

# EXPLORATORY FACTORIAL MODEL OF MOBILITY HABITUS IN THE COVID-9 ERA

Cruz García Lirios, Autonomous Mexico State University

José Marcos Bustos Aguayo, National Autonomous University of Mexico

Margarita Juárez Nájera, Metropolitan Autonomous University

Francisco Rubén Sandoval Vázquez, Metropolitan Autonomous University

## ABSTRACT

*The objective of the present work is modeling the mobility habitus in the public transport system with low Co2 emission mechanics in the center of Mexico. In this sense, a documentary work was carried out with a review of sources indexed to national repositories, using the Delphi technique for the content analysis and the specification of the model. A study was conducted with a selection of 100 students to establish the reliability, linearity, sphericity, adequation and validity of an instrument from which a relationship of dependence between income and mobility habitus was observed. The limits of the search, selection and processing of information are recognized, and it is recommended to extend the research to international repositories, as well as to employ a more sophisticated technique.*

**Keywords:** Spatiality, habitus, capacities, model, complexity.

## INTRODUCTION

Often complexity has followed two paths: the measurement of processes that are considered fractal, chaotic, dissipative or emerging, or the theorization of such processes. A model complexity, for prop bears of this paper, refers to a search, selection, processing, specification and discussion of the axes of trajectories relations between revised factors in each by the specialized and updated literature (García, 2013).

In this way, spatiality refers to representations of fetishization of the power that urban centrality supposes with respect to the suburban or rural periphery. On the other hand, the habitus refers to inherited and learned dispositions that, in the case of the habitus of spatiality, suppose an inheritance and a learning of appropriation of space. Finally, the notion of abilities, being inherent to freedoms and opportunities, refers to skills and knowledge oriented to personal and local development.

The theoretical frameworks that explain the complexity of the trinomial: spatiality, habitus and capacity include: 1) the theory of spatiality, 2) the theory of habitus and 3) the theory of capabilities (Juárez et al., 2018).

The Theory of Spatiality, the Theory of Habitus and the Theory of Capacities allow us to approximate the systems of governance of natural resources, mainly water resources, to the lifestyles of users about public policies on water supply and irregular supply. In this regard, the reconceptualization of local governance systems will allow greater equity between the sectors through a normative legal framework of the right to the city in general, natural resources and public services at the local level and the comfort of water in the (García et al., 2016).

The Theory of Spatiality understands the city as a symbolic scenario in which the relations of production materialize. The city concentrated asymmetric economic relations between the classes that own the means of production and the labor force (Lefévre, 1974).

The city is a scenario of industrial production rather than services since the asymmetric relations between the bourgeoisie and the proletariat prevail over other asymmetric relations. Therefore, the awareness of space is no longer necessary to appropriate the factory, but the city that houses it. The right to the city would be the extension of the right to a symmetrical production relationship (García et al., 2017).

In this sense, the Theory of Spatiality introduced the category of power to explain the differences between the relations of symbolic and material production. The city stands as a symbol of power that homogenizes the relations of production because the material conditions for it are already spatially pre-established. Spatial relationships are relations of power, but not communicative or discursive relationships, but material, although their fetishization makes them appear as tangible objects, but only at a discursive level, such relations could be transmuted (García et al., 2016).

The fetishization of space prevents observing the differences between social relations and their stratification based on spatial and economic segregation mechanisms. Therefore, it is necessary to consider the Theory of Spatiality as a sociohistorical complement to the categories of habitus and capabilities which are a-historical considering them emerging or underlying the absence of freedoms or the generation of abstract conflicts between the structure (public policies) and the agency (García et al., 2014).

In the framework of water conflicts between authorities and users, the Theory of Habitus states that citizens' lifestyles in a situation of scarcity are a consequence of public policies. The city is a field of interrelation between capitals and socially constituted habits. In this way, economic and political capitals are confronted with natural and citizen capitals. That is, the market and the State require aquifers that supply the industry and private services as publics of the city, but the availability of water, through the recharge of aquifers, is increasingly lower than international standards or registries. National historical such scenario explains the emergence of habitus or lifestyles in vulnerable, marginalized or excluded sectors (Bourdieu, 2002).

However, the Theory of Habitus maintains that lifestyles are conjunctural, emergent and inherent to a group or social agent. In other words, in a situation of scarcity and shortage, austerity underlies and similarly disappears in a situation of water sustainability in which the recharge of aquifers would guarantee the human and local development of the demarcations of a city. Such an approach is insufficient if it is necessary to understand the historical process that led cities to concentrate resources, services, lifestyles and capacities (García et al., 2012).

