations of satisfaction and the image of the destination of potential customers.

These three models and their corresponding instruments measure the relationships of determinants of the tourist experience based on both premises of perceived destination and satisfaction expectation, avoiding the importance of the transfer with its standards of reducing carbon dioxide emissions into the atmosphere. The studies of tourist mobility are distinguished by contrasting predictive models that can be self-reversing to investigate the homogeneous random effects with respect to the decisions and actions of companies dedicated to tourism. Other models propose the combination of exogenous and endogenous factors when anticipating risk scenarios and eventually emerging scenarios.

This section presents the modeling of the variables that explain tourist mobility, indicated by the degree of satisfaction achieved by the habitus of the parties involved in business intelligence. It starts from the definition of the technique to continue with the modeling of the variables reported in the state of the art and the discussion of the axes, trajectories and predictive relationships of tourist satisfaction.

Business intelligence is based on the disclosure of intangible assets. In the case of the recession, reactivation, mobility and tourist satisfaction, the data analysis technique allows the clarification of the relationships between the variables. In this way, business intelligence has been defined as the effect of the role of competitive advantages for the competitiveness of products and services (Ahumada Tello & Perrusquia, 2016). Business intelligence predicts the decisions and actions of companies in a local market from its determinants which are inferred from data processing such as transportation. In the case of anticipating risk scenarios in the face of the pandemic in the tourism sector. Caseiro & Coelho (2019) showed that the treatment of the data determined the innovation in Startups.

However, business intelligence also warns of the areas of opportunity for companies dedicated to strategic planning of the quality of their processes and products. Data analysis has been used in financial areas, but it is the information on the uses and preferences of Internet users that predict the acceptance or rejection of products or services (Murillo & Caceres, 2013). As it is a technique to reveal the knowledge of the parties involved in a company, business intelligence is linked to the management, production and transfer of knowledge in organizations that create intangible assets.

From the theoretical, conceptual and empirical frameworks it is possible to model the axes, trajectories and relationships between the determining variables of the tourist experience, mainly with regard to the transfer with the expectations of low carbon dioxide emissions into the atmosphere. In this way, the explanatory model of the experience of moving to a tourist destination based on the expectation of satisfaction recovers the variables; 1) demographic, 2) educational, 3) labor and 4) motivational with respect to the variables of travel time and travel speed.

Virkar & Mallya (2018) established as determinants of satisfaction the motivation of the trip and the image of the destination in tourist centers, which had high correlations with the socioeconomic variable of income, the sociocultural variable of schooling and the sociodemographic variable of age, but in the present study the sociocultural, sociodemographic and socioeconomic

variables had low correlations both with the motivation of the trip and with the image of the destination, suggesting the inclusion of other sociocognitive factors, even though the travel time and the average speed are essential in the journey. Calculation of CO2 emissions.

The objective of the present work was to explore the dimensions of the perception of tourism in the context of the pandemic in order to evaluate the anti-COVID-19 policies of distancing and confinement of people.

Are there significant differences between the theoretical dimensions of the perception of mobility with respect to the specification of the relationships between these dimensions reported in the state of the art?

Null hypothesis: There will be significant differences between the theoretical dimensions with respect to the specification of their relationships

Alternative hypothesis: There will be no significant differences between the dimensions and the relationships.

## METHOD

Given that business intelligence is the most suitable deliberate, planned and systematic way to explain the impact of the pandemic on tourism, as well as the most efficient, efficient and effective alternative to guide the reactivation of tourism, mainly in what concerns to mobility as a preponderant dimension and satisfaction as a hegemonic goal, the risk scenario was diagnosed; cons and pros of the relationships between mobility and tourist satisfaction.

