REVISTA DE
INVESTIGACIÓN ACADÉMICA SIN FRONTERA

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

# Sustainability expectations in a Public University in Central Mexico

# Expectativas de sustentabilidad en una Universidad Pública del Centro de México.

Cruz García Lirios[1], Julio E Crespo[2]

[1]Universidad Autónoma de la Ciudad de México. https://orcid.org/0000-0002-9364-6796
[2]Universidad de Los Lagos, https://orcid.org/0000-0001-9098-1233

**DOI: https://doi.org/10.46589/rdiasf.vi40.610**
**Recibido** 15 de abril de 2023.
**Aceptado** 19 de noviembre de 2023
**Publicado** 21 de diciembre de 2023

## Abstract

Roughly speaking, sustainability refers to a system of co-management oriented by local values and norms in matters of health, education and employment. In this process, business development and micro-financing policies have been strategies that allowed the State to manage natural resources and public services, although its programs did not always include migratory flows or native entrepreneurs, either due to its protectionist bias or its multilateralism. At all costs, the rulers excluded organized sectors of civil society from their policies and institutions. The objective of this work was to specify a model for the study of consensual sustainability, but no longer between political actors but rather with civil participation. A documentary study was carried out with a non-probabilistic selection of sources indexed to national repositories, considering the publication period from 2020 to 2023, as well as the inclusion of concepts related to development, migration and participation. It is recommended to continue the line of research related to the impact of comprehensive policies on the identity of social actors.

**Keywords:** growth; development; organizations; communities; diary.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



## Introduction

A model is a representation of the factors used in a review of the literature (Bechtel et al., 2006). In this way, the model includes five axes, trajectories and interrelationships between the factors used in the theoretical, conceptual and empirical frameworks.

In a sense of development and public policies, local sustainability refers to the mechanisms, instruments, evaluations and indicators referring to the impact of the promotion and exercise of individual rights and guarantees in the relations between government and civil society (Bechtel, Corral & Pinheiro, 1999). In this way, the difference between sustainability and sustainability lies in the fact that the first is an objective of nations, stated at the Rio 1992 Earth Summit, while the second is a co-responsibility between political and social actors (Carreón, 2016).

In this way, sustainability is not always consensual since it involves conflict, negotiation, arbitration, prosecution and co-responsibility in the face of an increasingly growing and threatening problem of civil society institutions and organizations (Bustos, 1996). In this scheme, sustainability is a political strategy that seeks to delay the effects of climate change, for example, on environmental public health (García, Sandoval & Aguilar, 2016).

However, sustainability as a management instrument and public administration parameter should be the result of an international debate that is not only disseminated to all regional, national or local levels, but is also fed back with the proposals and initiatives of local agendas. (García, Bustos & Montero, 2012).

The theoretical framework for the study of consensual sustainability includes the theory of multilateralism, the theory of regionalism and the theory of governance (Bustos, 2004). Each one explains the models of local sustainability, understood as a strategic alliance between rulers and governed with respect to micro-financing policies and solidarity cooperativism (García, Carreón & Hernández, 2016).

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



The multilateralist approach explains the economic relations and trade exchanges between developed countries and dependent economies (Bustos, Flores & Andrade, 2004). From this perspective, local sustainability depends on the adjustment of municipal policies to the international agreements established at the Earth Summits (Corral, 1998). From the conclusion of these treaties, recommendations are disseminated for the fulfillment of objectives and goals based on tasks aimed at the implementation of environmental and urban rights, the financing of projects and civil participation in the reduction of pollutants for the environment. compliance with international standards (Bustos & Flores, 2014).

However, the consensuses established at the Earth's summits did not always take into consideration local needs, expectations and capabilities (Bustos & Flores, 2000) . It will be the theory of regionalism that will explain the dialogue between community actors with their authorities and governments (Carreón, 2013).

If multilateralism loses sight of the local, regionalism will ignore strategic alliances between SMEs and transnational companies by assuming that communities defend themselves against the globalization of products and services, as well as the dissemination of climate change policies that threaten their uses and customs. (García, 2015).

The theory of regionalism warns that emerging countries are dependent on developed economies (Bustos, Flores & Andrade, 2002). Based on this fact, integration between emerging countries is substantial to establish an economic bloc that allows not only to contain globalization but also to build an alternative system (García, 2017).

From this perspective, business development policies are instruments for managing the national economy (Bustos et al., 2004). Subsidy and support programs for the national industry are the key to the regionalist model. Even consumption is oriented towards the acquisition of products and the consumption of services from national companies (Carreón et al., 2015).

It is a growth by substitution of imports where the State directs public resources towards the

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



national industry and based on the needs of sectors with sufficient income to consume the increase in prices (Bustos, Montero & Flores, 2002). However, the regionalist model, by concentrating resources and financing, affects productive sectors linked to the international market, ignores the emergence of new industries such as tourism and inhibits the innovation and competitiveness of companies subsidized or favored with public spending (García et al. al., 2011).

Consequently, global multilateralism and national regionalism seem to affect municipal development (Corral, 2000). The theory of governance not only explains the concertation process but also offers a panorama of consensus around the factors that would drive the local (Carreón et al., 2016).

If local development, unlike national and regional development, depends on the seed capital of migratory flows and their entrepreneurial ideas, then its co-management system will refer to the establishment of an agenda in which the central theme will be the conservation of natural resources. goods now considered common (García et al., 2012).

The theory of governance explains the way in which political and social actors establish negotiation and agreements no longer based on the availability of resources, nor on the professional training of human capital or state protectionism but based on uses and customs. local norms and community values (Carreón et al., 2015).

In this way, local sustainability would not depend on resources – financial, human, environmental – but on the participation of communities in their government and of the political class in the management of common goods (García et al., 2013).

Given that Sustainable Development involves the incorporation of diverse world views, the vicissitudes that prevent sustainability models from incorporating the symbols, meanings and meanings of communities and organizations oriented towards sustainability once economic instability and the environmental crisis threaten its existence (Corral, 2001). The preservation of natural resources for future generations is outlined by models that overcome the dilemma of

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



economic growth or eco-development. The discussion of issues related to local development in reference to global growth, the insertion of transnational companies in communities with respect to the internationalization of SMEs will allow us to understand the future of human needs based on the availability of resources (García et al., 2014).

Community, organizational and sustainable developments have often been considered opposite, both from the models that propose development from economic growth, industrial production and the exploitation of nature and from those models that propose development from liberalization. , at least ethical, of humanity in reference to consumerism (Corral, 2002). In such a scenario, communities and organizations are assumed to be barriers to economic growth or eco-development (Corral, 2006). In this sense, communities and organizations are incorporated in the construction of a global and environmental agenda of symbols, meanings and meanings aimed at establishing new relationships between humanity and nature (García et al., 2015).

