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Journal of Contemporary Sociology

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Presentation of Content

The first article presents *Community resilience in Asunción Ixtaltepec, Oaxaca*, by CASTILLO-LEAL, Maricela, ACEVEDO-MARTÍNEZ, Jorge Antonio Silvestre, RAMÍREZ-GÓMEZ, Perla del Carmen and PÉREZ-LARRAÑAGA, Héctor, from the Instituto Tecnológico de Oaxaca, as the next article is *Precariousness, inequalities and emotional health care practices in university students*, by GUERRERO-AZPEITIA, Luis Arturo, with affiliation at the Centro Universitario Hidalguense, as the next article is *Parental competences in parents of children with disabilities of the association "Autism Community los Cabos, A.C."*, by COSSIO-GARCIA, Jorge Luis, CEJAS-LEYVA, Luz María, SALAS-NAME, Sagrario Lizeth and SOTO-RIVERA, Jesús Abraham, with secondment at Universidad Juárez del Estado de Durango, the next article is *Measurement municipal social development in the district of Etila, Oaxaca*, by AQUINO-HERNÁNDEZ, Perla Viridiana, MARTÍNEZ-PELLEGRINI, Sarah Eva, RUÍZ-MARTÍNEZ, Alfredo and CASTILLO-LEAL, Maricela, with adscription at Instituto Tecnológico de Oaxaca.

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Community resilience in Asunción Ixtaltepec, Oaxaca

Resiliencia comunitaria en Asunción Ixtaltepec, Oaxaca

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Abstract

Oaxaca is located in an area where five tectonic plates meet: Caribbean, Pacific, North American, Rivera and Cocos (SSN, 2017), which makes it highly vulnerable to natural hazards such as earthquakes. The most recent earthquake was last September 7, 2017 at 23:49:17 hrs, with a magnitude of (8.2) degrees on the Richter scale, epicenter 133 km southwest of Pijijiapan, Chiapas (SSN, 2017), leaving a balance of 99 victims, of which 82 were in Oaxaca. The objective of this research was to identify the level of community resilience in Asunción Ixtaltepec, Oax. The techniques used were: participant observation, surveys, focus groups and semi-structured interviews. The instrument used was a questionnaire based on the one developed by GOAL, an association characterized by "disaster risk management, early warning systems, market systems, measurement and applicability of resilience." (GOAL, 2016). As a result, five pillars of community resilience were identified: cohesive social structure; governmental honesty; cultural identity; collective self-esteem and social humor, proposed by Suárez (1993) apud Uriarte (2014), in addition, the community resilience radar was elaborated.

Resumen

Oaxaca se ubica en un área donde se encuentran cinco placas tectónicas: Caribe, Pacífico, Norteamérica, Rivera y Cocos (SSN, 2017), lo que la vuelve un territorio altamente vulnerable a los riesgos naturales como los sismos. El sismo más reciente fue el del pasado siete de septiembre del 2017 a las 23:49:17 hrs, con una magnitud de (8.2) grados en la escala de Richter, epicentro a 133 km al suroeste de Pijijiapan, Chiapas (SSN, 2017), dejando un saldo de 99 víctimas, de las cuales 82 fueron en Oaxaca. El objetivo de esta investigación fue identificar el nivel de resiliencia comunitaria en Asunción Ixtaltepec, Oax. Las técnicas que se utilizaron fueron: observación participante, encuestas, grupos de enfoque y entrevistas semiestructuradas. El instrumento que se utilizó fue un cuestionario basado en el elaborado por GOAL, Asociación caracterizada por la "gestión de riesgo ante desastres, sistemas de alerta temprana, sistemas de mercado, medición y aplicabilidad de resiliencia". (GOAL, 2016). Como resultado se identificaron cinco pilares de la resiliencia comunitaria: estructura social cohesionada; honestidad gubernamental; identidad cultural; autoestima colectiva y humor social, que propone Suárez (1993) apud Uriarte (2014), además se elaboró el radar de resiliencia comunitaria.

Resilience, Vulnerable, Territory

Resiliencia, Vulnerable, Territorio

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Introduction

Human beings live immersed in various risks that occur in daily life, but specifically the risks caused by natural phenomena come to damage a society depending on a certain level of vulnerability, which without adequate preparation to mitigate the negative effects, becomes vulnerable to suffer greater damage.

These natural phenomena are considered as hazards and are often referred to as threats, and since they come from nature, they are called natural hazards. The effects of natural hazards represent economic, material and human losses. In other words, the hazard is considered a risk factor. In this way, it is said that the level of risk will depend on the community organisation, if there are resistant structures and mitigation plans. Novelo, (2020).

In this action, communities are severely affected by not being prepared to face and overcome adversity. This results in a disaster, generated by the interaction of a natural phenomenon (earthquake) and the prevailing levels of vulnerability of the community. This causes a rupture in development, generating that the planned and sustainable process of the community in search of quality of life and well-being is affected, due to losses that cause paralysis in daily activities and livelihoods.

(Lavell, 2007, 2020) apud Canese et al., (2022) point out that disasters are not the direct result of a natural event alone, but that a series of interrelated factors must be considered, such as social inequalities, citizen behaviour, territorial, economic and social exclusion, as well as the interaction of environmental conditions.

In this sense, Mexico has been no exception in being exposed to risks, as different types of natural disasters have been recorded over time, generating diverse damages, and unlike other natural phenomena, earthquakes or earthquakes silently threaten our peace of mind, since it is impossible to predict them.

In the Mexican Republic, Oaxaca is located in an area where five tectonic plates meet: Caribbean, Pacific, North American, Rivera and Cocos (the last two are subducting, submerging). These plates form a tectonic system and the boundaries between them are active seismic zones due to their interaction.

The Cocos plate is specifically the one that shows an eastward movement at an average displacement of seven centimetres per year, which generates a plate collision (SSN, 2017).

For this reason, Oaxaca is vulnerable to earthquakes and tremors. As it is located within the aforementioned plates, there have been earthquakes with magnitudes greater than eight on the Richter scale, of which there are records since 1700 to date. The most recent earthquake greater than seven degrees was the one on 7 September 2017 at 23:49:17 hrs, with a magnitude of 8.2 on the Richter scale, epicentre 133 kms southwest of Pijijiapan, Chiapas, leaving a toll of 99 victims, of which 82 were in Oaxaca. (SSN, 2017).

In the state of Oaxaca this earthquake left thousands of families devastated, mainly in the region of the Isthmus of Tehuantepec, affecting houses, schools, hospitals, health centres, churches, municipal palaces and markets, in addition to having a large number of victims due to the magnitude of the earthquake.

Baas mentions that "Unplanned urbanisation, environmental degradation and inadequate land-use planning are key factors that contribute to the increase in natural hazards, loss of life and assets when these hazards become disasters" (Baas, 2009: 22). Such is the case of Asunción Ixtaltepec in the Isthmus Region, where there is no planned urbanisation, so land use planning has not been controlled either.

Situations after the natural disaster (earthquake)

The lives of the people affected by the 2017 earthquake took a radical turn with a total of 180,000 people considered as victims (Velásquez, 2017). People who were left without patrimony, major structural affectations, family losses, traumas and fears, causing social dislocation.

After the disaster, what is sought is to recover the capacity of the social system and institutions to be able to face the adversities that have arisen and those that will arise on the road to resilience in order to reorganise (Uriarte, 2010). As well as the creation of action plans identifying the risks and dangers to which they are exposed and not waiting for another natural hazard to happen before acting.

The United Nations International Strategy for Disaster Reduction (UNISDR, 2010) states once again that the greatest damage occurs in places where poverty is prevalent, stating that: "85% of people exposed to earthquakes, cyclones, floods and droughts live in developing countries" and Mexico is among the countries with these characteristics.

In Mexico, in 2020, according to data from CONEVAL (2020), the 15 municipalities with the highest percentage of extreme poverty (98.5% or more) were located in Oaxaca (8), Chiapas (6) and Guerrero (1). These three municipalities are the municipalities with the highest percentages of poverty, while those with the lowest percentages of poverty are Nuevo León, CDMX, Sonora, Chihuahua and Coahuila (CONEVAL, 2020).

Due to the COVID-19 pandemic, poverty rose to levels that had not been recorded in 20 years. According to ECLAC data (2020), it is estimated that the total poor population reached 209 million by the end of 2020, adding 22 million more than in 2019.

Taking into account these factors for the case of Oaxaca: the high-risk geographical location, poverty in part of the population, vulnerability, limited access to information and poor territorial planning, among others, it becomes more important to develop resilience in the communities affected by earthquakes.

Disaster-risk countries, vulnerable, with increased hazards and exposure

The INFORM-LAC study (Risk Management Index for Latin America and the Caribbean) of UNICEF conducted for the years 2017, 2018 and 2020, shows little significant change over time and has been developed with the purpose of knowing the particular conditions of the countries in the region (33 countries) and to obtain a better comparison of the levels of risk among them (United Nations et al., 2020).

This report mentions the countries with a tendency to suffer greater risks from disasters and humanitarian crises and Mexico has a score of 6.0 (in 2018 it was at 6.2), the highest score is for Haiti with 8.5; Guatemala 8.2; Honduras 8.1; Venezuela 7.2; Colombia 7.0; El Salvador 6.7; Nicaragua 6.6; Peru, Bolivia and Mexico with 6.0 (United Nations et al., 2020).

Similarly, the report includes the countries with the highest values for vulnerability, which measures people's susceptibility to hazards. It takes into account the capacity of socio-economic systems and looks at the strengths of communities, families and individuals. In this way, it was based on socio-economic vulnerability and the vulnerable population in each country, with Mexico scoring 6.5 in ninth position (United Nations et al., 2020).

They also list the lack of coping capacity in the face of scarce resources available to cope with damage resulting from disaster or adverse events. The lack of institutional, infrastructure and systems capacity is also measured.

In both infrastructure and institutional capacity, Mexico disappeared from the list, ranking 10th in 2018 with a score of 6.5.

A very important element that makes Mexico vulnerable is its exposure to natural hazards; in 2018 it was in first place with a score of 8.3 and is currently in fourth place, as shown below:

Exposure to natural hazards					
Haiti	8.1	Colombia	7.4	Venezuela	7.0
Honduras	8.0	Dominican Republic	7.4	Cuba	6.6
Guatemala	7.9	Ecuador	7.3	Panama	6.5
Mexico	7.9	El Salvador	7.3	Jamaica	6.4
Nicaragua	7.7	Peru	7.2	Belize	6.2

Table 1 Exposure to natural hazards

Source: INFORM-LAC, Risk Management Index for Latin America and the Caribbean, United Nations, 2020.

This shows the final table for all dimensions of the countries with the highest values for risk, hazard and exposure, vulnerability and lack of coping capacity.

Country	Risk INFORM-LAC	Hazard and exposure	Vulnerability	Lack of coping capacity
LEVEL OF RISK VERY HIGH				
Guatemala	8.2	8.3	8.6	7.6
Haiti	8.5	8.0	8.4	9.0
Honduras	8.1	8.4	8.0	7.9
HIGH RISK LEVEL				
Bolivia	6.0	5.2	6.2	6.8
Colombia	7.0	8.1	7.1	6.0
El Salvador	6.7	8.1	5.1	7.2
Mexico	6.0	8.4	5.8	4.5
Nicaragua	6.6	8.0	5.7	6.3
Peru	6.0	6.1	6.3	5.5
Venezuela	7.2	8.3	6.5	6.9

Table 2 INFORM-LAC index, Risk Management Index for Latin America and the Caribbean

Source: United Nations INFORM-LAC study, 2020.

The table shows a close relationship between the risk index and the hazard and exposure index for both human and natural hazards. With regard to vulnerability, it is shown that the countries with a very high level are two Central American countries and one Caribbean country, while the others are at a high level of risk. In terms of coping capacity, Mexico has a score of 4.5.

The case of Mexico maintains a high level of risk, very high in terms of danger and exposure, medium in terms of vulnerability and lack of coping capacity. This means that in the face of a disaster, the state responds, albeit in a limited way, but with the resources it has, it attends to cases with higher levels of emergency, which means that vulnerability levels do not rise as much, but being in the medium level of vulnerability does not mean that it is not affected by levels of poverty, social backwardness, education, health centres, etc.

However, in terms of the risk and dangers to which Mexico is exposed, these are high and very high respectively. It is worth mentioning again that due to its geographic location, Mexico is highly seismic, in addition to other natural hazards such as hydrological, atmospheric, volcanic, as well as anthropogenic hazards to which it is exposed, making it one of the countries with the highest levels of exposure to natural hazards.