Scenery in Mexico, 685,023 companies are registered. Mexico city concentrates the largest number of companies with around 87,786, followed by the state of Jalisco with 55,841 and the state of Mexico with 52,501

194,061 companies make up the service sector; Mexico City includes 31,135, the State of Jalisco 16,866 and the state of Michoacán 13,331

625,224 micro companies are registered in Mexico. 77,188 are registered in Mexico City, 52,703 are taxed in the state of Michoacán and 51,296 in the state of Veracruz

In this panorama of micro-enterprises in the services sector and concentrated in Mexico City, an investigation was carried out based on business intelligence, considering the tourism potential of micro-entrepreneurs as transport users with tourist destinations.

Sample. A non-experimental study was carried out with a non-probabilistic selection of 345 tourist transport users Table 1.

	<b>Age</b>	<b>Scholarship</b>	<b>Entry</b>	<b>Marital status</b>
Feminine	M=24.3 SD=1.2	Postgraduate 5%; Bachelor's degree 15%; Baccalaureate 24%, Secondary 46%	M=3451.2 SD=243.1	Single 56%; Marriage 23%; Another 21%
Male	M=26.1 SD=1.5	Postgraduate 8%; Bachelor's degree 20%; Baccalaureate 31%; Secondary 41%	M=4233.1 SD=126.3	Single 67%; Marriage 17%; Another 16%

**Note:** Prepared with study data; M=Mean, SD=Standard Deviation

Instrument. The Tourist Mobility Self-Report (AMP-28) was constructed from the Destination Image Differential and the Olague Travel Motivation Scale 2015 (Olague et al., 2017).

The Tourist Mobility Self-Report included two dimensions for destination image (emotional and cognitive aspects) and two dimensions for travel motivation (impulse and attraction aspects).

The average speed and the travel time were recorded in a user self-report, comparing it with the reports of the transfer systems, as well as the traffic regulations regarding the speed limit of Mexico City.

Process: The surveys were carried out in the computer stations of the facilities of the tourist transport system. Confidentiality and anonymity of the respondents were guaranteed in writing, as well as that the results of the study did not affect their economic status.

Analysis: The information was processed in the Statistical Package for Social Sciences (IBM-SPSS-AMOS for its acronym in English version 25.0). Cronbach's alpha was estimated for the internal consistency of the Travel Motivation Scale (alpha of 0.880) and Spearman Brown (0.618) for the Destination Image Differential (Carreon et al., 2014). The adequacy was established with the KMO statistic (0.742) and the sphericity with the Bartlett test [ $\chi^2=213.2$  (34df)  $p=0.000$ ] (Garcia, 2007). Validity was established with an exploratory factorial analysis of principal axes with promax rotation. The correlations between the factors with Pearson's  $r$ , as well as the covariances to observe the relationships between the factors (Carreon et al., 2014). Testing the model with adjustment parameters; GFI, CFI and residual; RMSEA (Carreon et al., 2014).

## RESULTS

Table 2 shows the statistical descriptions of the instrument that measured the motivational factors of the trip and image of the destination, indicating a consistency higher than the required one of 700.

<b>R</b>	<b>M</b>	<b>D</b>	<b>Yes</b>	<b>C</b>	<b>A</b>	<b>F1</b>	<b>F2</b>	<b>F3</b>	<b>F4</b>
r1	4.31	1.12	1.02	1.91	0,721				0.341
r2	4.52	1.07	1.24	1.81	0,742				0.362
r3	4.01	1.19	1.15	1.82	0,711				0,371
r4	4.13	1.00	1.12	1.63	0,733				0,301
r5	4.24	1.14	1.11	1.81	0,741				0,381
r6	4.51	1.16	1.10	1.95	0,762				0,390
r7	4.23	1.13	1.18	1.61	0,781				0.361
r8	4.30	1.01	1.54	1.73	0,791			0,450	
r9	4.51	1.13	1.55	1.71	0,703			0.351	
r10	4.62	1.02	1.58	1.85	0.712			0.361	
r11	3.71	1.19	1.13	1.91	0,724			0,479	
r12	4.11	1.10	1.12	1.81	0,731			0,460	
r13	4.24	1.01	1.51	1.71	0,704			0.352	
r14	4.33	1.10	1.59	1.83	0.713			0.362	
r15	3.41	1.11	1.13	1.92	0,721		0.476		
r16	4.55	1.10	1.12	1.83	0,731		0.461		
r17	4.10	1.18	1.36	1.36	0,721		0.541		
r18	4.38	1.45	1.85	1.18	0.735		0,601		
r19	4.56	1.56	1.40	1.08	0,793		0.502		
r20	4.62	1.20	1.23	1.09	0,710		0,497		
r21	4.30	1.13	1.14	1.00	0,784		0.502		
r22	4.41	1.14	1.15	1.04	0,705	0,607			