However, organizations and communities can be incorporated into sustainability proposals if their values, norms, beliefs, knowledge and innovations are considered as foundations of development, however such management crosses dimensions and asymmetries between organizations and communities in the context of financial globalization and Sustainable Development (Sandoval, García & Pérez, 2015).

A variety of factors affect the sustainability of natural resources, although the barriers that prevent humanity from developing sustainably emerge from civil organizations and business communities (Corral, 2003). It is in the convergence of SMEs and transnational companies where the sustainability that could be incorporated into community values and organizational production is possible (Corral & Obregón, 1992). This is because globalization is indicated by the internationalization of SMEs and the insertion of transnationals into the local market; in both processes, strategic alliances translate into the coexistence between community traditions and organizational cultures (García et al., 2016).

Now, sustainability models dedicated to knowledge management and values that respect nature

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



are since the relationships between communities and organizations are asymmetrical since the former approach considering natural resources as part of the history of peoples while organizations use nature as a means to achieve their objective of internationalization or incorporation into the local market (Corral & Frías, 2006). Such assumptions have led to sustainability models managing economic growth or ecological development without considering the future of communities and organizations (Carreón et al., 2016).

Therefore, the implications of the principles that govern sustainability models are fundamental to envision the construction of a sustainability agenda in its local and global dimensions (García et al., 2011).

eco-tourist models have emerged as proposals for local environmental problems and endogenous sustainable development (Corral, 2010). Such models assume that, in a situation of vulnerability, indicated by their degree of availability of natural resources and their level of quality of public services, the capacities of communities and neighborhoods are threatened by the reduction of opportunities, although given the increase in responsibilities, It is possible to contribute to the reduction of risks, the optimization of energy, the improvement of productivity, the promotion of health and the prevention of ecological crime (García et al., 2012).

Local sustainability models underlie a diagnosis of community or neighborhood capacities in conflict with the availability of natural resources (Corral & Domínguez, 2011). They consist of the establishment of modifiable relationships between built and intangible spaces based on territorial ordering and urban planning (Corral & Encinas, 2001). In such a process, the participation of communities, neighborhoods, entities or demarcations is essential since the construction of a local agenda will guide collective decisions and actions (Carreón, 2016).

However, sustainability models can also be implemented in organizations dedicated to ecotourism or organic production since their essential purpose is to adjust the guidelines of Sustainable Development to the social responsibility of companies as well as guide work cultures to the preservation of the environment. the promotion of recycling and reuse styles, in addition to

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



being an area of values, norms and beliefs, organizations are promoters of jobs and products that are respectful of nature and the resources that serve as input, or the quality of life and well-being personnel are incentives for companies to care about their clients by offering them quality indicated by compliance with international standards (García et al., 2015).

However, each of the models assumes humanity as an entity apart from the laws of nature, its forms of coexistence and interdependence (Corral & Pinheiro, 1999). Intervention models for sustainability assume that the solution to ecological problems lies in human rationality or emotionality rather than in climatic processes (Corral et al., 2008). They even assume humanity as an agent of conflict and change to which nature should adjust its resources to preserve itself and thereby ensure the vulnerability, marginality or exclusion of peri-urban communities and neighborhoods (García, 2013).

In such a process of diagnosis, intervention and evaluation, Higher Education Institutions and Universities (IUES) are called to assume the commitment to manage; produce or reproduce, translate or dismember knowledge related to the state of natural resources in reference to the socioeconomic projection of current and future generations (Sandoval, García and Pérez, 2015).

The university, as a factor of local growth, is coupled to eco-tourism projects that are assumed as an alternative for economic growth due to the flow of foreign currency and job creation (Bustos, Rincón & Flores, 2011; Palacios & Bustos, 2012). Models focused on aquatic, extreme, beach or mountain tourism propose that lifestyles linked to risk are an "escape valve" for urban life and that customer satisfaction will result in a series of visits to paradisiacal places. or magical which not only make the lives of those who have the purchasing power for such activities more exciting and therefore meaningful, but will also give value to tourist sites, activating a "domino effect" in which visitors and walkers will demand the services. of localities or areas of recreation, fun and entertainment (García et al., 2014).

Local development, immersed in eco-tourism, seems to depend on a chain of trust, satisfaction and comfort more than on investment in industry, job creation and job placement through training

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



programs for local residents. (Corral & Pinheiro, 2004; Valenzuela et al., 2004). In this sense, the process that goes from the global to the local depends on external rather than endogenous factors, the entities are only mere intermediaries for the transfer of currency and the conversion of nature into resources, goods, services or consumer products seems be assumed as part of the eco-tourism model, however its consequences are considered external or collateral to development (García et al., 2016).

In parallel, regionalist models consider the imbalance between resources and population as a factor that will affect socioeconomic development and its impact on natural capital or biological diversity (Corral et al., 1997). Unlike the pressure is, the regionalist includes community participation while the pressure is only considers the population, production and consumption projections to establish relationships of dependencies between the use of energy and the agreements or conventions between local authorities (García et al., 2012).

These are two dissimilar models, but derived from the assumption according to which, between global and local development, the regions serve as intermediaries; They regulate and moderate the extractive, transformative and distributive processes in which natural resources are immersed based on the needs and expectations of current generations without considering the opportunities for resource management and generation of knowledge for the development of future generations (Corral and Zaragoza, 2000). Often, the diagnosis of the availability of natural resources and the forecast of their depletion serves in the planning of endogenous development in reference to the regional situation (Carreón et al., 2015).

In contrast to the pressures and regionalist models, the territorialism model emerges from the opportunities, capacities and responsibilities that the market offers to communities and neighborhoods (Corral et al., 2009). The demarcation of a territory of production, distribution and consumption is a consequence of external investment and the transfer of knowledge and technology (García et al., 2015).

The local is reduced to a passive expression in the face of market mobility through the supply

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



and demand of products and services (Corral, Fraijó & Tapía, 2004). Natural resources are only an instrument of development while the actors in global production chains are the same at the regional and local level (Corral et al., 2009). Alliances between SMEs and transnationals are assumed to be strategic in that they generate jobs, but alliances with other actors are not understood as pillars of development since collaboration agreements between SMEs and transnationals cover the labor supply and condition the demand for jobs (Carreón, 2013).