Within the country, the states that register a very high level of danger are Oaxaca, Guerrero and Chiapas (Atienza, 2015).

After the earthquake of 7 September 2017 with a magnitude of 8.2 Richter in which there was serious material damage and deaths, the affected communities had a response capacity according to the level of resilience that had been generated until then.

Authors such as Rutter (1992), Werner (1995) and Garmezy (1991), affirm that resilience is a process in which the capacity to face adversity is acquired, because one is not born with it, one develops the power to adapt and recover after an unhealthy or stressful event, but it will also depend on the internal and external factors that intervene.

In summary, resilience comprises the process of coping with adverse situations that are an opportunity for growth and development of both coping and protective skills for future situations.

In order to understand the level of community resilience, the five pillars of community resilience are identified: cohesive social structure; governmental honesty; cultural identity; collective self-esteem; and social humour, as proposed by Suárez (1993) apud Uriarte (2014). The Sendai Framework for Action 2015-2030 (UNISDR., 2010) also proposed four priorities for action that have been a methodological guide in various research, these priorities are: understanding disaster risk; strengthening disaster risk governance; investing in disaster risk reduction; and increasing disaster preparedness for effective response and to "build back better" in the areas of recovery, rehabilitation and reconstruction.

The effects of earthquakes on the individual-family-community are concentrated in various types of damage, for example, Palomares and Campos (2018) focus on traumatic experiences after living through a major earthquake. About one person in ten develops a psychiatric disorder afterwards. This damage will depend on whether they were in the most affected area, if they had some direct consequence or if they were already suffering from something. Among the disorders they develop are depression, post-traumatic stress disorder, anxiety, nicotine dependence, alcohol or drug abuse.

According to UNICEF (2018), children and adolescents suffer the greatest damage, as their daily activities are significantly interrupted and these changes affect their physical, cognitive and socio-emotional development (in situations of poverty this damage increases). Physical health can be directly affected by death, injury, maiming or illness due to reduced access to basic services such as water. In terms of economic damage, it was mentioned that the negative consequences are estimated to be divided into direct and indirect effects. The former refer to partial or total damage to property that may or may not be recoverable, while the indirect effects are the result of a decrease in household and/or business income due to a drop in productivity, etc.

Material damage ranges from a partially damaged house to homes destroyed and in rubble, as well as damage to churches, schools and public infrastructure, roads, etc.

The Economic Commission for Latin America and the Caribbean (ECLAC, 2020) states that a disaster implies setbacks in the economic and social progress that has been achieved in the place where the crisis occurs for years. The severity of this will depend on the capacity of each country to detect and transform its vulnerabilities.

Research study area

The Isthmus of Tehuantepec Region is one of the eight regions of the state of Oaxaca; to the north it borders the southern part of the state of Veracruz; to the south it borders the Pacific Ocean; to the east it borders the Sierra Sur Region of the state of Oaxaca; to the west it borders the state of Chiapas; it encompasses two districts: Juchitán and Tehuantepec.



Figure 1 Macro-localisation of the Isthmus region in the state of Oaxaca

Source: Own elaboration based on the National Institute of Statistics, Geography and Informatics, 2019

The Isthmus region is located on the coastal plain of the Pacific Ocean and, according to the classification for the seismic regions of Mexico made by the Federal Electricity Commission, it is located in the seismic region type D. This is explained in the Risk Atlas published by ERN, Ingenieros Consultores (2011), a classification presented by the Federal Electricity Commission (CFE) and the National Centre for Disaster Prevention (CENAPRED): "this region is characterised because ground accelerations usually exceed 70% of the acceleration of gravity and because in it, the number of epicentres registered by the National Seismological Service Network is much higher with respect to zones A, B, and C".

Compared to zone A where there are no historical records of earthquakes, there are no records of earthquakes in the last 80 years and the highest ground accelerations do not exceed 10% due to tremors.

They should not be images, everything should be editable.

It is also important to mention that Oaxaca is located in the "Pacific Ring of Fire" or also known as the "Ring of Fire", which is associated with the formation of large mountain ranges. This ring of fire links 328 of the 540 volcanoes on our planet (Valenzuela Wong, 2019).



Figure 2 Seismic regionalisation of Mexico

Source: Federal Electricity Commission, 2018

It is also important to mention that Oaxaca is located in the "Pacific Ring of Fire" or also known as the "Ring of Fire", which is associated with the formation of large mountain ranges. This ring of fire links 328 of the 540 volcanoes on our planet (Valenzuela Wong, 2019).



Figure 3 Ring of Fire

Source: Science UNAM, 2018

The region of the Isthmus of Tehuantepec, located in the state of Oaxaca, is geographically located on a zone of interaction of three tectonic plates: the Cocos plate, the Caribbean plate and the North American plate, which provide considerable elements and evidence of constant seismic movement.

In this same sense, in addition to the movement caused by the tectonic plates, geological faults are some of the evidence produced on the surface by the same plate dynamics, which can produce earthquakes of low to very high intensity.



Figure 4 Tectonic plates of Mexico
Source: Los sismos una amenaza cotidiana. Atienza, 2015

Taking into consideration the above, the following table issued by SEDATU (2017), shows the total damage to housing by municipality, caused by the earthquake of 7 September 2017 in Oaxaca.

Id	Municipality	Dwellings	51	San Miguel Tlaxiaco	2
1	Asunción Cuvotepeil	3	52	San Nicolás Hidalgo	27
2	Asunción Ixtaltepec	2,974	53	San Pedro Comitancillo	604
3	Calihualá	13	54	San Pedro Huamelula	1,487
4	Chahuites	1,078	55	San Pedro Huilotepec	383
5	Ciudad Ixtepec	4,130	56	San Pedro Mártir Yucuxaco	10
6	Cosoltepec	4	57	San Pedro Nopala	13
7	El Barrio De La Soledad	151	58	San Pedro Tapanatepec	2,611
8	El Espinal	1,106	59	San Pedro Y San Pablo Teposcolula	2
9	Fresnillo De Trujano	20	60	San Pedro Y San Pablo Tequixtepec	6
10	Guadalupe De Ramírez	5	61	San Sebastián Nicananduta	2
11	Guevea De Humboldt	929	62	San Sebastián Tecomaxtlahuaca	5
12	Heroica Ciudad De Huajuapán De León	452	63	San Simón Zahuatlán	4
13	Heroica Ciudad De Juchitán De Zaragoza	15,087	64	Santa Catarina Zapotitlán	1
14	Ixpantepec Nieves	12	65	Santa Cruz De Bravo	13
15	Magdalena Tequisistlán	296	66	Santa Cruz Tacache De Mina	88
16	Magdalena Tlaxiaco	106	67	Santa María Camotlán	3
17	Mariscala De Juárez	107	68	Santa María Chimalapa	398
18	Matías Romero	459	69	Santa María Guienagati	285
19	Reforma De Pineda	1,120	70	Santa María Jalapa Del Marqués	1,114
20	Salina Cruz	997	71	Santa María Mixtequilla	604
21	San Agustín Atenango	4	72	Santa María Petapa	684
22	San Andrés Dincuiti	6	73	Santa María Tototapilla	85
23	San Andrés Lagunas	2	74	Santa María Xadani	1,450
24	San Andrés Tepetlapan	3	75	Santiago Astata	498
25	San Antonio Monte Verde	16	76	Santiago Ayuquihilla	4
26	San Antonio Acutla	2	77	Santiago Cacaloxtepec	3
27	San Blas Atempa	1,282	78	Santiago Chazumba	4
28	San Dionisio Del Mar	1,548	79	Santiago Del Río	9
29	San Francisco Del Mar	2,194	81	Santiago Ihuatlán Plumas	6
30	San Francisco Ixhuatlán	2,658	82	Santiago Lachiguri	784
31	San Francisco Teopan	1	83	Santiago Laollaga	295
32	San Francisco Tlapancingo	5	84	Santiago Miltepec	1,603

33	San Jerónimo Silacayoapilla	20	85	Santiago Tamazola	15
34	San Jorge Nuchita	9	86	Santo Domingo Chihuitán	215
35	San José Ayuquila	16	87	Santo Domingo Ingenio	1,010
38	San Juan Bautista Tlachichilco	1,070	88	Santo Domingo Petapa	1,090
39	San Juan Mixtepec	6	89	Santo Domingo Tehuantepec	4,321
40	San Juan Numí	16	90	Santo Domingo Tonalá	149
41	San Marcos Arteaga	4	91	Santo Domingo Yodohino	2
42	San Martín Peras	3	92	Santo Domingo Zanatepec	1,578
43	San Martín Zacatepec	3	93	Santos Reyes Tepejillo	2
44	San Mateo Del Mar	1,788	94	Santos Reyes Yucuná	1
45	San Mateo Nejápam	4	95	Silacayoapam	41
46	San Mateo Tlapitepec	7	96	Teotongo	3
47	San Miguel Ahuehuetitlán	17	97	Tlaxiaco Plumas	4
48	San Miguel Amatitlán	32	98	Unión Hidalgo	2,811
49	San Miguel Chimalapa	646	99	Villa De Tamazulápam	13
50	San Miguel Tenango	105	100	Zapotitlán Lagunas	132

Table 3 Damaged housing by municipality in the state of Oaxaca
Source: Secretaría de Desarrollo Agrario Territorial y Urbano SEDATU, 2017

Based on the above, the municipality of Asunción Ixtaltepec was selected for the development of the research since the houses damaged by the earthquake represented 64% of the total.

Asunción Ixtaltepec

Bordering

Asunción Ixtaltepec is bordered to the north by the municipalities of: El Barrio de la Soledad and Santa María Chimalapa; to the east with the municipalities of Santa María Chimalapa, San Miguel Chimalapa and the Heroic City of Juchitán de Zaragoza; to the south with the municipalities of the Heroic City of Juchitán de Zaragoza, El Espinal, San Blas Atempa and San Pedro Comitancillo; to the west with the municipalities of San Pedro Comitancillo, Magdalena Tlaxiaco, Ciudad Ixtepec and El Barrio de la Soledad.

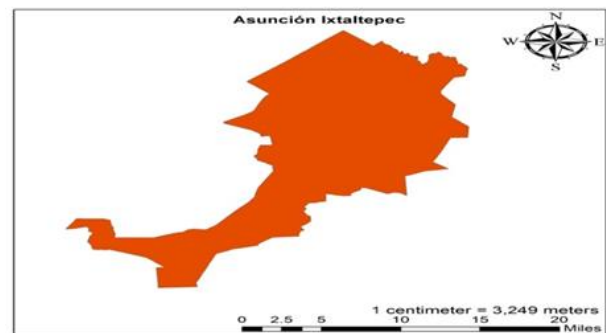


Figure 5 Asunción Ixtaltepec
Source: Own elaboration, ArcGis 2019

The total surface area of the municipality is 659.28 km², which represents 3.3% of the total surface area of the Isthmus region (19,977 km²), occupying 0.71% of the surface area of the state of Oaxaca (93,757 km²).

Forms of organisation and governance structure

Asunción Ixtaltepec is a municipality that is politically formed by political parties, the organisational structure is by town council, elected by a majority of the population in party elections, generally consisting of the Municipal President, Syndics and Councillors.

Characteristics of the population

The following data were consulted in CONEVAL's 2015 municipal poverty measurement report. The total population of Asunción Ixtaltepec is 15,105 people, occupying 0.37% of the state level (4,019,821), of which 7,620 are women and 7,485 are men.

Indigenous and language-speaking population

The total population of indigenous origin is 10,995, which represents 72.8% of the total population in the municipality of Asunción Ixtaltepec.

The population aged five years and over is 14,078, of which 6,600 speak an indigenous language, representing 46.9%; 6,385 speak Spanish in addition to their mother tongue, i.e. only 129 people do not speak Spanish.