r23	4.28	1.89	1.16	1.06	0,761	0,601			
r24	4.19	1.65	1.08	1.02	0,784	0,508			
r25	4.17	1.46	1.29	1.54	0,793	0,502			
r26	4.03	1.39	1.35	1.47	0,704	0,504			
r27	4.37	1.23	1.26	1.76	0,761	0,490			
r28	4.10	1.05	1.19	1.29	0,762	0,389			

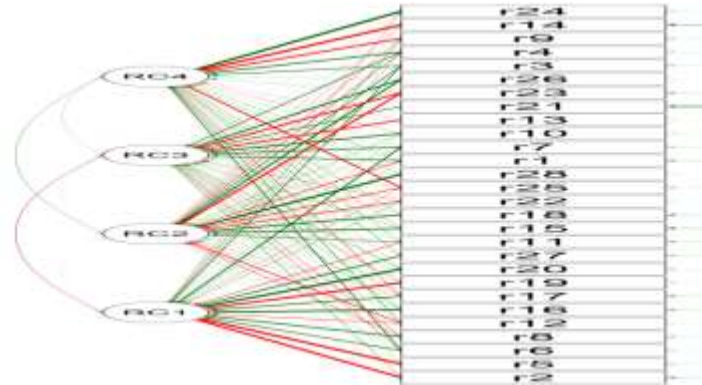
Note: Prepared with study data; R=Reactive, M=Mean, D=Deviation, S=Bias, C=Kurtosis, A=Crombach's Alpha minus the value of the item. Adequacy (KMO=0.782), Sphericity [ $X^2= 346.34$  (56df)  $p=0.000$ ]. Method: Main axes, rotation: Promax. F1=Trip Motivation (25% of the total variance explained), F2=Transfer Expectation (21% of the total variance explained), F3=Image of the destination (17% of the total variance explained) F4=Satisfactory Experience (14 % of the total explained variance).

In order to be able to observe the structure of relationships between variables, the correlations and covariances were estimated to infer the trajectories Table 3.

	M	OF	F1	F2	F3	F4	F1	F2	F3	F4
F1	24.31	14.35	1,000				1,879	0,487	0,387	0,488
F2	22.35	16.28	0.393*	1,000				1,989	0,389	0,479
F3	28.35	10.43	0.487*	0.476**	1,000				1,877	0,477
F4	20.31	13.26	0.390***	0.489*	0.387*	1,000				1,897

**Note:** Prepared with study data; F1=Trip Motivation, F2=Transfer Expectation, F3=Destination Image, F4=Satisfactory Experience, M=Mean, SD=Standard Deviation, \*  $p<0.01$ ; \*\*  $p<0.001$ ; \*\*\*  $p <0.0001$

Once the relationships between the variables were established, their structure of factors and indicators was observed in order to anticipate tourism reactivation scenarios based on the proposed model and contrasted with the study data Figure 1.



**FIGURE 1**  
**STRUCTURAL EQUATION MODEL**

Note: Prepared with study data; F1=Motivation for the Trip, F2=Expectation of Transfer, F3=Image of the Destination, F4=Satisfactory Experience;  $d$ =Factor measurement disturbance,  $e$  = Indicator measurement error,  $\zeta$ =Indicator regression with respect to measurement error,  $\gamma$  Factor regression with respect to its determinant.