Growth according to the economist model is the result of a continuous process of technological innovation, full employment and equitable distribution of resources, although this implies a gap between developed and underdeveloped countries (emerging economies), communities and organizations are only assumed as instruments for endogenous development in reference to the global market (Corral, Fraijó & Tapía, 2008). On the contrary, the eco-developmental model proposes consensus among actors to establish a common agenda for the interests of majorities and minorities, taking into account the availability of resources, as well as environmental and industrial threats that threaten the stability of localities. , regions or global systems (García et al., 2016).

At the other extreme, the communitarian, bio-centrist, ethical-discursive and ethical-ecological models assume that the imbalance is a co-responsibility between the actors since, around the construction of a sustainable agenda, the vulnerable, marginalized and excluded can contribute knowledge whose discussion is fundamental for public debate, citizen security and social peace (García et al., 2015).

The communitarian model emphasizes the participation of neighborhoods and indigenous peoples from which it is intended to understand nature as a local element of identity rather than development (Corral et al., 2012). Thus, residents of peripheral areas are those who defend their right to the city and natural resources, as well as the demand for public services related to the availability of public and common goods (Corral, Garibaldi & Encinas, 1987). This is where the bio-centrist model privileges the conservation of animal and plant species to the detriment of human needs (Corral et al., 2011). From this approach, natural resources are part of a system in which

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



humanity is just another species and therefore the ecological footprint that threatens its continuity is observed as a phase of the changes that nature experiences and from which species are affected. they extinguish or transform (Carreón, 2016).

However, the extreme preservation of nature is seen from the ethical-discursive model as an irrational consequence derived from a confusing reflection between the relationships between nature and humanity (Corral, Varela & González, 2002). The scientific community would be closer to this sustainability model since nature is perceived as an object of study, modifiable through urban planning (Espinosa, Orduña & Corral, 2002). In contrast, the ethical-ecological model maintains that communities and organizations are only part of natural resources and as moral entities they are susceptible to being liberated at least from their values, beliefs and norms regarding production and consumption (Carreon et al., 2015).

Sustainability models are prone to conflict and change since they are based on a dissonant relationship between nature and humanity, whether due to their values, beliefs and norms or their structures, systems, instruments and results, the models raise opportunities, capabilities and responsibilities. that current generations must assume for the approval of future generations (Bustos, Quintero & García, 2017).

Within the framework of Sustainable Development, organizations and communities seem to meet again in the process of internationalization of SMEs and the entry of transnational companies into the local market, however, sustainability models insist on considering that the development of communities and organizations travels through different paths (Limón, et al., 2017).

In principle, sustainability models aimed at exclusive development for current generations consider that communities are a symptom of emerging economies since they are, according to economic developmental logic, in transition towards full employment (Corral, Frias & González, 2001). For their part, eco-developmental models maintain that organizations are entities lacking values, norms and beliefs from which it is possible to infer a culture biased towards profit and therefore unfavorable to the environment (Sánchez et al., 2017).

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



In both models, economist and eco-developmentalist, communities in the first instance and organizations in the second, are barriers to sustainability, but perhaps the essential problem lies in the fact that both models assume that organizations and communities are opposites (Corral, Frías & González, 2003). In such a context, it is essential to discuss the relationships that communities and organizations have in reference to the guidelines of sustainable development and financial-economic globalization (Sandoval et al., 2017).

Organizations, unlike communities, are limited to technological innovations since they are their instrument to adjust their production to the logic of global and local markets (Frias & Corral, 2013). In contrast, communities are entities of uses and customs in which symbols, meanings and senses determine the traditions, myths, values, norms and beliefs that bring them closer to the care of natural resources while organizations, including socially responsible ones, they assume that nature is a provider of inputs and in any case a recipient of waste (Carreón et al., 2017).

The relationships between communities and organizations with respect to natural resources seem to show that both are opposite; however, in situations of scarcity, risk and uncertainty, communities have shown that trust, solidarity and cooperation are more than just symptoms of Social capital or support networks are essentially symbols, meanings and senses of sustainability that organizations present when establishing alliances in the face of a financial crisis, financial recession or economic slowdown (García et al., 2017).

In the case of the professional training of human capital, the values, beliefs and traditions of the communities converge with the knowledge and wisdom of the organizations (García et al., 2017). If in universities the community and the organizational can coexist, then in sustainability models the symbols, meanings and senses of trust, solidarity, respect, cooperation and innovation can be compatible for the construction of a public agenda of sustainable development (Limón et al. al., 2017).

However, the convergence of community principles with organizational principles is not an easy task since the extinction of natural resources has influenced the differences between communities

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



and organizations to such a degree that now indigenous peoples defend their rights to natural resources at all costs. resources and organizations in their desire to subsist establish networks of maquiladora chains in which the deregulation of the State allows the excessive exploitation of nature (Hernández et al., 2017).

Sustainability models must not only include the community and the organizational, but must also move towards legal regulation schemes in which environmental protection is a development indicator that can be complemented with civil participation (Fraj & Martínez, 2005). As the legal framework protects the availability of resources for future generations, the construction of a sustainable agenda must be discussed in the civil, political, economic, academic, community and organizational spheres (García, Carreón & Hernández, 2016). Such an exercise will distinguish our civilization as one in which climate change opened the opportunity for us to construct symbols, meanings and senses of sustainability (Sandoval et al., 2017).

The axis that goes from sustainability to the other nodes warns that, in this development scenario, the consensus between political and social actors, authorities and users, is the preamble to the establishment of an agenda focused on the promotion of opportunities and the financing of the abilities. It is a process in which business development and micro-financing policies determine social and environmental policies (García, 2011; 2012; 2013; 2014). At this level, consensus is generated from all political and social actors by considering common goods (Milfont & Duckitt, 2004).

The axis that goes from localism to the other nodes warns that municipal opportunities and capabilities are determinants of negotiation and strategic alliances between SMEs and transnationals (García, Carreón & Hernández, 2016). It is a process in which the local market is the product of agreements between the actors based on the maintenance of a system of co-management of common resources and public services. Co-responsibility is the result of agreements between native, migrant and floating cultures in matters of social entrepreneurship and productive innovation (Milfont & Duckitt, 2006).

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



The axis that goes from nationalism to the other nodes explains the process in which business development policies surpass micro-financing policies, but also highlights technology transfer mechanisms that will allow internal trade in products and services produced in the territory, but based on the needs of national growth, as is the case of domestic tourism (Fraj, Corral & Tapia, 2012). At this level, the literature warns that a large foreign direct investment is essential to update the industry and services in such a way that they are competitive at an international level, but State corruption is the main brake since, if these investments filter through in the national economy, public spending will no longer be the guiding axis (Martínez, 2004).