In the case of water, the capacities play a fundamental role since the daily use of water implies the development of lifestyles or habits that can help to counteract the situation of scarcity and shortage. In this sense, the Theory of Habitus explains that the discrepancies between local water supply policies and self-management actions, closure of avenues, network intervention, sequestration of pipes and boycotts to the system are the result of transformations of resources and spaces to which a sector of the citizenry does not have access. If capacities and habitus are indicators of the conflicts between citizens' expectations and public decisions, then reappropriation of spaces for debate on the right to the city, its resources and water supply systems as well as water distribution is fundamental.

The Theory of Capacities implies an interrelation between resources, services, scenarios, skills, knowledge and responsibilities that would make necessary a governance system from

which the balance between the mentioned factors is regulated by the State, supervised by the citizens and financed by the market.

The Theory of Capabilities to explain the redistribution of resources and their impact on human, local and sustainable development. Senian thinking considers that the differences between individuals (sex, age, abilities, education, and locality) determine the freedoms that individuals require to develop sustainably. In this sense, capacities are knowledge and experiences derived from the interrelation between individual characteristics, resources and spaces. As resources are scarce, capacities are decimated, and spaces are conflict scenarios since the State limits freedoms to guarantee a proportional distribution of resources (García et al., 2013).

Table 1 shows the concepts that explain the complexity of the trinomial spatiality, habitus and capacity are: a) freedom, b) responsibility, c) capital and d) fields.

<b>Table 1</b>		
<b>MOBILITY STUDIES</b>		
<b>Year</b>	<b>Author</b>	<b>Findings</b>
2010	McCright	The political ideology and perception of understanding negatively determined knowledge about climate change and concern about its consequences in gender ( $\beta=-0.372$ and $\beta=0.336$ , respectively).
2010	Sharples	The main source of information on climate change was the television news (23.9%), the most consumed and drinks with the most consumed by the sample (83.8%), the spotlights were the most used object to combat the Climate change (88.7%),
2010	Hidalgo and Pisano	the attitude was related to knowledge ( $r=0.454$ , $p=0.001$ ), self-efficacy with knowledge and attitudes ( $r = 0.303$ and $r = 0.882$ , $p=0.001$ respectively), the perception of risk with knowledge, attitude and self-efficacy ( $r=0.475$ , $r = 0.589$ , $r=0.547$ , $p=0.001$ respectively), the intention with knowledge, attitude, self-efficacy, perception and intention ( $r=0.206$ , $r=0.317$ , $r=0.390$ , $r=0.382$ ; $p=0.001$ respectively). The perception of risk was determined by attitude ( $\beta=0.305$ , $p=0.000$ ) and the intention was influenced by self-efficacy ( $\beta=0.259$ , $p=0.001$ ).
2010	Jiménez	They established three factors of the four possible dimensions. The first factor explained 46.4% of the variance while the second factor explained 28.6% of the variance and the third factor explained 25.15 of the variance. They established differences between men and women [ $X^2=10.088$ (2gl) $p=0.007$ ], for years [ $X^2=176.77$ (8gl) $p=0.000$ ] and habitat [ $X^2=21.657$ (6gl) $p=0.001$ ]
2011	McCright and Dunlap	Beliefs about the null effects of climate change determined confidence in white men with a conservative ideology ( $\gamma=0.82$ , $p=0.000$ ). For its part, the basic political ideology determined the negation of the effects of climate change ( $\gamma=0.47$ , $p=0.000$ ), the race determined the belief about the lack of consensus on the effects of climate change for conservative targets ( $\gamma=0.38$ , $p=0.000$ ), however, sex negatively affected the beliefs of the null effects of climate change on the base respondents ( $\gamma=-0.67$ ; $p=0.000$ ) as well as the identification with environmentalism about the same belief in the same group ( $\gamma=-0.81$ , $p=0.000$ ).
2011	Touginha and Pato	Ecological behavior correlated with age ( $r=0.30$ ) while ecocentric beliefs were related to universal values ( $r=0.20$ ). On the other hand, age and universal values determine ecological behavior ( $\beta=0.24$ , $\beta=0.21$ , $p=0.001$ respectively).
2012	Markowitz	They established differences between ethical, unethical and undecided regarding their concern ( $F=102.52$ , $p=0.000$ ), risks ( $F=51.68$ , $p=0.000$ ), consensus ( $F=26.83$ , $p=0.000$ ), efficacy ( $F=34.67$ , $p=0.000$ ), responsibility ( $F=69.41$ , $p=0.000$ ). The environmental intentions were determined by beliefs ( $\beta=0.506$ ).
2013	Vinneta and Maharaj	Self-transcendence was positively and significantly related to attitudes toward oneself (0.73).
2016	García	Premises were established regarding the establishment of a local agenda regarding the social representations of periurban residents around the system of collection and public drinking water supply, finding a prevalence of conflicts between political and civil actors.