Regarding the social situation, the following data were obtained

Social situation	Total
In poverty	6,946
In extreme poverty	1,503
Non-vulnerable - non-poor	2,588
Vulnerable income	817

Table 4 Social situation

Source: INEGI; *Social deprivation and economic well-being 2015*

The degree of social backwardness in this municipality is very low, compared to the state level, which is classified as very high. Even though there are two priority attention zones (ZAP). There are 4,631 homes, of which 2,974 were affected by the earthquake. In terms of quality and basic services in housing, the following data were obtained:

Quality and space in housing	%
With earthen floors	1.8
With roof of flimsy material	0.1
With walls of flimsy material	1.5
Overcrowded	4.0
Basic services in the dwelling	
No piped water	4.2
No drainage	3.4
No electricity	1.1

Table 5 Quality and basic services in housing

Source: INEGI; *Social deprivation and economic well-being 2015*

Finally, data related to the needs of the community according to SISPLADE (2020) are presented, which show that more than 50% of the population has income below the welfare line; there is a 40% lack of access to basic housing services and 63% of the population lacks access to social security. These are important aspects that increase the vulnerability of the municipality's population.



Figure 6 Needs of Asunción Ixtaltepec

Source: SISPLADE, 2020

Theoretical research model

This study was carried out using the social theory of risk developed by Ulrich Beck in 1986 as the basis and principle of risk theory, followed by Claudia E. Natenzon (1995), as well as the theory of disasters as a social phenomenon Maskrey (1993) and complemented by the theory of community action (Zambrano and Berroeta, 2012) and community resilience in which there are several authors (Arciniaga, 2010); (Uriarte, 2005; GOAL, 2015; Suárez Ojeda, 1993). In this way, the theoretical proposal is summarised in the following research model.

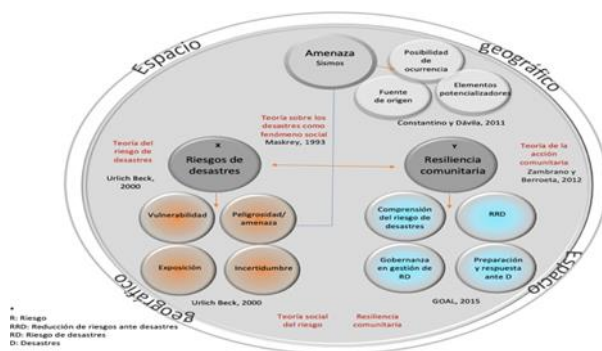


Figure 7 Explanatory model

Source: Own elaboration

This model shows that the factors that influence community resilience are supported by the theory of community action and community resilience, identifying five pillars: cohesive social structure, government honesty, cultural identity, collective self-esteem and social humour.

The five pillars range from how the community is structured, the identity they share together through beliefs and ways of life, to the governmental side of decision-making and how this is shared with the community.

It also mentions the seven anti-pillars of community resilience, i.e. those factors that limit the capacity to respond and recover. These pillars are: poverty, cultural poverty, moral poverty, political poverty, economic dependency, social isolation and stigmatisation of victims.

In terms of disaster risk factors, the social theory of risk and the theory of disasters as social phenomena were used, in which vulnerability, exposure, danger and threat, as well as uncertainty are highlighted. The main characteristic of vulnerability is that it is the main factor for the existence of a disaster, resulting from a combination of hazards and the danger to which the community is exposed.

As confirmed in their studies by Kates (1970) and Rubiano (2009) apud Canese et al., (2022), the contribution of the Social Sciences to disaster management studies has made it possible to understand the social and cultural problems that accompany disasters, in order to guide the management, action, participation and education of citizens.

In this sense, Casarrubia (2020) apud Canese et al., (2022), states that risk management has been approached from a macro approach, where the local dimension and citizen participation are not considered. Agreeing with Casarrubia, Durán Vargas points out that local management is an "option for direct action on the most concrete conditions of insecurity in communities and that it acts on the capacities and resilience that the history and social reality of the community builds".

Methodological design

The method of this research is qualitative, focused on understanding and deepening community resilience to earthquakes in the study community, relating the perspective of the inhabitants in their natural environment and context with the theoretical part (Hernández et al., 2014).

The design is action research, which helped to identify how to solve problems in the face of earthquake exposure and the path towards community resilience, as well as to improve and design DRR practices, with the main purpose of providing lines of action to guide decision-making for prevention, coping and coping.

Through this research design, the aim is to foster interest in change in the communities, to transform the current situation into a desired situation, and to make the inhabitants aware of their role in this transformation process.

According to Hernández et al. (2014), action research focuses on local and individual practices, proposes to elaborate and follow actions, and above all, one characteristic is that the research is accompanied, i.e. the researcher and one or more members of the community jointly create links to reach the objective.

At the same time, Ander-Egg (2003) suggests that there should be an intervention that creates mutual knowledge, always researching topics of common interest, not just a topic of personal interest. In this case, community resilience is a topic that both major authorities and civil protection and society have been interested in studies of this type, especially because it is a relevant topic due to the nature of its origin and the damage it has suffered, reasons that are set out in the justification.

In this sense, the essential phases of action research design listed by Stringer (1999) are firstly to observe, think and act. In the first one, the aim is to analyse, then interpret and finally propose strategies to solve problems in order to create improvements (apud Hernández et al., 2010).

It is considered that the scope of this research was descriptive and explanatory, with the former looking for specific characteristics and profiles of the communities in terms of community resilience (Hernández et al., 2010).

The explanatory scope is based on the problem, the aim is to explain the causes of the problem, to try to establish the causes of the problem, in this case, to find out the level of community resilience.

The techniques used were participant observation, surveys, focus groups and semi-structured interviews.

Authors such as Pascuas (2022) propose a methodology for managing the ecosystem resilience of natural areas that can serve as a basis for decision-makers and for those who design public policies on the subject.

What is important about this methodology is that it focuses not only on the ecological aspects, but also on the legal and socio-cultural aspects of each territory, and it is hoped that the application of this methodology will strengthen the resilience of ecological areas. This methodological process can be useful in research on community resilience (Pascuas, 2022).

Instrument for the collection of information

The instrument used was a questionnaire which is mainly based on the one developed by GOAL, an Association founded in Ireland in 1977 and which has been operating in Honduras for 21 years, characterised by the management of "disaster risk management, early warning systems, market systems, resilience measurement and applicability". (GOAL, 2015).

GOAL's perspective, and that of other authors, has been guided by the Sendai Framework for Action 2015-2030, developing a survey that is underpinned by extensive research by John Twigg. This partnership has applied it in 11 countries mostly in Africa and only in one country in Asia and two in Latin America.

In the same context, the ARC-D tool (named after GOAL) consists of two parts, part A is a description of the community context, while part B is assessed through 30 questions.

Due to the flexibility of the tool, which can be adapted to any type of hazard and local context, it has been complemented with the "Minimum indicators for building the resilience of municipalities" of CONRED (2015), in which essential aspects are taken.

In order to apply the questionnaire and identify the level of community resilience, two focus groups were carried out in which 15 people from the community were required in each one to provide the information. Balance is sought between participants, men and women, people from the community with different activities, different ages, with disabilities, etc.

Results

The pillars and anti-pillars are elements that allow us to identify the existence of community resilience in the communities, in each community there is a different way of responding to disaster situations. According to the pillars and anti-pillars of Suárez (1993) apud Uriarte (2014), the following was obtained:



Figure 8 The Five Pillars of Community Resilience in Asunción Ixtaltepec

Source: Own elaboration based on the community resilience perspective and fieldwork 2019- 2022.

The analysis of the community resilience radar in Asunción Ixtaltepec to determine the level of resilience identified that among the 16 indicators of community resilience, the participatory community risk assessment, the early warning system and leadership in the coordination of preparedness, response and recovery presented the lowest values and therefore are the ones that contribute to vulnerability. In contrast, those with the highest values are women's participation and security, peace and conflict mitigation mechanisms with the highest values, contributing to equity in participation and social cohesion and conflict prevention, respectively.

And of the 14 disaster risk indicators, higher values can be noted than for community resilience. The highest is water supply and access to water, with this indicator having the best overall score. Among the lowest values are sustainable housing, environmental management, business linkages, insurance, emergency operation capacity and knowledge of rights and entitlements.

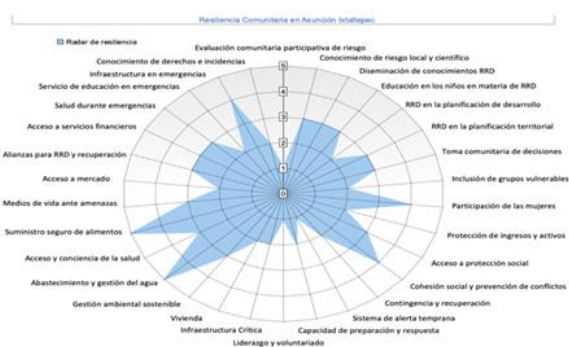


Figure 9 Community Resilience in Asunción Ixtaltepec
Source: Own elaboration

Finally, the results of Section B of the ARC-D tool are presented, which presents the results of the 30 questions posed in relation to the categories of community resilience, with the objective of establishing the level of community resilience in the municipality of Asunción Ixtaltepec.

Category 1: Participatory Community Risk Assessment		Key Question 1: Has the community conducted a participatory risk assessment?	Asunción Ixtaltepec
Level description		Characteristics of resilience	05
1	Little awareness/motivation and no action.	A structured, participatory risk assessment has never been conducted in the community. Or, if it has been done, the assessment is outdated or not in use and community members do not know about its findings.	x

Component 2: Local and scientific local and scientific knowledge		Key question 2: Does the community combine local knowledge/perception of risk with scientific knowledge, data and risk assessments?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	The community combines local knowledge/perceptions of risk with a degree of scientific analysis/data, but this can only address some aspects of the necessary disaster risk awareness.	x

Component 3: Dissemination of DRR knowledge		Key question 3: Have community members been exposed to or participated in DRR and recovery awareness-raising events (campaigns, debates and trainings) and have these resulted in an improvement in their knowledge and practices?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	Some community members have been exposed to or participated in DRR/recovery awareness-raising events. These have resulted in some improved knowledge and practices.	x

Component 4: DRR education for children		Key question 4: Are DRR and recovery knowledge and capacities being passed on to children formally, through local schools, and informally, through oral tradition from one generation to the next?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	Some DRR knowledge and skills are being passed on through both oral tradition and local schooling, however local teachers have not been formally trained in DRR and recovery.	x

Component 5: DRR in Development Planning		Key Question 5: Is DRR seen by the community as an integral part of plans and actions to achieve broader community objectives (e.g. poverty alleviation, quality of life)?	Asunción Ixtaltepec
Level description		Characteristics of resilience	05
2	Some awareness / motivation and limited, fragmented and short-term actions.	The community sees the importance of DRR in achieving broader community objectives, but has not documented DRR actions in their local development plans (or there are DRR actions documented in the local development plan, but this is not used or is outdated).	x

Component 6: DRR in spatial planning		Key Question 6: Does community decision-making on land use and management take disaster risk into consideration?	Asunción Ixtaltepec
Description of levels		Resilience characteristics	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	The community has a land use plan that takes into consideration most aspects of disaster risk, but it is not supported/aligned with local/central government land-use planning and there are difficulties in its implementation.	x

Component 7: Community decision-making		Key Question 7: Is the community decision-making process effective and accountable?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	Community leaders have medium level of commitment and effectiveness, with more long-term actions, but these address only some aspects of the problem and are not part of a long-term strategy. Community leaders are occasionally accountable to others (e.g. only when dealing with big problems).	x

Component 8: Inclusion of vulnerable groups		Key Question 8: Are vulnerable groups included/represented in DRR and recovery decision-making and management in the community?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
2	Some awareness/motivation and limited, fragmented, short-term actions	Vulnerable groups occasionally participate/are represented in decision-making and management in DRR and community recovery. Community decisions and actions rarely address their needs and priorities.	x

Component 9: Women's participation		Key Question 9: Are women involved in decision-making and management of DRR and recovery in the community?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
4	Long-term actions linked to a strategy; the main aspects of the problem are addressed, but there are still shortcomings (especially systemic).	Women regularly and actively participate in decision-making and management in DRR and community recovery, and hold leadership positions in the decision-making body. Decisions and actions taken usually address most of the needs and priorities of women in the community.	x

Component 10: Income and asset protection		Key Question 10: Are household assets (income, savings and convertible assets) sufficiently large, diverse and protected to reduce vulnerability to disasters?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
2	Algo de conciencia/motivación y acciones limitadas, fragmentarias y de corto plazo.	Pocos hogares en la comunidad tienen una base de activos suficientemente extensa, diversa y protegida como para reducir la vulnerabilidad ante desastres (apoyada por capacidades de afrontamiento y/o de adaptación).	x

Component 11: Access to social protection		Key Question 11: Does the community have access to informal or formal protection schemes to support them in disaster risk reduction or recovery?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	CAwareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	Community members can access both informal and formal social protection schemes; however these can only support some of the necessary aspects of risk reduction and recovery.	x