The axis that goes from regionalism to the other nodes clarifies that alliances between the economies of emerging countries will allow us to overcome dependence based on the competitive advantages of the countries that make up the economic bloc, but with full respect for individual rights and guarantees, protection of civil sectors and the establishment of a common agenda (Hernández et al., 2017). The consensus at these levels of management lies in external investments, but above all in the stability of the region since civil society dissenting from State policies can develop a movement of extraterritorial dimensions that complicate a negotiation (McFarie & Hunt, 2006).

The axis that goes from multilateralism to the other nodes indicates that it is the agreements between emerging countries and developed economies that will allow dependence to be overcome (García, 2005). This is the case of migration or trade agreements, but no longer from governments but from cities and civil organizations that increasingly transcend territorial borders (García, 2013). In this model, the consensus follows a process of management from dependent countries towards developed economies, but it materializes between the differences between migrant and native cultures regarding the workforce or occupational health, the main scenarios of multilateral policies (Milfont et al.,2008).

The objective of this work is to specify a model for the study of sustainability in its consensual modality, to glimpse the interrelationships between political and social actors, as well as the limits

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



of endogenous development policies and strategies with respect to community participation based on of the literature consulted. Furthermore, the theoretical model is contrasted with the responses of a sample of students at a public university in order to establish the significant differences between both models.

Are there significant differences between the theoretical model of sustainability agreed upon in the literature with respect to the observations of this work?

Hypothesis. Given that confinement and distancing policies to mitigate the pandemic have impacted the institutional dynamics of the university, significant differences are expected between the theoretical model and the empirical model (Kalantari & Asadi, 2010).

## Method

A first documentary, cross-sectional and exploratory study was carried out with a non-probabilistic selection of sources indexed to national repositories, as well as the inclusion of keywords: “sustainability”, “consensus”, “model”, “specification”.

A second cross-sectional, exploratory and descriptive study was carried out with a sample of 100 students ($M$ = 23.2 $SD$ 3.2 and $M$ = 9'897.00 $SD$ = 324.00 monthly income) from a public university, selected considering their participation in the professional internship system and social service in public health institutions.

The Sustainability Perception Scale (EPS-18) was used, which includes four dimensions related to susceptibility (“My university will be more prone to risk management than civil protection”), severity (“My university is strict regarding to risk prevention”), disruption (“My university is open to dialogue with dissidents or opposition”) and crisis (“My university has property insurance against a catastrophe”). All items are answered with one of seven options ranging from 0 = “not at all likely” to 7 = “quite likely.” The reliability obtained was 0.769 and the validity between 0.435 and 0.657 prior to sphericity and adequacy $\lceil \chi 2 = 213.234\ (24\ df)\ p = 0.001;\ KMO = 0.789 \rfloor$

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



Respondents were contacted via email. They were informed about the objectives and those responsible for the project, as well as the functions of their participation. A focus group was carried out to establish the homogeneity of the concepts. Using the Delphi technique, the content of the consulted literature was analyzed and integrated. In a content analysis matrix, the axes, trajectories and interrelationships between the factors used in the state of knowledge were schematized. The surveys were carried out at the public university facilities.

The data was captured in Excel. The JASP version 17 software was used for data analysis, as well as the estimation of the reliability, sphericity, adequacy, validity, adjustment and residual coefficients for the contrast of the hypothesis related to the significant differences between the theoretical and empirical structure. Values close to unity except for adjustment were considered evidence of non-rejection of the hypothesis.

## Results

The adequacy coefficient indicates that the values of the items range between 0.613 and 0.908, including the permissible threshold for factor analysis (see Table 1). Furthermore, the sphericity values $\lceil \chi 2 = 2539.520\ (153\ df)\ p = 0.001 \rfloor$ corroborate the assumption.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



**Table 1**. Kaiser-Meyer-Olkin test

| | MSA |
|---|---|
| Overall MSA | 0.801 |
| r1 | 0.800 |
| r2 | 0.901 |
| r3 | 0.858 |
| r4 | 0.613 |
| r5 | 0.908 |
| r6 | 0.670 |
| r7 | 0.777 |
| r8 | 0.768 |
| r9 | 0.871 |
| r10 | 0.835 |
| r11 | 0.873 |
| r12 | 0.562 |
| r13 | 0.740 |
| r14 | 0.657 |
| r15 | 0.850 |
| r16 | 0.663 |
| r17 | 0.810 |
| r18 | 0.490 |

The factor analysis of principal axes with promax rotation reveals four dimensions related to susceptibility, severity, disruption, and crisis (see Table 2). The susceptibility factor was grouped into items 3, 5, 7, 2, 9, 11, 15 and 13 with factor weights between 0.45 and 0.987. The second factor referring to severity included variables 6, 1, 16 with values between -0.751 and 0.893. The third factor related to disruption reached values between 0.409 and 0.844 with indicators 8, 14, 10, 17 and 18. The fourth factor indicative of the crisis included items 4 and 12 with values of 0.466 and 0.924 respectively.

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



**Table 2.** Factor Loadings

| | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Uniqueness |
|---|---|---|---|---|---|
| r3 | 0.987 | | | | 0.033 |
| r5 | 0.980 | | | | 0.085 |
| r7 | 0.960 | | | -0.420 | 0.111 |
| r2 | 0.863 | | | | 0.078 |
| r9 | 0.801 | | | | 0.313 |
| r15 | 0.781 | -0.488 | | | 0.053 |
| r11 | 0.777 | | 0.485 | | 0.072 |
| r13 | 0.514 | 0.456 | | | 0.209 |
| r6 | 0.450 | -0.751 | | | 0.045 |
| r1 | | 0.893 | | | 0.144 |
| r16 | | 0.839 | | | 0.159 |
| r8 | | | 0.844 | | 0.154 |
| r14 | | | 0.787 | 0.463 | 0.274 |
| r17 | | | -0.616 | 0.424 | 0.212 |
| r10 | | | 0.512 | | 0.584 |
| r18 | | | 0.409 | | 0.837 |
| r4 | | | | 0.924 | 0.234 |
| r12 | | | | 0.466 | 0.791 |

*Note.* Applied rotation method is promax .