2017	Sandoval	They established the reliability and validity of an instrument that measures the perception of risks, stress and resilience, finding that age determined the perception of risks and this resilience. That is to say that older resident develops a greater perception of risk that anticipates them to face the contingencies of the environment to the extent that they exacerbate rains, floods or landslides.
2018	Garcia	He found a network of learning around the production and marketing of coffee, considering the availability and supply of water in the locality. Anticipated a scenario of co-management as the scarcity of resources prevailed over the abundance of water, forcing the agreement between political and civil actors regarding the administration of water and financial resources.
2021a	Garza	They established the ethical codes for the integral management of sustainable transport, considering the most optimizing mechanics of the transport, as well as the reduction of emissions into the atmosphere, based on carbon credits and public investment for 40 years.
2021b	Garza	They demonstrated the effect of the transfer experience on the tourist stay, considering the travel time, speed and the image of the destination as determinants of the choice of walk.
2021	Sandoval	They carried out the contrast of a model in which they built a review with risk management thresholds in the choice of a mobility system. They contrasted reflective and formative models to establish a hybrid model that explained the transport systems based on regional idiosyncrasy.

**Source:** self-made

Trinomial studies: spatiality, habitus and capacity are based on developmental humanism (liberties, capacities and responsibilities), structuralist constructivism (habitus, capitals and fields) and Marxist urbanism (spatiality). Such universal elements revolve around the city and inclusion to sustainability:

- Freedoms, capacities and responsibilities for the reappropriation of the city (spaces and water resources).
- Habitus, capitals and fields where conflicts are generated by the redistribution of resources and spaces in the city (aquifers, networks and pipes).
- Spatiality for the governance of the local resources of the city (awareness for the equitable distribution of water).

Considering the governance and ecocity approaches, they would have a more social composition. The proximity of the concepts to the everyday styles, will allow discussing the importance of the political system of governance about the economic system of ecocity. In this sense, it is necessary to open the debate on social inclusion through the right to a city, mainly to natural resources and essentially to water resources as elements of local sustainable development (Brites, 2012).

The city as a scenario of symbols, meanings and meanings around which the asymmetries between public policies and urban lifestyles are represented. The city is a scenario of resources that increase capacities, but also increase responsibilities (Cravino, 2012).

Studies related to real estate services; spatial and technological indicate that the size of the houses and the technology of their facilities, to be increasingly reduced the first and more automated the second, facilitate fluvial catchment and recycling, but inhibit the storage and reuse of water. Provision capacity seems to encourage the irresponsibility of waste of water (Cueva, 2012).

However, from a developmental policy framework in which freedoms will give way to capabilities and responsibilities. This process seems to be inhibited given the scarcity of natural resources in cities. That is, the availability of resources, being an objective fact rather than a subjective one, influences the lifestyles of the users who inhabit the cities. Such scarcity phenomenon activates public policies that seek to supply resources to one social sector to the detriment of another (Guillén, 2010).

In response to the exclusion or marginalization of public services, the segregated population constructs *habitus intuitivo*, adopts lifestyles from which they will confront symbolically and actively with the authorities. Protests, closures, rallies, demonstrations, marches, physical or verbal confrontations are the result of scarce resources, public policies and lifestyles or *habitus* of citizens (Gissi & Soto, 2010).

Studies on lifestyles in cities in terms of shortage, saving and water reuse show that availability of less than 50 liters per person per day increases austerity but increases confrontations with local authorities; kidnappings of pipes, closures of avenues, boycotts to networks and clandestine takes. Citizens segregated from water spaces and public services, develop skills and strategies to demonstrate the situation in which they find themselves, express their outrage and appropriate spaces (Loyola & Rivas, 2010).

If the labor force only appropriates the means of production, the spaces would be only an accessory to the class struggle rather than a constitutive element of the differences between these classes (Iglesias, 2010). The fetishism of space as a commodity undermines the principle according to which the material conditions of existence determine the ideological superstructure. This is so since the exaltation of objects is inherent in the value of their use. The space, real or symbolic would have a use value, but not of change, although the interesting thing about its fetishization is that it indicates the degree of alignment to capitalist production relations over any other type of relations in which the spaces were not transformed into merchandise .