Component 12: Social cohesion and conflict prevention		Key Question 12: Is there a sense of peace/security and effective conflict prevention/mitigation mechanisms, both within the community and with other communities?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
4	Long-term actions linked to a strategy; the main aspects of the problem are addressed, but there are still shortcomings (especially systemic).	There is a sense of security and peace within the community members, with occasional tensions within the community and/or with other communities rarely escalating to violence and resolved in a peaceful and timely manner.	x

Component 13: Contingency and recovery planning		Key Question 13: Does the community use a contingency and recovery plan that has been jointly developed, is widely understood and includes measures to protect vulnerable groups?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
2	Some awareness/motivation and limited, fragmented and short-term actions.	The community has a contingency and recovery plan, but its content only addresses some of the major risks. The plan addresses the needs of very few vulnerable groups and few community members are aware of its contents. The plan has never been implemented (in drills) and updated.	x

Component 16: Leadership and volunteerism in response and recovery		Key Question 16: Does the community play a leadership role in coordinating preparedness, response and recovery, reaching out to all affected people (including the most vulnerable), through organised and trained volunteer corps?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
1	Little awareness/motivation and no action.	The community plays a passive role in preparedness, response and recovery, with the needs of the most affected and vulnerable people neglected. Community volunteering is either non-existent or negligible.	x

Component 14: Early Warning System		Key Question 14: Is there an Early Warning System (EWS) operational in the community?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
1	Little awareness/motivation and no action.	Due to local knowledge, the community knows when a threat is going to occur; but they do not (or cannot) take appropriate action.	x

Component 17: Critical Infrastructure		Key Question 17: Is the community's critical infrastructure and basic services disaster resilient (i.e. located in low-risk areas, using hazard-resistant construction methods and structural mitigation measures)?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
2	Some awareness/motivation and limited, fragmented and short-term actions.	Most critical infrastructure and basic services in the community are located in areas highly vulnerable to disasters. Little infrastructure is adequately protected (either by access to hazard-resistant construction, structural mitigation measures and/or by being located in low-risk areas).	x

Component 15: Preparedness and response capacity		Key Question 15: Is there a trained and operational disaster preparedness, response and early recovery organisation in the community?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
2	Some awareness/motivation and limited, fragmented and short-term actions.	There is a responsible community organisation (preparedness, response and early recovery) but its operational capacity is weak and only some of its members have been formally trained in preparedness, response and early recovery.	x

Component 18: Housing		Key Question 18: Is the housing in the community disaster-resilient (i.e. located in low-risk areas, using hazard-resistant construction methods and structural mitigation measures)?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
2	Some awareness/motivation and limited, fragmented and short-term actions.	Most of the houses in the community are located in areas highly vulnerable to disasters. Few of them are adequately protected against adverse events (*).	x

Component 21: Health access and awareness		Key Question 21: Do community members maintain good health services (through adequate food and nutrition, hygiene and health care) and are they aware of measures to stay healthy and protect life?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	Some people apply good practices to improve health and protect lives from health risks affecting the community. In general, health status is a good thing in the community.	x

Component 19: Sustainable environmental management		Key Question 19: Does the community adopt sustainable environmental and ecosystem management practices that reduce disaster risk and adapt to risks related to climate variability and change?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Long-term awareness and actions, but no strategy and not all aspects of the problem are addressed.	The community employs longer-term environmental management practices to protect the environment from degradation and the negative effects of climate change. However, these measures only address some aspects of the problem and are not part of a long-term strategy.	x

Component 22: Safe food supply		Key Question 22: Does the community maintain a safe and sufficient food supply?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
5	Long-term actions are linked to a strategy and address all aspects of the problem; actions are sustainable and integrated into society.	All households have or can access safe and sufficient food supplies during disasters as well as in normal times.	x

Component 23: Hazard-resilient livelihoods practice		Key Question 23: Does the community apply resilient livelihood practices for food and income security?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	Most community members adopt resilient livelihood practices to more numerous and longer-term adverse events; however these are insufficient and/or not part of a long-term strategy. Some significant post-disaster impact remains likely.	x

Component 20: Water supply and water supply and management		Key Question 20: Does the community have access to sufficient quantity and quality of water for consumption as well as for domestic and productive needs?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
5	Long-term actions are linked to a strategy and address all aspects of the problem; actions are sustainable and integrated into society.	The community can access sufficient water quality and quantity, both in normal times and in emergency situations, as a result of the long-term strategy and practices, fully supported by the authorities in water management.	x

Component 24: Market access		Key Question 24: Are local market links for products, employment and services protected against adverse events?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
2	Some awareness/motivation and limited, fragmented and short-term actions.	Most of the local market linkages on which the community depends are extremely vulnerable to adverse events. Fragmented and insufficient measures are in place for their protection and restoration from adverse events.	x

Component 25: Partnerships for DRR and recovery		Key Question 25: Are there clear, agreed and stable partnerships between the community and other actors (local authorities, NGOs, businesses, etc.) that provide resources for DRR and recovery?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	Partnerships exist with external actors, which provide funds/resources for long-term DRR and recovery actions. However, these are unstable in their frequency and not linked to a long-term plan for DRR and recovery.	x

Component 26: Access to financial services		Key Question 26: Are there accessible and flexible financial services, whether formal or informal (savings and credit schemes, micro-finance)?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	Community members have access to financial services. However, these are only able to finance some necessary aspects of risk reduction and recovery actions.	x

Component 27: Access to health services during emergencies		Key Question 27: Does the community have access to health services and health workers who are well equipped and trained to respond to the physical or mental health consequences of disasters?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
3	Awareness and long-term actions, but no strategy and not all aspects of the problem are addressed.	There is an accessible health centre staffed with health personnel, medicines and basic equipment. Services (including outreach and referrals) are not sufficient for all health problems during emergencies and are partially consistent with the relevant national strategy for emergencies.	x

Component 28: Education services in emergencies		Key Question 28: Do education services have the capacity to continue operating during emergencies?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
2	Some awareness/motivation and limited, fragmented and short-term actions.	Education services usually experience widespread disruption as a result of adverse events. The community is aware and motivated to act, but measures to ensure continuity of education services are sporadic and fragmented.	x

Component 29: Emergency infrastructure		Key Question 29: Are emergency shelters (purpose-built or modified) accessible to the community and with adequate facilities for the entire affected population?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
4	Long-term actions linked to a strategy; the main aspects of the problem are addressed, but there are still shortcomings (especially systemic).	In addition to the homes of relatives and neighbours, the community has a structure that serves as a shelter during emergencies with adequate conditions to meet the basic needs of most of the affected people and protect groups of the vulnerable during emergencies.	x

Component 30: Knowledge of rights and advocacy		Key Question 30: Does the community know their rights, the relevant legal mechanisms and the actors responsible for their fulfilment, and do they advocate for them?	Asunción Ixtaltepec
Description of levels		Characteristics of resilience	05
2	Some awareness/motivation and limited, fragmented and short-term actions.	The community has some awareness of their rights, the relevant legal mechanisms and the actors responsible for their enforcement, but takes little or no advocacy action.	x

Table 6 Results of Section B of the ARC-D tool

The questions in this section were designed and adapted to the variables of Community Resilience and Vulnerability. For each question there were five possible answers, which correspond to the "level of resilience", ranked from 1 to 5, (where 1 indicates minimum resilience and 5 indicates maximum resilience). The following table specifies each level and can be used as a percentage or as a level of resilience.

%	Level	CATEGORY
0-20	1	Low Resilience
21-40	2	Low Resilience
41-60	3	Medium Resilience
61-80	4	Resilience
81-100	5	High Resilience

Table 7 Resilience level
Source: GOAL, 2015

It can be concluded for the Municipality of Asunción Ixtaltepec that the level of community resilience to natural disasters is between the category of Low and Medium Resilience, since of the 30 components, 12 were located at level 3; 10 at level 2; 3 at levels 1 and 4 and finally 2 at level 5.

Therefore, the community should place emphasis in the Community Resilience Plan on those components that prevent reaching at least the level of resilience (4) in the medium term, in order to achieve the benefit of the population in general, given that there are external factors (beyond its control) related to the geographical location of Asunción Ixtaltepec, which make the community highly vulnerable to natural disasters and community resilience plays a fundamental role in these cases.

As confirmed in their studies by Kates (1970) and Rubiano (2209) apud Canese et al., (2022), the contribution of the social sciences to disaster management studies has made it possible to understand the social and cultural problems that accompany disasters, in order to guide the management, action, participation and education of citizens. In this sense, Casarrubia (2020) apud Canese et al., (2022), states that risk management has been approached from a macro approach, where the local dimension and citizen participation are not considered. Agreeing with Casarrubia, Durán Vargas points out that local management is an "option for direct action on the most concrete conditions of insecurity in communities and that it acts on the capacities and resilience that the history and social reality of the community builds".

References

- Ander-Egg, E. (2003). Repasando la Investigación Acción Participativa (4ª). Buenos Aires: Lumen. [fecha de Consulta 04 de febrero de 2021]. <http://metodo3.sociales.uba.ar/wp-content/uploads/sites/169/2014/10/Ander-Egg-20031.pdf>
- Arciniega, Juan de Dios (2010). La resiliencia comunitaria en situaciones catastróficas y de emergencia. *International Journal of Developmental and Educational Psychology*, 1(1). [fecha de Consulta 11 de Octubre de 2019]. ISSN: 0214-9877. <https://www.redalyc.org/articulo.oa?id=349832324073>
- Atienza, V. M. (2015). *Los sismos una amenaza cotidiana*. México: La caja de cerillos. ISBN: 9786078205905. https://www.researchgate.net/publication/311608603_Los_sismos_Una_amenaza_cotidiana
- Baas, S., Ramasamy, S., Pryck, J. D., & Battista, F. (2009). *Análisis de Sistemas de Gestión del Riesgo de Desastres Una Guía*. Roma: FAO. [fecha de Consulta 8 de Mayo de 2020]. ISSN: 978-92-5-106056-8. <https://www.fao.org/3/i0304s/i0304s.pdf>
- Canese de Estigarribia, M.I., Vuyk E. C.M., González C. R., Britez A., A.A., Lezcano V. J.C. y Prieto G, V.L. (2022). Dimensiones y desafíos de la participación ciudadana en la gestión de riesgo de desastres en Asunción, Área Metropolitana y Bajo Chaco, Paraguay. *Revista de Estudios Latinoamericanos sobre Reducción del Riesgo de Desastres REDER*, 6(1), 112- 123. <https://doi.org/10.55467/reder.v6i1.87>
- CEPAL. (2020). *Pandemia provoca aumento en los niveles de pobreza sin precedentes en las últimas décadas e impacta fuertemente en la desigualdad y el empleo*. [fecha de Consulta 6 de Junio de 2021]. <https://www.cepal.org/es/comunicados/pandemia-provoca-aumento-niveles-pobreza-sin-precedentes-ultimas>.
- Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL). (2020). *Informe de Pobreza 2020*. Base de datos en línea. [fecha de Consulta 16 de abril de 2021]. <https://municipalconeval.hub.arcgis.com/pages/pobreza.te>
- ERN, Ingenieros Consultores S.C. (2011). *Actualización del Atlas de Riesgos del estado de Oaxaca en los fenómenos geológicos e hidrometeorológicos*. México: CENAPRED. <https://www.oaxaca.gob.mx/proteccioncivil/atlas-de-riesgo/>
- Falconí, E. J., Moscol, A. A., Ramírez, H. O., & Sociales, F. C. (2016). *Vulnerabilidad y resiliencia socioeconómica ante los desastres naturales en el distrito de Sayán, 2016*. Lima: Universidad Nacional Federico Villareal.