The first factor explained 0.359 of the total variance the second reached 0.174, the third 0.135 and the fourth 0.089 with a total of 0.756 of explained variance (see Table 3). Such a finding indicates the inclusion of a fifth factor that the literature relates to resilience to events derived from climate change.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



**Table 3**. Factor Characteristics

| | Unrotated solution | | | Rotated solution | | |
|---|---|---|---|---|---|---|
| | SumSq . Loadings | Proportion var . | Cumulative | SumSq . Loadings | Proportion var . | Cumulative |
| Factor 1 | 6,466 | 0.359 | 0.359 | 6,236 | 0.346 | 0.346 |
| Factor 2 | 3,126 | 0.174 | 0.533 | 2,700 | 0.150 | 0.496 |
| Factor 3 | 2,421 | 0.135 | 0.667 | 2,652 | 0.147 | 0.644 |
| Factor 4 | 1,599 | 0.089 | 0.756 | 2,024 | 0.112 | 0.756 |

The correlations between the factors corroborate the assumption of non-collinearity between the factors and the acceptance of the hypothesis of reflectivity of perceived sustainability (see Table 4). Furthermore, the Mardia coefficient ⌈ Skewness = 11.753 (1140 df ) p = 0.001; Kurtosis == 348.326: p = 0.018⌋ indicates multivariate normality.

**Table 4.** Factor Correlations

| | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
|---|---|---|---|---|
| Factor 1 | 1,000 | -0.059 | 0.117 | 0.269 |
| Factor 2 | -0.059 | 1,000 | -0.093 | 0.007 |
| Factor 3 | 0.117 | -0.093 | 1,000 | -0.209 |
| Factor 4 | 0.269 | 0.007 | -0.209 | 1,000 |

The analysis of the factors suggests the prevalence of four factors with respect to their own values, although up to 18 factors can be analyzed that would correspond to each item (see Table 5).

**Table 5.** Parallel Analysis

| | Real data component eigenvalues | Simulated data means eigenvalues |
|---|---|---|
| Factor 1* | 6,589 | 1,770 |
| Factor 2* | 3,358 | 1,591 |
| Factor 3* | 2,581 | 1,482 |
| Factor 4* | 1914 | 1,381 |

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



**Table 5.** Parallel Analysis

| | Real data component eigenvalues | Simulated data means eigenvalues |
|---|---|---|
| Factor 5 | 0.904 | 1,278 |
| Factor 6 | 0.758 | 1,202 |
| Factor 7 | 0.613 | 1,132 |
| Factor 8 | 0.289 | 1,051 |
| Factor 9 | 0.235 | 0.993 |
| Factor 10 | 0.189 | 0.922 |
| Factor 11 | 0.142 | 0.854 |
| Factor 12 | 0.108 | 0.797 |
| Factor 13 | 0.087 | 0.737 |
| Factor 14 | 0.070 | 0.684 |
| Factor 15 | 0.064 | 0.624 |
| Factor 16 | 0.046 | 0.572 |
| Factor 17 | 0.033 | 0.499 |
| Factor 18 | 0.023 | 0.432 |

*Note.* '*' = Factor should be retained. Results from PC-based parallel analysis.

The factor structure includes four factors that are positively and significantly related to 11 factors. The first factor included indicators 2, 3, 5, 7, 9 and 11. The second factor includes items 8 and 10. The third factor includes item 6. The fourth factor includes items 4 and 1.

The adjustment and residual parameters ⌈$\chi$2 = 323.821 (87 dl) p = 0.001; CFI = 0.901; TLI = 0.821; RMSEA = 0.151⌋ indicate the non-rejection of the hypothesis of significant differences between the theoretical model and the empirical model.

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



## Discussion

The objective of this work has been the specification of a model for the study of consensual sustainability. From the review and analysis of the literature, the dependency relationships between the variables used in the state of knowledge were specified, but the type of exploratory study, the type of sample selection of information sources and the type of technique for the analysis of the Content limits the findings to the context and the study sample (Modh, 2013). It is necessary to carry out an extension and sophistication of the model in order to be able to contrast its hypothetical proposals (Mohsen et al., 2013).

The contribution of the present study to the state of the art lies in the establishment of a model of reflective trajectories between four factors reviewed in the literature from 2020 to 2023 and contrasted in a sample from a public university in central Mexico. The type of study design and the type of sample selection limit the proposal itself, which can be enriched with a selection of sources in international repositories and the text mining technique (Obregon, 1996).

Regarding other model proposals such as those of Bustos, Quintero and García (2017), Carreón, García and Hernández (2017), Carreón et al., (2017), Hernández et al., (2017), Limón et al. , (2017), Sánchez et al., (2017) and Sandoval et al., (2017) focused on identity as an essential factor in the construction of an agenda, debate and agreements, the present work clarifies that comprehensive public policies are They are distinguished by their social protection within the framework of economic, political, social, labor, environmental and sexual rights ( Obregón and Zaragoza, 2000) . In that sense, the models put forward exempt one or another civil sector from their proposals, but this generates an agenda and a public discussion to compensate for the asymmetries.

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



## Conclusion

In the content analysis and the trajectories of relationships between the variables reported in the state of the question, it is possible to see that the literature consulted focuses on the determination of behavior for sustainability, which evolved from pro-environmental behavior in the case of domestic conservation of resources and responsible environmental behavior in the case of organizations. In a historical sense, the specification of relationships focused on resource-saving motives as the main determinant of behavior for sustainability, but in recent years this has been determined by community variables such as sense of community and indicated by skills and socially shared capabilities such as *tequio* or *guatza.*

More recently, behavior for sustainability has been determined by sociopolitical variables, derived from the effects of austerity policies such as *tandeo* and *barter*. In this way, behavior for sustainability has been explained from personal variables such as attitudes and perceptions to group variables such as the relationship climate, the support climate, the task climate and the innovation climate in the case of civil society organizations. That is to say, the construction of a consensual sustainability model goes through trajectories of interrelationships between variables that refer to individual and collective behavior based on public policies and psychological resources, although the evaluation of this process depends on behavioral indicators for sustainability such as This is the case of austerity, optimization and reuse of public resources and services.

In relation to the consensus theory of sustainability where a regionalist and multilateralist approach prevails, this work warns that both models can be complemented by nationalist and local approaches, as well as integrated into a sustainability model. Regarding the literature that highlights the economist, eco-developmentalist, ethical- discursive, ethical- ecological, biocentric, territorialist, communitarian, regionalist, pressureist and eco-tourist models, each and every one focused on the relationship between the State and the citizenship, this study proposes that agreements are rather developed in civil spheres and networks around needs, expectations and capacities of strategic alliances either between organizations or between local governments where

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870



they have the greatest impact. Precisely, one line of research would be the effect of comprehensive policies on the identity of the actors in a context of scarcity of resources, shortage of services and emergence of capacities, materialized in an agenda of debate, agreements and co-responsibility.