In a certain way, the capacities and the *habitus* would be precedents to the alignment and would be indicated by their degree of fetishistic representation of space. If capacities and *habitus* are skills circumscribed to resources and spaces, then alignment would be the result of scarce resources and asymmetric distribution of resources .

The scarcity of fetishized water in short supply would mean the emergence of saving skills or dosage *habitus*, but such a process would inhibit the representation of conflict and social change. that is, scarcity, shortage, confrontation or boycott indicate a pseudo-conflict as it is resolved by supplying pipes, the distribution of jugs, the regular provision of water or the granting of vouchers for the purchase of water. The contradictions between public policies and lifestyles, derived from the demand of the pharmaceutical, soft drink or beer market, are reduced to relations of distribution rather than production or appropriation of spaces (Nacif et al., 2011).

However, the urgency of a fairer political system around the citizenship of the cities, ecocity projects are multidimensional and, in this diversity, lies its complexity (Nozica, 2011).

The ecocity concept is multidimensional. It has been understood as an economic, political and social system to reduce the ecological footprint of previous generations about the capacities of previous generations, a space limited to one million inhabitants, whose activities are agriculture and industry as a function of water availability, although conflict scenario, recycling is seen as its main development tool (Orostegui & Matos, 2009).

The concept of ecocity is related to others of sociohistorical nature. Together with the categories of freedoms, capacities, responsibilities, *habitus*, capitals, fields and spatialities, the concepts of governance, segregation, sustainability, centrality, inclusion, periphery and surplus value will make it possible to conceptualize the problem of scarcity, marketocracy and shortage in the demarcation of study (Pallares, 2012).

If the concepts used are considered, a governance system oriented towards the eco-city is opposed to segregation via the relocation of social sectors from the naturalization of their exclusion but is closer to local development since the term sustainability incorporates the system of government as rector of the resources and services of the ecocity. Rather, a governance system

is developed in small localities such as the neighborhood or the periphery to extend to the center of the city. This is how the ecocity indicators would be those related to sustainability and inclusion. In this sense, the studies on the sustainability and ecocity projects seem to demonstrate the viability of the terms based on heterogeneous indicators.

Latin American studies on scarcity, marketocracy and public policies on water resources in cities have used various instruments to measure indicators of local water sustainability. The management of water resources; the ethnic appropriation of the urban space; population density as a factor of residential sustainability; national identity as an argument for the design of buildings; the reordering from the inclusion and spatial exclusion, the bi-oceanic peri-urban tourism policies; the perception of peri-urban risk; the segregation of public squares and the representation of the city according to social strata are examples of the empirical relevance of studying scarcity, marketocracy and public policies regarding the water resources of Mexico City.

The empirical studies regarding sustainability and ecocity have incorporated the symbolic and representational dimension of those who consume resources and therefore evaluate public services. In this way, studies have focused on the impact of public policies on the lifestyles of indigenous peoples, communities, neighborhoods and peri-urban localities about centrality and territorial ordering. In such a process, qualitative studies have replaced the quantification of spaces, instruments such as plans, records and maps have been replaced by in-depth interviews. The investigation of spatial relationships and natural resources has now incorporated the representations of public services as a fundamental element of the governance system through the establishment of tariffs for urban services.

The relations of appropriation, transformation and distribution of resources and spaces in their development process encouraged the differentiation of social classes. As the differences were exacerbated, the segregation of the spaces protected the appropriate and transformative differences at the same time as it enhanced the distributive differences of the resources, mainly the water ones. This process confronted public policies against lifestyles privileging market demands (Urquieta & Campillo, 2012).

Regarding the situation of scarcity and shortage generated by public policies that adjusted to market demands, marginalized, excluded and vulnerable sectors developed skills, knowledge and strategies for appropriating spaces (aquifers, facilities, networks) to supply and confront the authorities for the regularization of the service. In this framework, the transformation of water resources was delegated to the federal government and the collection of the service to the local government. In this sense, the shortage of water and the increase in tariffs oriented the water conflicts towards the forgiveness of debts, the implementation of meters, the repair of visible leaks, the protection of facilities, the control of demonstrations and agreements between authorities' delegations with representatives of the users. In contrast, the concessions of the aquifers, the technology of recycling and fluvial uptake, the investment in infrastructure, the detection of imperceptible leaks, the contamination and overexploitation of the aquifers, the cultures of the water and the real estate deregulation were ignored as problematic that prevent the sustainability of the city.