Garmezy, N. (1991). Resilience in Children's Adaptation to Negative Life Events and Stressed Environments. <https://doi.org/10.3928/0090-4481-19910901-05>

<https://journals.healio.com/doi/epdf/10.3928/0090-4481-19910901-05>

GOAL. (2015). Herramienta para medir la resiliencia comunitaria ante desastres. Guía Metodológica. Honduras: GOAL. <https://dipecholac.net/docs/herramientas-proyecto-dipecho/honduras/Guia-Medicion-de-Resiliencia.pdf>

Hernández, R., Fernández, C., y Baptista, P. (2014). Metodología de la investigación (6ª edición). México D.F.: McGraw-Hill. <https://www.uca.ac.cr/wpcontent/uploads/2017/10/nvestigacion.pdf>

Novelo, D. (2020). Evaluación de peligros y riesgos por fenómenos naturales [Material del curso]. Universidad Autónoma de México, Ciudad de México. <https://es.coursera.org/learn/riesgos-fenomenos-naturales>

Maskrey, A. (1993). Los desastres no son naturales. Panamá: Red de Estudios Sociales en Prevención de Desastres en América Latina. <https://www.desenredando.org/public/libros/1993/ldnsn/LosDesastresNoSonNaturales-1.0.0.pdf>

Naciones Unidas, DFID, ECHO. (2020). Índice de gestión de riesgos para América Latina y El Caribe: Actualización INFOR-LAC 2020. https://drmkc.jrc.ec.europa.eu/inform-index/Portals/0/InfoRM/2020/Subnational/LAC/LAC_INFORM_2020_v007_MainResults_Spa.pdf

Natenzon, Claudia E. (1995). Catástrofes naturales, riesgo e incertidumbre. Buenos Aires: FLACSO. <https://www.gub.uy/sistemanacionalemergencias/sites/sistemanacionalemergencias/files/documentos/publicaciones/PUB-Natenzon-Catastrofes-naturales-riesgo-e-incertidumbre.pdf>

Palomares, E., Campos, E. (2018). Impacto de los terremotos en la salud mental. Ciencia. Vol 69 (3). https://www.amc.edu.mx/revistaciencia/images/revista/69_3/PDF/impactoSaludMental.pdf

Pascuas, R. E., Basto, M. M. B. y Fontalvo B. J.C., (2022). Methodological proposal to manage ecosystem resilience of natural protected areas in Colombia. Revista Chapingo Serie Agricultura Tropical, 2(1), 77-91. doi:<http://dx.doi.org/10.5154/r.rchsat.2022.03.06>

Rutter, M. (1993). Resilience: Some Conceptual Considerations. Journal of Adolescent Health. Vol. 14 (8). ISSN 1054-139X, [https://doi.org/10.1016/1054-139X\(93\)90196-V](https://doi.org/10.1016/1054-139X(93)90196-V). <https://www.sciencedirect.com/science/article/pii/S1054139X9390196V>.

SEDATU. (2017). Censo de Viviendas Dañadas por los Sismos del Mes de Septiembre de 2017. <http://transparencia.sedatu.gob.mx/#>

Sistema de Información para la Planeación del Desarrollo Municipal. (2020). Asunción Ixtaltepec. México: SISPLADE. <http://sisplade.oaxaca.gob.mx/EvalPlanesMunAPP/planesmunicipales.asp>

SSN, S. S. (2017). Zona de subducción mexicana y su potencial para un sismo mayor. México: Instituto de Geofísica UNAM. <http://www.ssn.unam.mx/jsp/reportesEspeciales/sismoMayor.pdf>

Uriarte Arciniega, J. D. (2005). La resiliencia. Una nueva perspectiva en psicopatología del desarrollo. Revista de Psicodidáctica, 10(2), 61-79. [fecha de Consulta 19 de Agosto de 2022]. ISSN: 1136-1034. <https://www.redalyc.org/articulo.oa?id=17510206>

Uriarte Arciniega, J. D. (2010). La resiliencia comunitaria en situaciones catastróficas y de emergencia. International Journal of Developmental and Educational Psychology, 1(1). [fecha de Consulta 2 de mayo de 2019]. ISSN: 0214-9877. <https://www.redalyc.org/articulo.oa?id=349832324073>

Uriarte, J. D. (2014). Escritos de resiliencia. La resiliencia individual y comunitaria. España: URILAN [fecha de Consulta 4 de septiembre del 2019]. https://www.academia.edu/32178675/ESCRITOS_DE_RESILIENCIA_LA_RESILIENCIA_INDIVIDUAL_Y_COMUNITARIA

UNISDR. (2010). Reducción del Riesgo de Desastres: Un Instrumento para alcanzar los Objetivos de Desarrollo del Milenio. Ginebra, Suiza: Unión Interparlamentaria.

Valenzuela R., (2018). Cinturón de fuego, zona de sismos y volcanes. México: UNAM.<https://ciencia.unam.mx/leer/807/cinturon-de-fuego-zona-de-sismos-y-volcanes->

Velásquez, L. (2017). 7 de septiembre, el día de desastres de Oaxaca. México: UNAM. <https://unamglobal.unam.mx/7-de-septiembre-lo-que-paso-un-dia-como-hoy/>

Werner, E. E. (1995). Resilience in Development. *Current Directions in Psychological Science*, 4(3). <http://www.jstor.org/stable/20182335>

Zambrano, A. y Berroeta, H. (2012). Teoría y Práctica de la acción comunitaria. Chile:RIL. https://www.academia.edu/5183644/Teor%C3%ADa_y_pr%C3%A1ctica_de_la_acci%C3%B3n_comunitaria_aportes_desde_la_psicolog%C3%ADa_comunitaria

Pascuas R. E., Basto M. M. B., y Fontalvo B. J.C., (2022). Methodological proposal to manage ecosystem resilience of natural protected areas in Colombia. *Revista Chapingo Serie Agricultura Tropical*, 2(1), 77-91. doi: <http://dx.doi.org/10.5154/r.rchsat.2022.03.06>.

Precariousness, inequalities and emotional health care practices in university students**Precariedad, desigualdades y prácticas de atención de la salud emocional en estudiantes universitarios**

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Abstract*Objectives*

The objective of this research was to identify emotional affectations in university students and the relationship they have with their learning in times of pandemic as well as their sociocultural context. For this purpose, the sociological perspective of Pierre Bourdieu was recovered with the intention of articulating the production of subjectivities from their objective conditions.

Methodology

Methodologically, two moments were established: 1) construction of social classes based on their volume and capital structure and 2) establish the relationship of their perceptions about emotions and learning by constructed social classes.

Contribution

The findings suggest that given the difference between the precariousness and the inequalities that deprive them, their perceptions and dispositions in this educational transition affect an inadequate attention to emotional problems. Therefore, it can be concluded that socialization in the virtual educational field demands the consideration that the social experience must face all the vital structures, including cognition, emotions and the will of social agents.

Subjectivities, Affectations, Inequalities, Sociocultural**Resumen***Objetivos*

El objetivo de esta investigación fue identificar afectaciones emocionales en estudiantes universitarios y la relación que guardan con su aprendizaje en época de pandemia, así como su contexto sociocultural. Para tal efecto, se recuperó la perspectiva sociológica de Pierre Bourdieu con la intención de articular la producción de subjetividades a partir de sus condiciones objetivas.

Metodología

Metodológicamente, se establecieron dos momentos: 1) construcción de clases sociales con base en su volumen y estructura de capital y 2) establecer la relación de sus percepciones sobre emociones y aprendizaje por clases sociales construidas.

Contribución

Los hallazgos sugieren que ante la diferencia entre las precariedades y las desigualdades que privan en ellos, sus percepciones y disposiciones en esta transición educativa inciden una inadecuada atención de los problemas emocionales. Por lo que se puede concluir que la socialización en el ámbito educativo virtual demanda la consideración que la experiencia social debe enfrentarse con la totalidad de las estructuras vitales, entre ellas la cognición, las emociones y la voluntad de los agentes sociales.

Subjetividades, Afectaciones, Desigualdades, Sociocultural

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Introduction

The relationship between the socio-cultural environment and emotions in social agents has undoubtedly been studied for some time, such is the case of the evidence regarding the relationship between mathematics skills and the socio-economic level of students, the higher the social skills, the better the mathematics performance and vice versa (San Martín & Tyrso, 2010), on the other hand, the main source of educational inequality in Latin America is the social and economic conditions of the students' families of origin:

[...] more specifically, the cultural level of the families is the composite factor that is able to explain most of the variance in students' academic performance; and the highest level of education attained by the student's mother is the best simple variable. In other words, the main source of educational inequality in the region is the economic and socio-cultural inequality of students' families of origin (Murillo & Román, 2008, p. 28).

Although there is no relationship between IQ and emotional intelligence, it has been determined that there is a relationship between the latter and academic performance (Pérez, 2006). This seems to indicate that the academic achievement of students depends on a favourable emotional environment, which in turn is regulated by the relationships between the social agents that interact in each area of knowledge (Castrejón, Cantero & Pérez, 2008), although not only does it depend on this, but the personal attitudes of the agents also have a significant influence on their academic achievement (Gargallo, Pérez, Serra, Sánchez & Ross, 2007).

In addition, there is evidence of the importance of emotions for learning mathematics, although it should be mentioned that there is a historical separation of cognitive functions and emotions, considering them to be antagonistic (Gómez-Chacón, 2002), despite the existence of trends towards the integration of cognitive, social, cultural, economic and, of course, political elements. This conception seems to have shortcomings, given that nowadays the importance of integrating both the affective and cognitive spheres is recognised, not only in the training of students, but also in that of teachers as the articulating axes of mathematical learning.

In this sense, the review of works classified under a positivist stance shows the relationship between socio-cultural level, emotional environment and academic performance, manifested through statistical studies (mainly analysis of covariance and linear regression), but still does not provide answers in those cases in which, for example, students with unfavourable social, cultural and emotional conditioning achieve high levels of performance and a social mobility that, initially, was forbidden to them.

However, from a hermeneutic point of view, instrumental competences are closely related to the cognition of individuals, and given that this is not genetically determined, but invented and culturally transmitted, it can be assumed that cognitive reorganisation is thus an everyday phenomenon (Wilson, 2010).

If an individual is at least partially a concretion of a collective, it is necessary to understand the socio-cultural context from which he or she comes in order to interpret the situations he or she lives, such is the case of asymmetrical socialisation processes in which social agents with greater skills are able to mobilise cognitive resources with respect to other agents with lower communicative skills and abilities in the generation of inferences (León, Solari, Olmos & Escudero, 2011).

Socialisation recognises the subjectivity of the social agent, but also intersubjectivity at the moment of the relationship between agents, which is why it is considered that emotions, as a social construction, are part of subjectivity and that they also have psychological, physiological, cultural and individual dimensions, where social interaction plays a determining role (Fericgla, 2011); It can therefore be assumed that an individual placed in a given situation, at a precise moment in his or her life and in a given context, does not react to external stimuli with the same emotional charge as at another moment in his or her biographical path or in another context.

With respect to gender difference, its formation has been determined in the early stages of the subjects derived from the somewhat differential inculcation processes that girls have compared to boys, which leads to women having a higher index of emotional intelligence than men (Sánchez, Fernández, Montañez & Latorre, 2008). This exemplifies the relevance of the history of the body - Bourdieu's notion of habitus or, as Husserl established, the shaping of consciousness through the history of the agent - in the development of subjectivity, hence the consideration that emotions, as bodily dynamics, have an impact on the implementation of actions that are made possible by the emotions of individuals (Maturana & Varela, 2004).

Recently, the concept of emotional competence has been coined (Bisquerra & Pérez, 2007), understood as a set of socio-personal competences that are classified into: emotional awareness, emotional regulation, emotional autonomy, social competence, life skills and well-being. This classification has made it possible to approach emotional competences as a social satisfier, since it conceives an application of these competences in different social and productive sectors, where the importance of some instruments such as: curriculum vitae and emotional map of the candidate, as relevant elements for good emotional management in leadership, is mentioned.

In addition, the notion of emotional competences has also been used in the productive sector, where socio-emotional competences have been revalued in the personal sphere and the labour market, thus making evident the double importance that emotional environments have for academic and work performance (Talavera & Pérez-González, 2007).

Therefore, there is a tendency to explain the levels of academic performance and the socio-cultural conditions of the students. In this position, the level of poverty, the academic training of the parents - but mainly of the student's mother - and the symbolic resources, among others, are recognised as explanatory variables. However, there are also studies that show that the cause-effect relationship does not always have a positive correlation, that is, there are agents who, even with conditions considered unfavourable, present satisfactory academic results in certain tests, where an explanatory variable may be the emotional environment of the agents.

In this sense, various researchers (Eurasquin, Diego Correa, García and Gómez, 2022) refer to the importance of the context in the training of teachers and psychologists, where spaces in metropolitan areas present advantages and privileges for students who live in them, a situation that contrasts with their counterparts who live in marginalised areas. In light of this, students developed empathy and recognised resilience as fundamental elements in the training process.