## References

Bechtel, R., Asai, M., Corral, V. & González, A. (2006). *A cross cultural study of environmental beliefs structures in USA, Japan, Mexico and Peru.* International Journal of Psychology, 41, 145-151

Bechtel, R., Corral, V. & Pinheiro, J.Q. (1999). *Environmental belief systems United Status, Brazil and México.* Journal of Cross–Cultural Psychology, 30, 122-128.

Bustos, J. (1986). *A model for the study of pro-environmental behavior.* Social Psychology in Mexico, 1, 159-163

Bustos, J. (2004). *Pro-environmental behavior model for the study of drinking water conservation.* Doctoral Thesis, Faculty of Psychology, National Autonomous University of Mexico.

Bustos, J. Flores, M. & Andrade, P. (2004). *Predicting water conservation from socio-cognitive factors.* Environment and Human Behavior, 5, 53-70

Bustos, JM & Flores, LM (2014). *Environmental psychology, education and sustainability* . In JM Bustos y Flores, LM (coord.). Environmental psychology, analysis of barriers and psychosocial facilities for sustainability. (pp. 15-46). Mexico: UNAM-FES Zaragoza

Bustos, JM, Quintero, ML & García, C. (2017). *Governance of local sustainability: Water mediatization index for Mexico City* . Tlatemoani, 24, 143-159

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

Bustos, J. & Flores, L. (2000). *Evaluation of environmental problems, environmental quality and beliefs affecting health.* Social Psychology in Mexico, 8, 445-451.

Bustos, J., Flores, L. & Andrade, P. (2002). *Motives and risk perception as antecedent factors to water conservation in Mexico City* . Social Psychology in Mexico, 9, 611-617.

Bustos, J., Flores, L., Barrientos, C. & Martínez, J. (2004). *Helping to counteract ecological deterioration: attribution and reasons for conserving water.* Social Psychology in Mexico, 10, 521-526

Bustos, J., Flores, M. & Andrade, P. (2004). *Predicting water conservation from sociocognitive factors.* Environment and Human Behavior, 5, 53-70

Bustos, J., Montero, M. & Flores, L. (2002). *Three antecedent intervention designs to promote environmentally protective behavior.* Environment and Human Behavior, 3, 63-88.

Bustos, J., Rincón, G. & Flores, L. (2011). *Exploration of beliefs about water scarcity in the population of Mexico City* . Quaderns of Psychology, 13, 3-23

Carreon J. (2016). *Human development: Governance and social entrepreneurship* . Mexico: National Autonomous University of Mexico-National School of Social Work

Carreon, J. (2013). *Discourses around labor migration, return and social reintegration based on group identity in Xilitla, micro-region of Huasteca Potosina (Mexico* ). in L. Cano (coord.). Poverty and social inequality. Challenges for the reconfiguration of social policy. (pp. 153-174). Mexico: National Autonomous University of Mexico-National School of Social Work

Carreon, J., De la Cruz, PI & De los Santos, M. (2015). *The administration of social fears. Contrasts of a model of perception of insecurity in Mexico* . Equity, 4, 31-60

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

Carreon, J., García, C. & Hernández, J. (2017). *Water situations, lifestyles in peripheral urban areas and struggles over water*. In ME Alvarado (coord.). university experiences of social movements and collective action. A look at the past and the future from the present. (pp. 105-128). Mexico: UNAM-CEIICH

Carreón, J., García, C., Vilchis, FJ, Martínez, J. & Sánchez, R. (2016). *Reliability and validity of an instrument that measures seven dimensions of security perception in a public university.* Thinking Psychology, 12 (20), 65-76 DOI: 10.16925/pe.v12i20.1564

Carreon, J., Hernández, J. & Quintero, ML (2016). *Specification of a local development model.* In D. Del Callejo, Canal, ME and Hernández, G. (coord.). methodological guidelines for the study of development. (pp. 149-168). Mexico: Universidad Veracruzana.

Carreon, J., Hernández, J., Bustos, JM & García, C. (2017). *Business development policies and their effects on risk perceptions in coffee farmers in Xilitla, San Luis Potosí, central Mexico.* Poiesis, 32, 33-51

Carreón, J., Hernández, J., Quintero, ML, García, C. & Mejía, S. (2016). *Knowledge networks around organizational complexity: learning self-regulation, dissipation, adaptability and dynamism in the face of change.* Prospective, 2 (2), 57-70

Corral, V. & Frías, M. (2006). *Personal normative beliefs, antisocial behavior, and residential water conservation* . Environment and Behavior, 38, 406-421

Corral, V. (1998). *Environment/behavior interactions: some areas of research* . In VM Alcaraz and A. Bouzas (coords.). Mexican contributions to psychology. (pp. 55-70) Mexico: UNAM.

Corral, V. (2000). *The definition of Pro-Environmental Behavior* . Social Psychology in Mexico, 8, 466-472.

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

Corral, V. (2001). *Applications of Structural Modeling to psychological research.* Mexican Journal of Psychology, 18 193-209.

Corral, V. (2002). *A structural model of proenvironmental competence* . Environment & Behavior, 34, 531-549.

Corral, V. (2002). *Advances and limitations in the measurement of pro-environmental behavior* . In J. Guevara, and S. Mercado, (coord.) Selected Topics in Environmental Psychology. (pp. 483-510). Mexico: UNAM–GRECO–UNILIBRE.

Corral, V. (2002). *Structural Equation Modeling.* in Bechtel, R and Churcman, A. (eds.) Handbook of Environmental Psychology. (pp. 256-270). New York: Wiley & Sons, Inc.

Corral, V. (2003). *Cognitive maps or environmental behaviors?* in E. Díaz, and M. Anaya, (coord.). Perspectives on cognitivism in psychology. (pp. 37-79). Mexico: UNAM (Iztacala).

Corral, V. (2003). *Psychological determinants or situations of water conservation behavior: a structural model* . Psychology Studies, 8, 245-252.

Corral, V. (2003). *Psychological and situational determinants of water conservation behavior: a structural model.* Psychological Studies, 8, 245-252

Corral, V. (2003). *Situational and personal determinants of waste control practices in Northern Mexico: a study of reuse and recycling behaviors.* Recourses, Conservation & Recycling, 39,265-281.