Adjustment parameters and residuals [ $\chi^2=214.6$  (45df)  $p=0.007$ ; GFI =0.995; IFC=0.997; RMSEA=0.007] suggest the non-rejection of the null hypothesis regarding the adjustment of the theoretical relationships between the variables with respect to the empirical observations.

## DISCUSSION

The contribution of the present work to the state of the question lies in the establishment of an exploratory factorial structure of the relationships between the factors that the literature identifies as the determinants of the satisfactory experience, but the research design limits the results to the sample surveyed, suggesting the extension of the work to other variables that the literature identifies as tourism dispositions.

In relation to the theory of tourist mobility that exalts the image of the destination and the satisfactory experience as central variables in the explanation of the tourist reactivation after a risk event, the present work found that the motivation of the trip and the expectation of transfer they indirectly affect the satisfactory experience through the image of the destination. Lines of research concerning other mediating variables such as the quality of the service will make it possible to observe the structure of the relationships found and contribute to the prediction of the tourist reactivation based on promotions or transfer offers.

Regarding the models of tourist mobility that highlight motivational dimensions as direct and indirect determinants of the tourist experience, the present work found that the motivation of the trip, the transfer and the destination make up a consistent structure in terms of the explanation and anticipation of a scenario. Satisfying Studies concerning the influence of external factors such as service quality will allow anticipating tourism sustainability scenarios as added value and competitive advantage.

In relation to the specification of the predictive model of the tourist experience that highlights the time and speed of the transfer as indicators of the quality of the service, the present

work found that as transfer expectations they have a direct incidence on the satisfactory experience; suggesting the inclusion of both indicators in the model to contrast in other samples of visitors.

In summary, the quality of the transfer service, indicated by the time and speed of transfer as an added value and competitive advantage of sustainability in the reduction of carbon dioxide emissions into the atmosphere, will allow us to anticipate a scenario of promoting tourism to destinations with sustainability standards.

## CONCLUSION

The objective of the present work was to observe the relationships between determinants of the satisfactory tourist experience, although the design limited the results to the sample, it suggests the extension of the proposed model to other motivational dimensions such as religion or the environment in concomitance with the motivation of the trip, the expectation of transfer and image of the destination. In addition, the study carried out with microentrepreneurs limits the needs, preferences and expectations both in the transfer and in the choice of the destination and the planning of the stay. It is necessary to extend the research to small and medium-sized entrepreneurs as potential tourists for reactivation, mobility and satisfactory experience in the places of destination.

Thus, the null hypothesis of differences between the relationships of variables reported in the literature with respect to the observations made in the present study was not rejected. In other words, the extension of the proposed model with the inclusion of religious or environmental motivations that explain the satisfactory ecological experience of tourists is suggested. Unlike the homogeneous random effects models and the simultaneous effects models where the history and the relationships between exogenous variables are taken into account with the endogenous variables that determine the intentions, decisions and tourist behaviors, the structural equation models offer the possibility to extend the model. The inclusion of cognitive variables in micro, small and medium entrepreneurs anticipates their needs, expectations and choices, guiding the analysis of transport associated with the hotel industry as a comprehensive satisfactory experience.

The hybrid structure that structural equation models incorporate in their explanation of the exogenous and endogenous factors that determine tourist behavior has two premises; 1) the prediction of the axes, trajectories and relationships between the variables, a process known as the formative structure and 2) the anticipation of scenarios with dimensions that reflect the risk of carrying out or not carrying out an action based on the information available and processable, a process that is understood as a reflective dimension.

Therefore, public policies on the matter should be aimed at substantially increasing the quality of the transfer service and connecting it with stay promotions. Said government strategies and programs, being based on business intelligence as a theoretical and methodological framework, as well as on structural equation models as a technique for analyzing axes, trajectories and variable relationships, will allow us to detect fatalistic and optimistic scenarios. The pandemic situation and the expectations of tourist reactivation based on the detection, treatment or vaccination of potential clients are variables that will enrich the proposed model.