Within the framework of eco-city projects and the evaluation of their governance systems, mainly public policies on natural resources, essentially water resources, the Human Development Index aims to observe, measure and compare freedoms, capacities and responsibilities, but in the best of cases it only records the amount of public goods that would demonstrate local sustainability. Therefore, an index describing sustainability with an emphasis

on water resources is required, referring to its availability, extraction, distribution, consumption, reuse, recycling and tariff as constitutive elements of a local governance system (Vieira & Erazo, 2012).

The objective of this work was to specify and establish the reliability and validity of an instrument that measures the habitus of mobility in order to observe dependency relationships from sociodemographic variables.

Are there significant differences between the sustainable transport models reported in the literature with respect to the modeling proposal in this work, considering the effects of distancing and isolation caused by the pandemic on mobility?

The premise that supports the research refers to the fact that the mechanics of public transport is sustainable to the extent that the optimization of the transfer is regulated from the social confinement (Garza et al., 2021). It is an innovative system that will indicate substantial differences with other models to measure the effects of the pandemic and restrictive policies on the use of the transportation system. In this scenario of high risks and health contingencies, zero emissions transportation finds its main challenge when users move guided by habits of satisfactory experience (Vázquez et al., 2021). This predicts the economic reactivation, but limits the observation of the use of zero-emission transport since this has its explanation in the habitus linked to the conservation of the environment as an extension of personal and family heritage, but without being considered a common good and a space of public appropriation.

## METHODS

A study was carried out with a sample of sources indexed to international repositories: Dialnet, Latindex, Redalyc and Scielo, considering the period from 2000 to 2021, as well as the categories of "*mobility*", "*habitus*", "*capacity*". A matrix content analysis was built, the Delphi technique: a) summary information, b) data contextualization, c) comparing information and 4) content integration expert judges rated information, considering: -1=negative data, 0=unlinked data, +1=positive data.

From the three categories, it proceeded to make a second transverse and correlational study with an intentional selection of 100 students of a public university, considering their inclusion in the system of professional practices and answers to five options: 0 = "*Not likely*" up to 5="*quite likely*" Table 2.

	<b>Age</b>	<b>Entry</b>	<b>Civil status</b>
Men (57%)	M=18.3 SD=2.4	M=234USD DE=23.2 USD	Singles (65%) and other (35%)
Women (43%)	M=19.3 SD=1.4	M=246 USD DE=2.3	Single (62%) (and others (38%).

**Source:** elaborated with the study data

The Mobility Habitus Scale (EHM-28) was constructed from the operative definitions and the five response options Table 3.

<b>Factor</b>	<b>Definition</b>	<b>Indicator</b>	<b>Measurement</b>	<b>Interpretation</b>
Aesthesis	Refers to aesthetic dispositions (Sandoval et al., 2018)	I will use the roads with landscapes	0=" <i>not likely</i> " up to 5=" <i>quite likely</i> "	High scores allude to an aesthetic habitus of

				mobility
Hexis	It refers to the corporal dispositions (Juárez et al., 2018)	I will avoid the subway in the morning	0="not likely" up to 5="quite likely"	High scores suppose a corporeal habitus of mobility
Eidos	It refers to the logical provisions	I will privilege the transport of zero emissions	0="not likely" up to 5="quite likely"	High scores refer to a logical habitus of mobility
Ethos	Refers to ethical provisions (Loyola & Rivas, 2010)	I will promote zero emissions transport	0="not likely" up to 5="quite likely"	High scores presuppose ethical habitus of mobility

**Source:** self-made

The surveys were conducted in the university facilities, with the guarantee of confidentiality, anonymity and not affecting the student's academic status. The information was processed in the statistical package for social sciences (SPSS by its acronym in English version 25.0).

The normality, reliability, sphericity, adequacy and validity of the instrument and the answers to it were estimated to establish the statistical properties.

## RESULTS

A model is a representation of the axes and trajectories of relations between the factors used in a state of knowledge. Spatiality fields, understood as scenarios of fetishization of power, differences and conflicts between political and social actors, are indicated by four factors related to the spatiality of freedom fields, the spatiality fields of habitus, spatiality capacities and fields, as well as spatialities and fields of responsibility.

The spatiality of fields of freedom refers to the opportunities that arise in fields of power and fetishization. It is an emerging factor in the face of conflicts between the governors and the governed, or, underlying the differences between urban policies and local needs. As political strategies limit the freedoms of choice and their materialization in opportunities to access resources, sectoral demands are intensified, as well as distrust among citizens with respect to their authorities.