Corral, V. (2006). *Behavior analysis contributions to proecological behavior research.* Mexican Journal of Behavior Analysis, 32, 111-127

Corral, V. (2006). Inter-American Environmental Psychology. Environment and Human Behavior, 7, 1-5

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Corral, V. (2010). *Psychology of sustainability. An analysis of what makes us pro-ecological and pro-social* . Mexico: Thresholds

Corral, V. & Domínguez, R. (2011). *The role of antecedent and consequent events in sustainable behavior.* Mexican Journal of Behavior Analysis, 37, 9-29

Corral, V. & Encinas, L. (2001). *Dispositional, situational and demographic variables in metal and paper recycling.* Environment and Human Behavior, 2, 1-19.

Corral, V. & Obregón, FJ (1992). *Predictive models of pro-environmental behavior* . Sonoran Journal of Psychology. 6, 5-14.

Corral, V. & Pinheiro, J. (1999). *Conditions for the study of pro-environmental behavior.* Psychological Studies, 4, 7-22.

Corral, V. & Pinheiro, J. (2004 *). Approaches to the study of sustainable behavior.* Environment and Human Behavior, 5, 1-26

Corral, V. & Zaragoza, F. (2000) *Sociodemographic and psychological bases of reuse behavior: A structural model.* Environment and Human Behavior. 1, 9-29.

Corral, V., Bechtel, R., Armendáriz, LI & Esquer, AB (1997). *The structure of environmental beliefs in Mexican university students: the New Environmental Paradigm.* Mexican Journal of Psychology, 14, 173-181.

Corral, V., Bonnes, G., Tapia, C., Fraijo, B., Frías, M. & Carrus, G. (2009). *Correlates of pro-sustainability orientation: The affinity towards diversity*. Journal of Environmental Psychology, 29, 34-43

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

Corral, V., Carrus, G., Bonnes, M., Moser, G. & Sinha, J. (2008). *Environment beliefs and endorsement of Sustainable Development principles in water conservation* . Environment and Behavior, 40, 703-725

Corral, V., Fraijó, B. & Pinheiro, J. (2006). *Sustainable behavior and time perspective: present, past, and future orientations and their relationships with water conservation behavior.* Inter-American Journal of Psychology, 40, 139-147

Corral, V., Fraijó, B. & Tapía, C. (2004). *Psychological propensities in sixth grade primary school children. Validity of an instrument.* Yearbook of Educational Research, 7, 31-44

Corral, V., Fraijó, B. & Tapia, C. (2008). *An observational record of individual water consumption: applications to sustainable behavior research* . Mexican Journal of Behavior Analysis, 36, 79-96

Corral, V., Frías, M. & González, D. (2001). *On the relationship between antisocial and anti–environmental behaviors: an empirical study* . Population and Environment, 24, 273-286.

Corral, V., Frías, M. & González, D. (2003). *Risk perception, pro-environmental behavior and sociodemographic variables in a community in Sonora.* Mexico. Region and Society, 15, 49-72

Corral, V., Frías, M., Fraijo, B. & Tapia, C. (2006). *Traits of antisocial behavior as correlates of anti- and pro-environmental actions.* Environment and Human Behavior, 7, 89-103

Corral, V., García, F., Tapia, C. & Fraijo, C. (2012). *Sustainable behaviors and perceived psychological restoration.* Psychological Research Act, 2, 749-764

Corral, V., Garibaldi, L. & Encinas, L. (1987). *Exploratory study of behavioral patterns of domestic water consumption in urban areas.* Sonoran Journal of Psychology, 1, 87-93

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

Corral, V., Mireles, J., Tapia, C. & Fraijo, B. (2011). *Happiness as correlate of sustainable behavior: a study of pro-ecological, frugal, equitable and altruistic actions that promote subjective well-being.* Research in Human Ecology, 18, 95-104

Corral, V., Tapia, C., Fraijo, B. Mireles, J. & Marquez, P. (2008). *Orientation to sustainability as a determinant of sustainable lifestyles. A study with a Mexican sample.* Mexican Journal of Psychology, 25, 313-327

Corral, V., Tapia, C., Frías, M., Fraijó, B. & González, D. (2009). *Orientation to sustainability as a basis for Pro-social and Pro-ecological behavior* . Environment and Human Behavior, 10, 195-215

Corral, V., Varela, C. & González, D. (2002). *A functional taxonomy of pro-environmental competencies.* Social Psychology in Mexico, 9, 592-597.

Espinosa, G., Orduña, V. & Corral, V. (2002). *Structural modeling of pro-environmental competencies for water saving.* Social Psychology in Mexico, 9, 605-610.

Fraijo, B., Corral, V., & Tapia, C. (2012). *Adaptation and testing of a sustainability orientation scale in children in the sixth year of primary education.* Mexican Journal of Educational Research, 17, 1091-1117

Fraj, A. & Martínez, E. (2005). *The level of environmental knowledge as a moderating factor of the relationship between attitude and ecological behavior* . European Research in Management and Business Economics, 11, 223-243

Frías, M. & Corral, V. (2013). *Environmental and individual factors in adolescent anti-sociality: a structural model Mexican adolescents.* International Journal of Criminal Justice Sciences, 8, 198-214

García, C. (2005). *Psychological studies of sustainability.* Journal of Humanities, 13, 1-63

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

García, C. (2013). *Psychological studies of water sustainability. Applications to the consumption tariff system.* Journal of Social Sciences, 139, 65-90

García, C. (2015). *The legitimation of public security in Xilitla, San Luis Potosí (Mexico* ). Administrative Research, 115, 24-40

García, C. (2017). *The psychological studies of agenda setting: specification and discussion of a conformist versus cooperative identity model* . Nomads, 50, 1-18

García, C., Bustos, JM & Montero, M. (2012). *Dimensions of water sustainability* . In J. Carreon, and Hernández, J. 8coord). Psychology of neoliberal globalization: analysis of social exclusion, the digital divide and sustainable development. (pp. 117-172). Mexico: Díaz de Santos

García, C., Bustos, J. M. , Juárez, M., Rivera, BL & Limón, GA (2017). *Expectations of users of the drinking water service regarding supply, quality and rates in the framework of future elections in a town in Mexico City* . Compendium, 4 (7), 35-54

García, C., Carreon, J. & Hernández, J. (2016). Public security governance *based on the identity and perception of risks established in the citizen agenda by the media* . Directions of Social Work,11 (13), 103-116

García, C., Carreón, J., Hernández, J. & Bustos, J. (2015). *Risk governance from threat perception and sense of community.* In S. Vázquez., Cid, B. and Montemayor, E. (coord.). Risks and Social Work. (pp. 71-94). Mexico: UAT