## REFERENCES

Adams, S. (2020). Academic framework of social entrepreneurship. *International Journal of Research Aspects of Engineering & Management*, 16(2), 1-6.

- Ahumada Tello, E., & Perusquia Velasco, J.M.A. (2016). Business intelligence: Strategy for competitiveness development in technology-based firms. *Accounting and Administration*, 61(1), 127-158.
- Amemiya, M., Valdes, O., Espinoza, F., & Garcia, C. (2018). Specification of a model for the study of sustainable local development. *Eureka*, 15(1), 136-157.
- Bermudez-Ruiz, G., Sánchez-Rosales, R., Espinoza-Morales, F., Martínez-Munoz, E., Sánchez-Sánchez, A., & García-Lirios, C. (2019). Meta-analytical validity of the social entrepreneurship inventory: A study of random effect sizes. *Global Journal of Management and Business Research*.
- Carreon, J. (2019). Studies of common goods and governance of resources. *Addiction, Medicine & Therapy*, 6(1), 13-23.
- Carreon, J., Hernandez, J., & Garcia, C. (2014). Perceptual differences in the risk of crowds in public and concession transport. *Delos*, 7(21), 1-1.7
- Carreon, J., Hernandez, J., Morales, M., & Garcia, C. (2014). Sociopolitical complexity of public transport. *Tlatemoani*, 15(1), 1-22.
- Caseiro, N., & Coelho, A. (2019). The influence of business intelligence capacity, network learning and innovativeness of startup performance. *Journal of Innovation & Knowledge*, 4, 139-145.
- Felix, A., Garcia, N., and Vera, R. (2020). Participatory diagnosis of the tourism sector in managing the crisis caused by the pandemic (Covid-19). *Interamerican Journal of Environmental and Tourism*, 16 (1), 66-78.
- Freire, K. M., & Mancheno, M.J. (2020). Covid-19 between death and economic recession. *Fipcaec*, 5(5), 280-320.
- Garcia N., Doumet Y., & Carreño L. (2018). Post-earthquake strategic tourism plan for the municipality of Bolívar, Manabi, Ecuador. *Geo Journal of Tourism and Geosites*, 23(3), 881-894.
- Garcia, C. (2007). Sustainable thinking. *Synchro*, 12(43), 1-19.
- Garcia, C. (2008). The beliefs, conflicts and situations that have been preventing representativeness and sustainable governance in Mexico. *Gazette of Anthropology*, 24(2), 1-12.
- Garcia, C. (2011). The structuring of sustainability. *Delos*, 5(10), 1-12.
- Garcia, C. (2020). Specification a model for the study of entrepreneurship. *Advanced Research Journal of Multidisciplinary Discoveries*, 49 (1), 1-4.
- Garcia, C., Carreon, J., Bustos, J., & Hernandez, J. (2013). Socio-psychological systems of sustainable governance. *Sustainability*, 9(1), 1-31.
- Garcia, C., Carreon, J., Hernandez, J., Rivera, B. Aguilar, J., & Rosas, F. (2015). Perceptual differences in the risk of crowds in public and connected transport. *Iberoforum*, 10(19), 112-131.
- Garcia, C., Carreon, J., Hernandez, J., Salinas, R., & Aguilar, J. (2015). Governance of institutionalized entrepreneurship in the face of climate change based on the establishment of a public agenda. *Without Border*, 8(20), 1-15.
- Garcia, C., Juarez, M., & Bustos, J. (2018). Specification of a model for the study of local governance. *Synchrony*, 22(73), 459-472.
- Gonzalez, A. (2021). Evaluation of the level of knowledge about biosafety protocols in the personnel of lodging establishments, province of Tunguragua in the presence of SARS-CoV-2. *Research and Development*, 13(1), 1-10.
- Hernandez, J., Carreón, J., Morales, M.L., Aguilar, J.A., & García, C. (2014). Sociopolitical complexity of public transport. Implications for sustainable local development. *Reason and Word*, 86, 4, 49-468.
- Limon, G. Rivera, B., Bustos, J., Juárez, M., & Garcia, C. (2017). Climate Change Governance: Specifying a Model of Attitudes Towards Climate Change Governments. *Political Science*, 30(1), 1-31.
- Llamas, B., Bustos, J., & Garcia, C. (2018). Specification of a model for the study of mobility habitus. *Academic Research Without Borders*, 27(1), 1-25.
- Martinez, E. (2019). Specification of a model for study of mobility. *International Journal of Precious Engineering Research & Applications*, 5(10), 5-9.
- Martinez, E., Martinez, M., & Garcia, C. (2018). Governance of perception and intention to vote in favor of bike ways. *International Journal of Environment Agriculture, and Biotechnology*, 3(3), 1-9.
- Murillo, M.J., & Caceres, G. (2013). Business intelligence and financial decision making: a theoretical approach. *Logos, Science & Technology*, 5(1), 119-138.
- Olague, J. (2015). Destination image and travel motivation as determinants of satisfaction and loyalty in urban leisure tourism in Monterrey, Mexico. Doctoral Thesis, Autonomous University of Nuevo León.
- Quintero, M., Rivera, B., Garcia, C., Sandoval, F. Figueroa, O., & Molina, H. (2018). Awareness model for sustainability. *Academic Integration in Psychology*, 6(16), 4-19.
- Quiroz, C.Y. (2019). Meta-analytical retrospective of the policies in the handling of risk of transportation in the Mex-