The spatiality of habitus understood as scenarios of inheritance and learning differentiations between citizens and ruled with respect to the management of public services from considering natural resources as public goods. It is a process in which the differences between the actors are accentuated since, the State generates a propaganda of its rectory in the municipal services. As a result, authorities inherit decision-making powers and citizens learn competing powers of initiative.

Spatiality and field capacities refer to conflicts and changes among actors, which establish a public agenda in which priority issues obey the interests of groups in conflict rather than civil society or the State, institutions and institutions. the sphere of participation.

Spatiality and fields of responsibility suppose a post-conflict and disagreement instance, a consequence of public debate and a prelude to federal, state or local elections. It is about respecting the agreements of pacification and participation among the actors in order to be able to effectively respond to the problems of scarcity and shortages of public resources and services.

Once the model was specified, the statistical properties of the instrument were established Table 4. In the case of the reliability of the general scale of habitus (alpha of, 780) and the subscales of aesthesis (alpha of, 776), hexis (alpha of, 770), Eidós (alpha of, 775) and ethos (alpha of, 785).



R	M	SD	S	K	A	F1	F2	F3	F4
r1	4.30	1.48	1.45	1.32	0,768	0,436			
r2	4.37	1.32	1.49	1.34	0,739	0,381			
r3	4.17	1.43	1.47	1.32	0,792	0,415			
r4	4.20	1.54	1.39	1.35	734	0,456			
r5	4.31	1.68	1.58	1.36	0,784	0,438			
r6	4.56	1.28	1.40	1.40	0,792	0,439			
r7	4.28	1.04	1.28	1.24	0,701	0,438			
r8	4.19	1.05	1.31	1.31	0,784		0,319		
r9	4.37	1.07	1.45	1.35	0,788		0,328		
r10	4.27	1.82	1.48	1.36	756		0,438		
r11	4.13	1.04	1.28	1.91	701		0,460		
r12	4.21	1.09	1.50	1.45	0,732		0,329		
r13	4.21	1.02	1.38	1.34	0,754		0,411		
r14	4.35	1.03	1.56	1.34	731		0,329		
r15	4.46	1.24	1.48	1.23	745			0,415	
r16	4.38	1.43	1.25	1.12	0,785			0,430	
r17	4.39	1.54	1.31	1,13	769			0,439	
r18	4.30	1.46	1.34	1,15	743			0,439	
r19	4.67	1.57	1,14	1,16	713			0,439	
r20	4.85	1.35	1.30	1.01	0,752			0,328	
r21	4.13	1,14	1.47	1.08	750			0,329	
r22	4.25	1.32	1.56	1.19	763				0,410
r23	4.69	1.43	1.65	1.45	713				0,436
r24	4.56	1.12	1.39	1.36	0,752				0,319
r25	4.76	1.35	1.34	1.32	0,786				0,428
r26	4.50	1.49	1.24	1,15	0,794				0,591
r27	4.13	1.02	1.35	1.21	0,782				0,429
r28	4.25	1.05	1.23	1,13	750				0,430

**Source:** Prepared with the study data.

R=Reagent, M=Mean, SD=standard deviation, S=Bias, C=Kurtosis, A=Afa by removing the item value, Adequacy (KMO=0,782), Sphericity [ $X^2=234.1$  (37gl)  $p=0,000$ ]. F1=Hexis (28% of the total variance explained), F2=aesthesia (20% of the total variance explained), F3=eidós (17% of the total variance explained), F4=Ethos (14% of the variance total explained). All the items are answered with any of five options: 0="not likely" until 5="quite likely".

Once the four factors of mobility habitus have been established; Eidos, hexis, ethos and aesthesis that explained 79% of the total variance explained, we proceeded to estimate the dependency relationships between sociodemographic factors with respect to a common second order factor: mobility habitus Table 5.

	M	S	F1	F2	F3	F4	F1	F2	F3	F4
F1	34,25	18,39	1,000	0,439*	0,548**	0,439**	1,893	0,657	0,453	0,632
F2	46,57	15,46		1,000	0,652*	0,456*		1,768	0,587	0,598
F3	53,24	14,30			1,000	0,672*			1,892	0,453
F4	44,12	13,25				1,000				1,546

**Source:** Elaborated with data study. M = Mean, S = Standard Deviation; F1 = Hexis, F2 = Aesthesia, F3=Eidós, F4=Ethos:  $p < 0,01$ ; \*\*  $p < 0,001$ ; \*\*\*  $p < 0,0001$

Once the relationship structure was established, we proceeded to observe the structure of reflective trajectories among the four factors with respect to the 28 indicators.