It is evident that the causal positioning adopted by positivist studies is insufficient insofar as it presents an isolated treatment of the explanatory variables; on the other hand, hermeneutic and critical studies recognise both the individual conditions and those of a social, cultural and emotional order of the agents as interpretative variables of their practices, in this case educational practices, recognising the processes of subjectivity but also of intersubjectivity in the relationships between socialised and socialising agents.

These studies also recognise the importance of the primary socialisation of the agents and not only the secondary socialisation (attributed more to educational institutions), this means a recognition of the transcendence of the past to understand the present, moreover, the integration of elements from various disciplines where the cognitive, social, cultural, economic, political, and individual aspects would allow articulating a broader understanding of the educational reality is recognised.

However, opinions, perceptions, beliefs, feelings and positions, among others, are elements of subjectivity, which is why their study has generated some controversy due to the non-generalisability of their results and interpretations. However, it has been established that:

The recognition of subjectivities requires a knowledge of the social with a dynamic, unstable and circumstantial character, where language, experiences, the culture of each learner, the educational management model, relations of homology and domination, values and emotions among other explanatory variables, play a very important role (Guerrero-Azpeitia, 2017, p. 61).

Finally, the construction that Fericgla (Op. cit) puts forward on emotions is recovered, for whom these are open mental and physical processes, very complex and basic in our lives, with physiological, psychological, cultural and individual dimensions. In accordance with all of the above, the following research questions were posed: what are the perceptions of university students regarding emotions in their formative process in times of contingency? What is the relationship between these perceptions and their socio-cultural context?

In order to answer these questions, the objective was to characterise university students' perceptions of emotions and their academic training in a transition from face-to-face to virtual education through a sociological study. This approach made it possible to focus on elements of subjectivity in accordance with the social, economic and cultural conditions of university students.

Theoretical references

It is important to mention that the theoretical proposal of the French sociologist should not be seen as an objectivist expression, but on the contrary, as a bet that allows recovering the relationship between objective and subjective sense as a concretion of social practices.

Thus, the aforementioned formula recovers three of the nodal concepts of the aforementioned author's theory of the economy of social practices: field, capital and *habitus*.

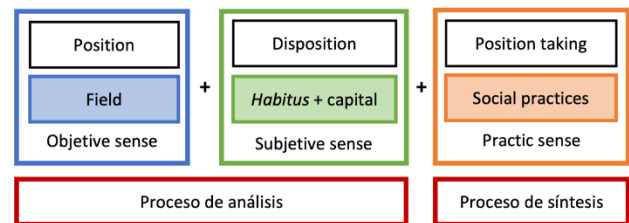


Figure 1 Social practice as a relationship between the objective and subjective senses

Source: Guerrero-Azpeitia (2020, p. 118)

The field can be understood, in a very brief way since it is not of interest in this article to go deeper into this concept, as that relationship of objective relations that social agents have with each other and which allows them to position themselves in the social space; however, this position is related to the volume and structure of the capital they possess.

By capital, we can conceptualise accumulated labour, which can be presented in different ways (material, internalised or incorporated state) but which does not exist outside the field that originated it, its classification can be: economic, cultural, social, symbolic, etc. On the other hand, habitus is the history incorporated by the agent or social entity, which, as a materialisation of the collective memory, conditions social practices. It is important to mention that the three concepts (and some others) are articulated and intimately related in their concreteness.

In addition, social agents will establish reproduction strategies, which have as precursors the volume and structure of their own capital and the very field where they were formed, but also the field where the social agent develops his or her practice, fields which may or may not coincide. Such strategies denote in the first instance coercions within the framework of objective but also subjective structures, but at the same time they provide a series of active "resources" to these coercions, i.e. there is a kind of dynamism in social practices.

In addition, a set of social agents can present similar conditions and, at the same time, employ more or less similar strategies of reproduction, it is in this sense that Bourdieu states that:

...the agents are distributed in the totality of social e-space [Sic.], in the first dimension according to the overall volume of capital they possess, in the second dimension according to the composition of their capital, i.e. according to the relative weight of the various types of capital in their total capital, especially economic and cultural capital, and in the third dimension according to the evolution over time of the volume and composition of their capital, i.e. according to their trajectory in social space (2001, p. 106).

This proposal serves as a basis for the analytical construction of social classes which, possessing similar trajectories, capitals, habitus and evolutions, tend to present a regularity characteristic of this conglomerate. Although it is not possible to consider a deterministic position in this respect, it is possible to speak of a regularity in the practices of social agents.

Description of the method

The study of subjectivity necessarily evokes qualitative approaches to social research since, as referred to by Sandín quoted by Dorio, Sabariego and Massot (2009, p. 276), it is "a systemic activity aimed at the in-depth understanding of educational and social phenomena, the transformation of socio-educational practices and scenarios, decision-making and also the discovery of an organised body of knowledge". In this sense, qualitative research demands an ontological and epistemological positioning and, of course, a methodological and technical perspective.

In other words, language and personal experiences, values and emotions are related to educational policies, management models of educational institutions and socio-economic contexts, among others, represent explanatory variables that allow characterising it under a dynamic but unstable and circumstantial perspective at the same time (Guerrero-Azpeitia, 2017).

Thus, in order to rescue the characteristic peculiarities of subjectivity, a sociological perspective was selected that was congruent with the theoretical approach and multivariate analysis techniques, all from a relational perspective that at the same time allowed the data to be constructed from a systematisation of the objective conditions, but without overlooking the understanding of the particular subjectivity of the students mediated from their perceptions.

In this sense, the methodological strategy consisted of two clearly defined moments: 1) construction of analytical social classes based on the volume and structure of capital and 2) construction of the relationship between social classes and the corresponding perceptions based on multivariate analysis techniques. The unit of analysis was the Centro Universitario Hidalguense and the target population was students of the Bachelor of Education Sciences.

An instrument was designed in Google forms and consisted of three sections: a) general socio-economic and cultural data; b) technological skills and resources; and c) detection of student perceptions. The first two sections were closed-ended questions and the third was a Likert scale.

For the construction of the data, reference was made in the first instance to the multidimensional analysis whose particularity is the concretion of both objective and subjective dimensions, specifically, the analysis of multiple correspondences was adopted whose main characteristic is the generation of perceptual maps that facilitate the evaluation and interpretation of the interdependence between the variables or categories selected by the researcher (Hair, Anderson, Tathan & Black, 1999).

Results

Socio-cultural context

100% of the respondents were women, 25% of whom live in metropolitan areas, the remainder in semi-rural regions, and the average age was 27 years. Every second household has 5 or more persons, every fourth household has up to 4 persons, and every fourth household has 3 persons or less. One in five women is single, one in four lives in a union or is divorced.

With regard to the education of the parents of the surveyed women, a tendency was identified to establish a parental relationship between the father and the mother where the former has less academic qualifications than the latter, except in the case where the father has secondary education, the mother tends to have primary education or no education at all. On the other hand, and with respect to the occupation of both parents, a relevant association is also identified, as they tend to be employed in low-skilled, low-skilled or medium-skilled jobs (agriculture / worker / housewife, employee / employee, SME owner / owner, etc.).

Construction of social classes

After this description, we proceeded to the construction of analytical social classes by considering three types of capital: objectified economic, embodied cultural and social. The result, taking into consideration the volume and structure of capital, was: class A (low volume), class B (medium) and class C (high).

Perceptions of emotional health as a function of constructed social class

Classes A and C presented a preponderance of job losses and anxiety attacks, while Class B also presented apathy and lack of motivation to carry out their daily and educational activities. With regard to who the students turn to when they present emotional problems that merit attention, it is found that: 1) class C always tends to seek support from specialists (psychologists, therapists, psychiatrists), teachers and, if necessary, classmates, 2) class A and B did not show significant differences and tend to socialise very little with friends, family and teachers, and occasionally with specialists and classmates. The above results suggest that those students with medium and high vulnerability conditions tend not to socialise their mental health problems.

Subsequently, interviews were conducted with students previously selected according to the social classes constructed. By way of illustration, three testimonies of students with different volume and structure of capital are presented, taking into consideration four central axes: at the time of the pandemic, how were your relationships with friends and family, as well as what are your perceptions about your professional and family future.

Student E1 (Class A: low volume and low capital structure)

Relations with friends.

“With some friends the relationship has been maintained, with others it has been lost, it is no longer the same. With some of them communication is sporadic, only in emergencies, and with others we have tried to maintain communication and it is possible to meet or make video calls”

Family relations

“At the beginning it was desperate, because we couldn't adapt to the changes, there was a lot of stress, shouting and anger, because everyone wanted their own space”

Professional future

“With a bit of uncertainty, in knowing how and under what circumstances I am going to face the world of work. Well, my learning was not the same during these two years. Many times it was only about complying with the planning and delivering evidence, but there was no concern about whether the student was learning”

Personal future

“With a bit of fear, but I am sure that I will achieve the long-term goals I set for myself when I started studying for my degree”

In this case, the socio-economic conditions and the consequent adversity are reflected in interpersonal and family relationships, which are accentuated by the lack of resources and the high number of family members. It can be observed that communication is weak, not only for the socialisation of daily events but also for the emotional problems they went through during the pandemic. In terms of perceptions about their professional and personal future, it can be identified that there is a relatively high level of uncertainty.

Student E2 (Class B: high volume and structure of capital)

Relations with friends

“I think that this has been slowed down, not in its totality, but with some people, since we no longer live together and we no longer know what is going on with each other as we used to do in face-to-face classes, so I think that I feel that I am not in communication”

Family relations

“In a certain way more trusting, although this sometimes leads to conflicts, however, these are due to living together and the stress of not going out as before”

Professional Future

“Sometimes at a loss, as at the moment I want to finish and move to another country, which would prevent me from practising.”

Personal future

“Bewildered as much of what I thought would be there is no longer and will not be there”

In this case, which illustratively represents students with an intermediate volume and structure of capital, it can be identified that they present similar situations to students in class A, although to a certain extent with less emotional charge and better emotional management. Regarding expectations about the professional and personal future, uncertainty prevails in this case as in the previous one.

Student E3 (Class C: average volume and structure of capital)

Relations with friends

“I consider interacting with people to be extremely indispensable and necessary. My relationships with friends have been limited, at the beginning of the pandemic it was only through digital media, in this last stage they have improved and we have interacted; however, not seeing them in the critical stage of the pandemic did not affect me emotionally, that is to say I did not miss interacting with them”

Family relations

“Due to the pandemic my parents lost their jobs which caused stress for the first few months of the pandemic, my mother suffered from depression which directly caused insomnia and stress in me. As the months went by, we asked for psychological help for my mother, who was the most affected, and this gave me greater peace of mind. There was more support, organisation and agreements between the family members and it allowed us to make the confinement more manageable”

Professional future

“I consider that I have the indispensable tools and experience to continue to perform favourably in my workplace; I have also acquired more knowledge to be able to contribute in administrative areas of the institution and with more experience in the use and development of technological devices and applications. This makes me see myself in a positive and confident way in my professional development and encourages me to continue my academic training”

Personal future

“Confident and secure because I have some entrepreneurial projects that can give me economic and emotional stability. Although these projects could stabilise me, I am a little stressed that my son will be going to university in a year and the economic costs are higher. I feel happy with what I have achieved so far and I predict a good future. The family is a fundamental and present part of me, as a moral support to be able to develop myself and my plans”.

Finally, in the case of students with a high volume and structure of capital, significant differences are observed with respect to students from other social classes. In the first instance, the importance of interpersonal relationships with friends is recognised, but they do not necessarily have a significant importance; however, in the case of family relationships, when some of the family members had emotional problems, they opted for the help of specialists (psychologists), which allowed intra-family relationships to improve. With regard to the perspective for personal and professional development, the expectations, although with traits of uncertainty, reflect a perspective oriented towards the fulfilment of significantly high goals for the students.

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Conclusions

Based on the analysis and discussion of the findings already referred to, it is possible to conclude, in a preliminary way, that it is those students with higher levels of precariousness (lower volume and structure of capital: economic, cultural and technological) who present higher levels of educational disadvantage derived from the transition from a face-to-face to a virtual educational modality.

In contrast, students whose social, cultural and economic conditions have greater resources required by this transition tend to have antagonistic and even favourable perceptions, and therefore tend to assume a playful position with respect to the aforementioned transition..

In this way, the incidence of socio-cultural inequalities and their consequent segmentation is identified in an inadequate attention to the emotional problems presented by students, which would mean a disadvantageous situation both in socialisation, treatment of emotional problems and academic achievement during a face-to-face educational transition.