- ico City. *Net Journal Social Sciences*, 7(4), 92-100.
- Quiroz, C.Y. (2020). Specification of a model of digital entrepreneurship. *Current Research in Psychology and Behavioral Science*, 1(1), 1001-1004.
- Rivera, B., Garcia, C., Garcia, E., Rosas, F., Limon, G., Carreon, J., Hernandez, J., & Morales, M. (2015). Contrast of a model of political mistrust. *Psience*, 7(1), 1-9.
- Rivera, B., Limon, G., Sandoval, F., & Garcia, C. (2018). Model of perception of risks, benefits and intention to vote in favor of cycle paths. *Political Science*, (1), 1-25.
- Rosas, F., Gomez, D., & Garcia, C. (2019). Specification of a model for the study of the perception of mobility. *Eureka*, 15(2), 1-11.
- Salvatore, K. (2020). Habitus mobility in the transport of zero carbon dioxide emissions into the atmosphere. *International Journal of Advanced Engineering Research and Science*, 7(2), 1-4.
- Sandoval, F.R. (2019). Specification a model for study of environmental behavior. *International Journal of Research*, 7(8), 5-9.
- Solis, S., & Munoz, L.F. (2020). Mexican air lines in the current situation of Covid-19 evolution and prospect. *European Journal of Marketing & Economics*, 3 (2), 10-21.
- Tun, G., Garcia, C., Carreon, J. (2017). Observational ethnography of rational horizons in a magical town in central Mexico. *Political Science*, 31(5), 1-14
- Villegas, E., Rosas, F., & Garcia, C. (2018). Social Works a quality of life and well-being subjective. *International Journal of Research in Humanities and Social Studies*, 5(6), 35-48.
- Virkar, A. & Mallya, P. (2018). A review of dimensions of tourism transport affecting tourism satisfaction. *Indian Journal of Commerce & Management Studies*, 9(1), 72-80.

**Received:** 01-Nov-2022, Manuscript No. JIBR-22-12926; **Editor assigned:** 03-Nov-2022, Pre QC No. JIBR-22-12926(PQ); **Reviewed:** 17-Nov-2022, QC No. JIBR-22-12926; **Revised:** 24-Nov-2022, Manuscript No. JIBR-22-12926(R); **Published:** 30-Nov-2022