The adjustment and residual parameters [ $\chi^2=23, 24$  (12gl)  $p<0, 01$ ; GFI=0,990 CFI=0,997; RMSEA=0,008] suggest the non-rejection of the null hypothesis relative to the significant differences between the theoretical dimensions with respect to the structural model.

Once the structure of reflective trajectories was weighted, we proceeded to estimate the structure of dependency relations between the sociodemographic and socioeconomic variables with respect to the habitus of mobility Table 6.

	Beta	R	R <sup>2</sup>	R <sup>2</sup> <sub>corrected</sub>	p
Sex	0, 41	0, 40	0, 016	0, 017	0, 012
Age	0, 32	0, 30	0, 090	0, 091	0, 01 7
Entry	0, 24	0, 25	0, 012	0, 013	0, 005
Civil estatus	0, 17	0, 20	0, 016	0, 017	0, 015

**Source:** Prepared with the study data

The sociodemographic variable determining the habitus of mobility was income ( $\beta=0, 24$ ,  $R^2=0, 25$ ,  $R^2_{corrected}=0, 013$ ,  $p=0, 005$ ), corroborating the theory of spatialities that warn of an association between income and the appropriation of spaces.

## DISCUSSION

The contribution of the present work was the modeling of the mobility habitus as a feature of the zero-emission transport system. Four dimensions were established that explained 79% of the total variance. Such a result agrees with that established by Garcia (2021) where he found four determining factors of the choice of destination and tourist stay. It is a phenomenon of economic reactivation focused on the dissemination of preventive rules of distancing and confinement of people, but without affecting the transfer system.

Bustos et al. (2020) they established the effect of biosecurity in the reactivation of the local economy, although the relationships between the dimensions of habitus and the determinants were not significant. In the present work, it was shown that the relationships between habits explain and anticipate trust scenarios that, when linked to risk situations, are predictive. Therefore, it is advisable to broaden the discussion around habitus as mobility factors in zero-emission transport.

## CONCLUSION

The contribution of the present work to the state of the matter lies in the establishment of a model for the study of the complexity of the trinomial: spatiality, habitus and capacity, but the selection of informative sources and the analysis technique limit the contrast of the model to other contexts and study samples, reasons why it is recommended to search and process information in international repositories such as Ebsco, Scopus and Copernicus, as well as the use of the data mining technique.

Therefore, the inclusion of theoretical, conceptual and empirical frameworks such as social movements and citizen participation will allow orienting the model towards the link between self-government and state policies in a new co-government between the parties in conflict.

In addition, the present work established the reliability and validity of an instrument with the purpose of observing the effect of income on the mobility habitus, corroborating the theory of spatiality in terms of the appropriation of a scenario based on purchasing power.

The present study has specified a model, established the reliability and validity of an instrument with the purpose of anticipating the mobility habitus from sociodemographic variables that, in the case of income, turned out to be the determining variable, although the type of study did not experimental, the type of non-probabilistic sampling and the type of exploratory analysis limit the results to the context of the research, suggesting the inclusion of factors related to sociocultural variables such as identity, values and mobility rules in eco-cities.