García, C., Carreón, J., Hernández, J. and Bustos, JM (2014). *Structure of risk perceptions around global and local water scarcity and shortages* . In JM Bustos y Flores, LM (coord.). Environmental psychology, analysis of barriers and psychosocial facilities for sustainability. (pp. 105-118). Mexico: UNAM-FES Zaragoza

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

García, C., Carreón, J., Hernández, J. & Bustos, JM (2016). *Risk governance from the perception of threats and the sense of the community.* In S. Vázquez, Cid, BG, Montemayor, E. (coord.). Risks and social work. (pp. 71-94). Mexico: UAT

García, C., Carreón, J., Hernández, J. & Salinas. (2016). *Governance of technological innovation actors and networks.* In ML Quintero, Sales, J. and Velázquez, E. B: (coord.). Innovation and technology. Challenges for its practical application in companies. (pp. 79-94). Mexico: Porrúa-UAEMEX UAP Nezahualcóyotl

García, C., Carreón, J., Hernández, J., Bustos, J. & Aguilar, J. (2015). *Specification of a model of sociopolitical hyperopia* . Blue Moon, 42, 270-292

García, C., Carreón, J., Hernández, J., Carbajal, C., Quintero, ML, Sandoval, FR & Valdés, O. (2014). *Incidence of micro-financing policies on the perception of coffee entrepreneurship and implications for Social Work.* Equity, 6, 11-36

García, C., Carreón, J., Hernández, J., Limón, GA & Morales, ML (2014). *The determinants of hydrological concern in Iztapalapa.* In JM Bustos y Flores, LM (coord.). Environmental psychology, analysis of barriers and psychosocial facilities for sustainability. (pp. 93-104). Mexico: UNAM-FES Zaragoza

García, C., Carreón, J., Hernández, J., Montero, M. & Bustos, J. M: (2012). *Systems of political complexity.* Social Work Today, 65, 39-48

García, C., Carreón, J., Mecalco, J., Hernández, J., Bautista, M. & Méndez, A. (2013). *Complex political systems: Implications for sustainable public security* . Social Actions and Research, 34¸186-216

García, C., Sandoval, FR & Aguilar, JA (2016). *Approach to the framing of the printed media around the attention to victims of the Ayotzinapa case, Iguala-Guerrero (Mexico)* . Secci Communication Magazine, 20 (39), 153-160

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

García, C., Valdés, O., Sánchez, R., Elizarraráz, G., Méndez, A. & Hernández, J. (2011). *Differences between Internet entrepreneurs with respect to empathy, risk perceptions and use of technological applications* . Prospective, 12 (1), 68-75

Hernández, J., Carreón, J., García, C. Aguilar, JA & López, LR (2017). *Reliability and validity of an instrument that measures attitudes toward sustainability.* In ML Quintero, Velázquez, EB and Sales, J. (coord.). approaches, strategy and transdiscipline in sustainability studies. (pp. 95-110). Mexico: UAEMEX-UAPN

Kalantari, K. & Asadi, A. (2010). *Designing a structural model for explaining environmental attitude and behavior of urban residents (case of Tehran)* . International Journal of Research, 4, 309-320

Limón, GA, Rivera, BL, Bustos, JM, Juárez, M. & García, C. (2017). *Climate change governance: specification of a model of attitudes toward climate change governments.* Political Science, 30, 1-31

Martínez, J. (2004). *Structure of Pro-environmental responsibility towards the conservation of drinking water in young students.* Environment and Human Behavior, 5, 115-132

McFarie, B. & Hunt, L. (2006). *Environmental activism in the forest sector. Social psychological, social cultural, and contextual effects.* Environment and Behavior, 38, 266-285

Milfont, T. & Duckitt, J. (2004). *The structure of environmental attitudes: a first and second cader confirmatory factor analysis.* Journal of Environmental Psychology, 24, 289-303

Milfont, T. & Duckitt, J. (2006). *Preservation and utilization the structure of environmental attributes* . Environment and Human Behavior, 7, 29-50

Milfont, T., Andrade, P., Belo, R. & Pessoa, V. (2008). *Testing Zimbardo time perspective inventory in brazilian simple* . Inter-American Journal of Psychology, 42, 49-58

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Modh, N. (2013). *Structural relationships on consumer ecological behavior* . Journal of Sustainability Science and Management, 8, 233-243

Mohsen, A., Ahmad, J., Abd, M. & Ali, I. (2013). *Consumer environmental activism, sustainable consumption behavior and satisfaction with life.* Life Scientific Journal, 10, 1000-1006

Obregón, F. (1996). *Beliefs as a dispositional factor of behavior.* Sonoran Journal of Psychology, 10, 43-49

Obregón, F. & Zaragoza, F. (2000). *The relationship of tradition and modernity with environmental beliefs* . Sonoran Journal of Psychology, 14, 63-71

Palacios, J. & Bustos, J. (2012). *Model of self-efficacy and environmental skills as predictors of pro-environmental intention and disposition in young people* . Intercontinental Journal of Psychology and Education, 14, 143-163

Sánchez, A., Quintero, ML, Sánchez, R., Fierro, E. & García, C. (2017). *Governance of social entrepreneurship: specification of a model for the study of local innovation.* Nomads, 51, 1-21

Sandoval, FR, Carreón, J., García, C., Quintero, ML & Bustos, JM (2017). *Model of the determinants of the perception of resilience based on perceived risk and stress in relation to civil protection governance* . Invurnus, 12 (1), 30-35

Sandoval, F., García, H. & Pérez, A. (2015). *Gender and resilience in the face of environmental catastrophes.* Ibero-American Journal of Academic Production and Educational Management, 3, 1-20

Valenzuela, B., Corral, V., Quijada, A., Griego, T., Ocaña, D. & Contreras, C. (2004). *Dispositional predictors of water saving: Austerity, Altruism and Future Proneness.* Social Psychology in Mexico, 10, 527-532

ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.

Año 16 / Núm. 40 / - Julio- diciembre 2023
Revista de Investigación Académica sin Frontera
ISSN 2007-8870

CÓMO CITAR

García Lirios, C., & Crespo, J. E. (2023). Sustainability expectations in a public university in central Mexico. *Revista De Investigación Académica Sin Frontera: Facultad Interdisciplinaria De Ciencias Económicas Administrativas - Departamento De Ciencias Económico Administrativas-Campus Navojoa*, (40). https://doi.org/10.46589/riasf.vi40.610




ISSN 2007-8870 RIASF Universidad de Sonora
Facultad Interdisciplinaria de Ciencias Económicas Administrativas
Departamento de Ciencias Económico Administrativas-Campus Navojoa.