This coincides with what has been reported by other researchers (Díaz-Barriga-Arceo, Alatorre-Rico & Castañeda-Solis, 2022) who refer to the importance of the interrelation between socio-cultural, institutional and, of course, family variables. In view of this, it is considered necessary to create the conditions in educational institutions that make it possible to conceive that social experience must be confronted with the totality of vital structures, including cognition, emotions and the very will of social agents.

Although Guerrero-Azpeitia (2022) recognises that social trajectories are fundamental for the construction of social classes, in this case and with the intention of establishing a descriptive study, they were not taken into consideration, so that for future work with a greater level of depth it is highly recommendable to include these trajectories.

References

- Bourdieu, P. (2021). *Poder, derecho y clases sociales*. Editorial Desclée de Brouwer S.A.
- Bisquerra, R. & Pérez N. (2007). Las competencias emocionales. (Emotional competences). *Educación XXI*, (10), 61–82. <http://e-spacio.uned.es/fez/eserv/bibliuned:EducacionXI-2007numero10-823/Documento.pdf>
- Castrejón, J., Cantero, M. & Pérez, N. (2008). Diferencias en el perfil de competencias socio-emocionales en estudiantes universitarios de diferentes ámbitos científicos. *Electronic Journal of Research in Educational Psychology*, 6(2), 339-362. <https://www.redalyc.org/pdf/2931/293121924005.pdf>
- Gargallo, L., Pérez, C., Serra, B., Sánchez, F. & Ross, I. (2007). Actitudes ante el aprendizaje y rendimiento académico en los estudiantes universitarios. *Revista Iberoamericana de Educación*, (42), 1–11. <https://rieoei.org/historico/investigacion/1537Gargallo.pdf>
- Gómez-Chacón, I. (2002). Afecto y aprendizaje matemático: causas y consecuencias de la interacción emocional. En J. Carrillo (Ed.), *Reflexiones sobre el pasado, presente y futuro de las matemáticas* (pp. 197–222). Huelva: Universidad de Huelva. <https://eprints.ucm.es/id/eprint/23048/>
- Díaz-Barriga-Arceo, F., Alatorre-Rico, J. & Castañeda-Solis, F. (2022). Trayectorias interrumpidas: motivos de estudiantes universitarios para suspender temporalmente sus estudios durante la pandemia. *Revista Iberoamericana de Educación Superior*, 13(36), 3-25. <https://doi.org/10.22201/iisue.20072872e.2022.36.1181>

- Dorio, I., Sabariego, M. & Massot, I., (2009). Características generales de la metodología cualitativa. En Bisquerra (Coord.). *Metodología de la investigación educativa*. Madrid: La Muralla, pp. 275-293.
- Eurasquin, C., Diego Correa, M., García, L. & Gómez, N. (2022). Inclusión, participación y vivencias en procesos de formación de docentes y psicologxs en Educación. Comunidades de prácticas y aprendizaje expansivo en Pandemia: Argentina y México. En A. Borgobello, T. Platzer & Proença, M. (Eds.). *Investigaciones e intervenciones en psicología en tiempos de pandemia en América Latina*. UNR editora.
- Fericgla, J. (2011). Cultura y emociones. Manifiesto por una antropología de las emociones. Recuperado el 02 de enero de 2022, de http://www.concienciasinfronteras.com/PAGINAS/CONCIENCIA/Fericgla_emociones.html
- Guerrero-Azpeitia, L.A. (2022). Yuxtaposición, trayectorias sociales y la construcción del objeto de estudio. Reflexiones metodológicas. *Revista Latinoamericana de Educación Comparada*, 13(19), 52-73. <https://www.saece.com.ar/relec/revistas/19/art3.pdf>
- Guerrero-Azpeitia, L.A. (2020). Capitales, habitus y disposiciones de profesores universitarios. Una aproximación a partir de sus trayectorias académicas. *Religación Revista de Ciencias Sociales y Humanidades*, 5(25), 117-131. DOI: <https://doi.org/10.46652/rgn.v5i25.672>
- Guerrero-Azpeitia, L.A. (2017). El estudio de la subjetividad. Una mirada desde la educación comparada. *InCrescendo. Educación y Humanidades*, 4(1), 50-71. https://www.researchgate.net/publication/339513182_El_estudio_de_la_subjetividad_Una_mirada_desde_la_educacion_comparada
- Hair, J., Anderson, R., Tatham, R. & Black, W. (1999). *Análisis Multivariante*. Pearson Prentice Hall.
- León, J. A., Solari, M., Olmos, R. & Escudero, I. (2011). La generación de inferencias dentro de un contexto social. Un análisis de la comprensión lectora a través de protocolos verbales y una tarea de resumen oral. *Revista de Investigación Educativa*, 29(1), 13-42. <https://revistas.um.es/rie/article/view/115381>
- Maturana, H. & Varela, F. (2004). *El árbol del conocimiento. Las bases biológicas del entendimiento humano*. Editorial Universitaria.
- Murillo, F. & Román, M. (2008). Resultados de aprendizaje en América Latina a partir de las evaluaciones nacionales. *Revista Iberoamericana de Evaluación Educativa* 2008, 1(1), 7-35. <https://revistas.uam.es/riee/article/view/4677#:~:text=Entre%20sus%20principales%20hallazgos%20se,en%20Matem%C3%A1tica%20que%20en%20Lenguaje>
- Pérez, N. (2006). Relaciones entre la inteligencia emocional y el cociente académico en estudiantes universitarios. *Revista Electrónica de Motivación y Emoción*, 9(22). <http://dialnet.unirioja.es/servlet/articulo?codigo=2123905>
- Sánchez, M., Fernández, P., Montañés, J. & Latorre, J. (2008). ¿Es la inteligencia emocional una cuestión de género? Socialización de las competencias emocionales en hombres y mujeres. *Educational & Psychology I+D+i and Editorial EOS*, 6-2(15), 455-474.
- San Martín, B. & Tirso, M. (2010). Perfiles de desempeño en Matemática, según habilidad cognitiva por nivel socioeconómico en estudiantes chilenos de enseñanza municipal. *Revista Electrónica de Investigación Educativa*, 12(1), 1-17. <https://www.redalyc.org/articulo.oa?id=293121924011>
- Talavera, E. & Pérez-González, J. (2007). Formación en competencias socioemocionales a través de las prácticas en empresas. *Revista Europea de Formación Profesional*, (40), 92-112. <https://dialnet.unirioja.es/servlet/articulo?codigo=2316242>

Wilson, M. (2010). The re-tooled mind: How culture re-engineers cognition. *Social Cognitive & affective Neurosciencie. SCAN (2010) 5*, 180–187.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2894684/>.

Parental competences in parents of children with disabilities of the association “Autism Community los Cabos, A.C.”

Competencias parentales en padres de hijos con discapacidad de la asociación “Comunidad Autismo los Cabos, A.C.”

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Abstract

Parenting skills are the set of skills that allow parents to face the vital task of being parents in a flexible and adaptive way, according to the developmental and educational needs of their children. Objective: to determine the level of parental competence in parents of children with disabilities from the Los Cabos A.C. Autism Community Association. during 2021. Methodology: This research was descriptive with a quantitative approach, with an observational, cross-sectional and retrospective design. Procedure: 14 parents participated. For data collection, the Positive Parenting Scale (E2P) instrument was used, made up of 58 items with a Cronbach's alpha reliability of 0.95 for the total scale; For its application, the instrument was adjusted virtually due to the pandemic caused by SARS-CoV-2. The results obtained show that 43% of the parental skills of the parents of the Los Cabos Autism Community Association A.C. they are in the risk zone, 36% in the monitoring zone and 21% in the optimal zone, also showing greater difficulty in the skills of the bonding area; being the mothers the ones who are more involved in the education of the children.

Resumen

Las competencias parentales son el conjunto de capacidades que permiten a los padres afrontar de modo flexible y adaptativo la tarea vital de ser padres de acuerdo con las necesidades evolutivas y educativas de los hijos. Objetivo: determinar el nivel de competencia parental en padres de hijos con discapacidad de la Asociación Comunidad Autismo Los Cabos A.C. durante el 2021. Metodología: Esta investigación fue de tipo descriptivo con enfoque cuantitativo, con diseño observacional, transversal y retrospectivo. Procedimiento: Participaron 14 padres de familia. Para la recogida de datos se empleó el instrumento Escala de Parentalidad Positiva (E2P) formada por 58 ítems con una confiabilidad alfa de Cronbach de 0.95 para la escala total; para su aplicación se ajustó el instrumento de manera virtual debido a la pandemia ocasionada por el SARS-CoV-2. Los resultados obtenidos muestran que el 43% de las competencias parentales de los padres de la Asociación Comunidad Autismo Los Cabos A.C. se encuentran en zona de riesgo, el 36% en zona de monitoreo y el 21% en zona óptima, demostrando también mayor dificultad en las competencias del área vincular; siendo las mamás las que se encuentran más implicadas en la educación de los niños.

Disability, Parenting Skills, Autism

Discapacidad, Competencias parentales, Autismo

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Introduction

Parental competencies are considered as the set of previous skills that parents acquire over time, to apply them in the intervention of raising their children, in a reflexive and flexible way, providing children with strengths to improve their adaptation within the social environment. However, having a child with a disability alters the family dynamics, generating strong stress in parents, and parental competencies deteriorate due to inexperience in raising children with a disability.

For this reason, the present research was born from the question "How are the parental competences of parents of children with disabilities of the Asociación Comunidad Autismo Los Cabos A.C. during 2021? In order to answer this question, the key concepts of the topic in question and the purposes pursued are addressed, in addition to providing an approach to previous research on how this topic has been developed and who have been the main people involved.

Likewise, in the theoretical framework section, the documentary material is captured to give meaning to the present document, in which the types of competences and what each one of them considers, as well as parental competences and their components, the theories that involve parental competences, disability and its types, concluding with the autistic spectrum disorder, are set out.

In order to establish the development of the research procedure, the methodology section describes the technical and practical process to fulfil the objectives set out, determining the type of study and the sequence of actions implemented to collect the information, followed by the subsequent framing of the results, where the findings are described, which are organised in tables and graphs, which offer an approach to the skills acquired in parental competencies and the variables to be taken into account.

To conclude with the discussion, where the information collected is contrasted with the theoretical support to explain the reality of the development of these competencies; concluding that a systemic therapeutic approach is necessary where parents are more involved in favour of the children and are supported in different ways.

The aim of this research was to determine the area of parental competence in parents of children with disabilities and its results were aimed at generating information that supports the importance of creating future strategies or intervention projects aimed at parents of the Asociación Comunidad de Autismo Los Cabos A.C. in the development of the competences that will help their children to have a better social development, in an appropriate and healthy way.

Justification

The acquisition of parental competences is a process that integrates a multitude of factors for its good development, among which are: learning processes, lived experiences, personal capacities as a parent among others, being so, that for many parents it is difficult to achieve parentality and even more when it is about a child with disability.

Therefore, the purpose of the present study was to describe the parental competencies in parents of children with disabilities of the association Comunidad Autismo los Cabos A.C., with the results obtained it is intended to generate viable information to support the need to create programmes, projects or workshops that strengthen and support the development and acquisition of parental competencies for the benefit of parents, families and children with disabilities of the association.

Likewise, this research will lead to new studies in which the continuous and systemic evaluation of the progress of parental competences prevails. All in favour of the child's psychosocial adaptation.

Other benefits obtained from this study is to create awareness on the part of parents about their weaknesses in parenting skills, reaching a self-analysis for the improvement of the dynamics of monitoring at home, it is known that the active participation of the family in the education of children favours cognitive and social development, as well as reinforcing emotional intelligence, thereby reducing stress and anxiety.

Problem

Previously, the therapies were given one to one and occasionally the intervention of the parents was required, only for specific objectives, but not for explanation and guidance for them, leaving hidden the primary needs of the interventions, which are self-empowerment, bonding with others and cognitive development in its various branches. Due to this, the following research question is asked: How are the parental competences in the parents of children with disabilities of the Asociación Comunidad Autismo Los Cabos A.C. during 2021?

Objectives

General objective

- To describe the parental competences in parents of children with disabilities of the Asociación Comunidad Autismo Los Cabos A.C. during 2021 using the positive parenting scale.

Specific objectives

- To characterise the socio-demographic data of parents of children with disabilities.
- To identify the types of diagnosis suffered by the children.
- To find out the socio-demographic data of the child with a disability.
- To identify the zone in which the bonding, protective, formative and reflective competences of the parents of children with disabilities are found.
- To determine the zone in which the parental competences of parents of children with disabilities are found.