## REFERENCES

- Bourdieu, P. (2002). Power field, intellectual field. Itinerary of a concept. Buenos Aires: Montessor.
- Brites, W. (2012). The adversities of the habitat in housing complexes of relocated population. *Dimensions of the Mexican Popular Habitat*, 121-142.
- Bustos Aguayo, J.M., Sandoval Vazquez, F.R., & Amemiya, M. (2020). Psychosocial determinants of the reactivation of tourism in the COVID-19 era. *TURyDES: Revista Turismo y Desarrollo Local*, 100-122.
- Cravino, M. (2012). To inhabit new neighborhoods of social interest in the metropolitan area of Buenos Aires: the space built by the State and lived by the neighbors. *Dimensions of the Mexican Popular Habitat*, 101-120.
- Cueva, S. (2012). The public space as a right to the city. *Dimensions of the Mexican Popular Habitat*, 267-294.
- García, C. (2013). The knowledge network in a university with a system of professional practices and a technological-administrative social service. *Fundamentals in Humanities*, 14(1), 135-157.
- García, C. (2021). Security perception from the pandemic caused by SARS CoV-2 coronavirus and COVID-19 disease. *Epidemiology International Journal*, 5 (1), 180-188.
- García, C., Carreón, J., Hernández, J., Montero, M. & Bustos, JM (2012). Systems of political complexity. *Social Work Today*, 65, 39-48.
- García, C., Carreón, J., Mecalco, J., Hernández, J., Bautista, M., & Méndez, A. (2014). Complex political systems: Implications for sustainable public security. *Actions and Social Investigations*, 34(1), 183-206.
- García, C., Carreón, J., Sánchez, A., Sandoval, F., & Morales, M. (2016). Reliability and validity of an instrument that leadership and educational management. *Ehquity*, 5, 109-130.
- García, C., Juárez, M., Sandoval, F.R., & Bustos, J.M. (2017). A psychological approach to environmental complexity: Specification of a model of community stress and resilience. *Community*, 14, 75-95.
- García, C., Morales, M.L., Bustos, J.M., Carreón, J., Limón, G. A., & Hernández, J. (2013). Systemic foundations of political complexity. *Approaches*, 25(1), 7-23.
- García, C., Sandoval, F.R., Rivera, B.L., & Limón, G.A. (2017). Complexization of a model for the study of environmental resilience. *Without Borders*, 10(25), 1-13.
- García, C., Valdés, O., & Sandoval, F. R. (2016). Algorithmic and neguentropic complexity in models that explain social suffering in Mexico City. *Margin*, 81(1), 1-6.
- Indexed at, Google Scholar, Cross Ref
- Garza, J.A., Hernandez, T.J., Campos, L.L., Coronado, O., Hernandez, J., Bermúdez, G. & Garcia, C. (2021). Specification of a model of sustainable justice. *PalArch*, 17 (4), 2827-2845.
- Gissi, N., & Soto, P. (2010). From stigmatization to neighborhood pride: Appropriation of space and social integration of the Mixtec population in a neighborhood in Mexico City. *INV*, 68, 99-118.
- Guillén, A. (2010). Perspectives on the environment in Venezuela. *Notebooks UCAB*, 10, 29-55.
- Iglesias, Á. (2010). Strategic planning as a public management instrument in local government: case analysis. *Notebooks of Management*, 10(1), 101-120.
- Juárez, M., Bustos, M., & García, C. (2018). Governance of intention to vote in favor of bikeways. *International Journal of Environmental, Agriculture & Biotechnology*, 3 (3), 1-10.
- Lefévre, H. (1974). The production of space. *Australian: Blackwell Publishing*.
- Loyola, C., & Rivas, J. (2010). Analysis of sustainability indicators for its application in the city. *Time and space*, 25, 1-15.
- Nacif, N., Martinet, M., & Espinosa, M. (2011). Between idealization and pragmatism: plans for the reconstruction of the City of San Juan, Argentina. *Iberoamerican Urbanism Magazine*, 6(1), 5-17.

- Nozica, G. (2011). Plan for territorial integration. The desirable scenarios of insertion of the province of San Juan al Mercosur. *Revista Iberoamericana de Urbanismo*, 6(1), 43-54.
- Orostegui, K., & Matos, A. (2009). Behavior of the generation of solid domestic waste in the Chaclayo district. *Journal of University Research*, 1(1), 44-51.
- Pallares, G., & Erazo, J. (2012). Right to the city: homeless people in the city of Buenos Aires. *Dimensions of the Mexican popular habitat.*, 171-186.
- Sandoval, F.R., Bustos, J.M., Juárez, M., Barrera, A., Quintero, M.L.Y., García, C. (2018). Modeling of the determinants of the imagen destination as a subsystem periurban mobility policies, the transport of zero emissions of carbon dioxide to the atmosphere and the habitus transfer. *Social Science Learning Educational Journal*. 3 (9), 1-4.
- Urquieta, M., Campillo, C., Bolivar, T., & Erazo, J. (2012). The feminine representations of the urban space \_ New demands for the democratic and inclusive construction of the city. *Dimensions of the Mexican popular habitat*, 311-330.
- Vázquez, F.R.S., Ruíz, H.D.M., & Lirios, C.G. (2021). Meta-Analytic Network Retrospective of Public Transport and Its Effects on The Governance of Health. *International Journal of Advances in Social Sciences*, 9(1), 08-18.
- Vieira, N., & Erazo, J. (2012). Popular housing and public security: the process of pacification of the favelas of Rio de Janeiro. *T, Bolivar and Erazo J.(coord.). Dimensions of the Mexican Popular Habitat*, 143-164.

**Received:** 01-Feb-2023, Manuscript No. JOCCC-23- 13226; **Editor assigned:** 03-Feb-2023, Pre QC No. JOCCC-23- 13226(PQ); **Reviewed:** 17-Feb-2023, QC No. JOCCC-23- 13226; **Revised:** 24-Feb-2023, Manuscript No. JOCCC-23- 13226(R); **Published:** 28-Feb-2023