Theoretical framework

Competences

As discussed in the previous chapter, competences prepare the individual to face social, working and family life; within this context Sarramona, (as cited in Latorre, 2016) divides competences into basic, key and professional competences according to a series of characteristics as follows.

Competition	Features
<p>Core competences These should be easily attainable for all, which can be integrated with the knowledge that has been gained.</p>	<ul style="list-style-type: none"> • No matter the social level. • They must be applicable in everyday life. • Their assessment implies a "low" standard. • They can be applied in a variety of contexts. • They deal with personal values, commitment among others. • Identify whether they are performed adequately and in an optimal period. • They manage to achieve complex objectives mainly by means of learning obtained through the medium. • They are evaluated by actions rather than theory..
<p>Key competences These are competences that are important for the integration of the individual within a society, they are more than knowledge and skills. They perceive the ability to perform complex demands, directing and organising psychosocial resources in specific contexts.</p>	<ul style="list-style-type: none"> - They show integration and automation of knowledge, which allows them to create life plans and projects. - They allow them to interact with diverse groups and relate to them, supporting each other or working in teams. - They allow them to interact with knowledge, such as language, symbols and numbers, information and prior knowledge.
<p>Professional competences These are specific to professional students.</p>	<ul style="list-style-type: none"> - They refer to basic and specific knowledge and skills for a specific job and within a specific context.

Table 1 Types of competences and their characteristics
Source: (Sarramona, 2007 as cited in Latorre, 2016)

Parental competences

Parental competencies have several areas that make them up and are specific according to their applicability; according to Gómez and Muñoz (cited in Vera and Apolo, 2020, p.190) these are divided into:

- **Bonding:** the knowledge, attitudes and practices they carry out on a daily basis to generate a secure attachment and favourable socio-emotional development.
- **Formative:** aimed at development, knowledge, learning and socialisation.
- **Protective:** those that safeguard their rights and integrity as individuals, protecting their needs, physical, emotional and sexual needs.
- **Reflective:** which consists of a self-analysis with the aim of providing feedback on the person's areas of parental competence.

For example, parents who have more developed parental competencies, their children will have more skills in executive functions (Bernal, Rodríguez, González & Torres, 2017, p.172).

Similarly, "it has been proven the relevance of parents being involved in school matters, spending time talking, explaining doubts and listening to their children so that they develop the ability to understand the feelings and ideas of others" (Domínguez, Fortich and Rosero, 2018, p.231); at the same time that they make their responsibilities as parents and the significant influence on the development of phonological awareness prevail (Paredes, 2020, p.93).

Parenting components

In addition to the aforementioned, each of the competences contains components that make their performance the most optimal and adequate, within the bonding competences are the components of:

- **Mentalisation:** This focuses on the interaction of the infant and the parents in order to create an attachment bond which can be secure or insecure between them, as it implies that the parents are the focus of the infant's intervention, without seeing them as individual subjects (Golanó, Perez and Salamero, 2019, p.93).
- **Parental sensitivity:** Ainsworth and collaborators (cited in Kast, Farkas and Vallotton, 2017) as the ability of parents to be able to identify, interpret what they are trying to say, respond as correctly as possible and visualise what may or may not happen thanks to the child's signals. (p.138).
- **Emotional warmth:** The level of attention, kindness, support, love, affection, compassion that the parent gives to the child, expressed in physical and verbal actions (Acevedo, Ibarra and Canchila, 2016, p.20).
- **Involvement:** This is the active participation of parents in the activities of raising, educating, learning and caring for their children, providing quality, basic responsibility, control and indirect care (Rodríguez, Salas and Vélez, 2018, p.8).

The formative competencies include:

- **Stimulation of learning:** Adequate stimulation provides cognitive, physical, social and other tools, which gives way to learning by having this knowledge, so when parents have the tools to provide early and timely stimulation, they favour the cognitive and interactional development of their children (Martínez, 2020, p.42).
- **Orientation and guidance:** By parents to accompany their children in activities, direct them and enhance their independence progressively, through moulding, matching, modelling, imitation, dialogue, meditation oriented to the development of daily life skills (Fundación ciudad del niño, 2017).

- **Positive discipline:** The parent must ensure that their child leads a dignified and healthy life, must be responsible for creating a good quality of life, help the child to adapt to society by giving them values and attitudes to promote democratic coexistence, for this they must also have contact in the context; according to the Ministry of Education (2021) they mention that this discipline develops principles for the benefit of all, these being:
 - **Principle 1.** All people have the right to be treated with equal dignity and respect.
 - **Principle 2.** The positive approach
 - **Principle 3.** The human being is a social being, oriented towards connection with others.
 - **Principle 4.** Behaviour has a purpose: to belong and to feel important.
 - **Principle 5.** Private logic: Children and adolescents continually make decisions based on how they perceive and interpret their world.
 - **Principle 6.** A sense of community (or social feeling) is the foundation of mental health.
 - **Principle 7.** Autonomy is fundamental to development, as it is the basis for self-efficacy, the feeling of "I am capable".
 - **Principle 8.** The main role of the adult is to encourage the development of children and adolescents.
 - **Principle 9.** Mistakes are learning opportunities.
 - **Principle 10.** focus on solutions (p.14).
- **Socialisation:** The experiences to which the child has been exposed, as well as the quality in the upbringing imparted, will have repercussions in their adolescence and adult life, which is why in order for them to achieve an optimal integration into society, parents should teach them the social norms so that the minor can integrate them, in addition that they can recognise themselves, to facilitate certain social objectives such as self-regulation, delaying impulses and creating roles, mentioned by Musitu and García (cited by Castillo and Saldarriaga, 2019, p.57).

On the other hand, in the protective capacities we have:

 - Guarantees of physical, emotional and psychosexual safety: which are to protect against any threat of a sexual, emotional and physical nature (Gómez and Muñoz, 2014, p.9).
 - Care and satisfaction of basic needs: Although there are various theories on the concept of basic needs, with their variables varying according to the culture in which they are performed, they all focus on these points: physical survival or health and personal autonomy, therefore the duty of caregivers is to initially meet these needs and encourage the learning of skills for their development corresponding to their self-empowerment (Bruck and Ben-ariéh, 2020, p.36).
 - Organisation of daily life: The more carefully planned and structured daily routines are, the greater the sense of order and organisation they provide for children, because they anticipate what will happen, involving consistent locations and sequences of activities (Dawson, 2021, p.10).
 - Seeking social support: It is important that in the face of various needs within parenting, whether emotional, instrumental or economic, the corresponding support is sought through various social means such as programmes, social or governmental (Gómez and Muñoz, 2014, p.9).

- In terms of reflective capacities we have:
- Anticipating relevant life scenarios: This means that parents should try to be prepared for difficult moments that may arise during parenting, such as sexual issues, crises, social, emotional, self-help, learning, among others (Gómez and Muñoz, 2014, p.10).
- Monitoring influences on child development: This means that caregivers should be observing the contexts and the neurodevelopmental evolution of the child (Gómez and Muñoz, 2014, p.10).
- Meta-parenting or parental self-monitoring: This is when parents make an evaluation of themselves in how they are raising their children, which causes short or long term changes in the parents' thinking and behaviour, leading to an evolution in the interaction of parents and children (Sood, and Chand, 2021, p.582).

Parental self-care: This is based on parents being in good physical, mental and emotional health, for which they are offered support through various means such as couples therapy, relaxation therapies or exercises, recreational centres, sports facilities, social security, scholarships for children, in order to give parents the tools and knowledge they may require to carry out their parenting work, and to make it as affective and knowledgeable as possible (Unicef, 2017, p.6).

Positive parenting

All of the above skills are part of positive parenting, which is focused on "parental behaviour based on the best interests of the child that is caring, develops the child's capacities, is non-violent and offers recognition and guidance, including setting limits that allow for the child's full development" (Rodrigo, 2015, p.40).

However, apart from parental competencies, according to Balsells, Vaquero, Fernández, Fuentes, and Mateos (2020) two more variables are taken into account, which are:

- Sons' and daughters' needs, which can be evolutionary, educational and differential needs that children have, which change throughout their lives.

- The psychosocial context of the family where they develop, what help or needs the parents present, it is more than anything the impact of the extended family and the environmental factors that affect or interfere in the relationship between parents and children (p.9).

Theories involving parental competencies

From the point of view of resilience, the importance of the interaction of the person with the different contexts is recognised and identified, in order to grow or evolve, giving solutions to new challenges, from the attachment approach, the importance of the creation of bonds and the dynamism that characterises family relationships and interactions is highlighted. On the other hand, the systemic approach recognises that the different members of the family are interconnected, so that any change in one of them has repercussions on the others, and the ecological model places the family as the first microsystem of the ecological environment and therefore the first context of development..

Systemic theory of human development

The systemic theory of human development studies the relationship between different contexts, or ecosystems and the human being, as it takes into account the experiences and time that have passed in his life immersed in them, Bronfenbrenner (1986 and 1987 cited in López, 2017) indicates that.

The family can be considered a context, which gives rise to human development [...] because it experiences, perceives and feels directly, the events generated by interpersonal relationships in which it is involved; from the roles or roles it assumes and the activities that it develops within a daily life. (p.37).

Human resilience theory

Another of the theories that implies the development of competences based on difficulties that in many cases are difficult to overcome is that of Stefan Vanistendael (2014, cited in Granados, Alvarado and Carmona, 2017) which approaches resilience by conceptualising it as.

The capacity of a person or a group to grow in the presence of great difficulties [...] resilience is not fixed, but varies throughout life; it is never absolute; it is built in interactions with the environment [...] it is always in process; and, beyond simple resistance, it builds or rebuilds life. (p.57).

Resilience builds strengths and abilities to adapt to the sudden changes imposed by the process of life and its social environment. In other words, resilience is a creator of competences that will help to overcome difficulties within the internal and external environment of the individual.

Attachment theory

Another theory that plays a major role in the appropriate growth and development during childhood is the attachment theory developed by John Bowlby (cited by Benlloch, S., 2020), which delves into interpersonal relationships with primary figures such as mother, father and family.

The effect of early experiences and the relationship with the first attachment figure on the child's development [...] within it, we learn to regulate our own emotions since we are not able to do it by ourselves when we are born and it fulfils the functions of maintaining proximity and trying to establish the attachment figure as a secure base, from which the child sets off to explore and returns in search of refuge and comfort, influences both the child's physical and cognitive development, as well as his or her emotional and affective development" (p.171).

This is also implied over the years in parents, who create their own parenting competencies from experiences in the family environment and implement them in a similar way with their children.

Disability

With reference to what has been described above in a general way, however, in the case of individuals with disabilities, the conditioning factors of growth and development in children are accentuated and aggravated by the fact that they do not have the same capacities as other children.

According to information from INEGI (cited in ISSSTE, 2019), there are different types of disability and it classifies them into four groups according to the main causes:

- At birth (congenital/hereditary).
- By disease.
- Accident.
- Due to old age.

Types of disability

From the previous classification there is another functional classification (ISSSTE, 2019) which is divided into:

- Visual sensory.
- Auditory sensory.
- Motor disability.
- Intellectual.
- Mental or psychosocial (p.6).

Autism spectrum disorder

Within the disabilities we find one of the most common, the Autism Spectrum Disorder (ASD) which is distinguished by being a neurodevelopmental disorder, which may present various alterations added to the main causes such as motor difficulties, poor or no language, intellectual disability, intestinal difficulties, perception, among others. (Lampert, 2021, p.5).

Causes of ASD

Within the causes of ASD there is evidence that demonstrates the involvement of multiple factors, including genetic and environmental factors at early ages, and therefore it is also estimated that the chances of developing ASD increase when considering the following factors (Landrigan, 2010 cited by Lampert, 2021):

- Having a sibling with ASD.
- Birth defects associated with CNS malformations.

- Parents with schizophrenia / psychosis / mood disorder (p.7).

Therefore the DSM-5 (Association, 2013) indicates that the impairments are not best explained by intellectual disability or Global Developmental Delay. Intellectual disability and Autism Spectrum Disorder often coexist, to make the diagnosis of comorbidity of Autism Spectrum Disorder and Intellectual Disability, social communication must be below the general expected level of development (p.29).

Levels of support for patients with ASD

The levels established by the DSM-5 indicate the amount of help or support the patient requires to perform certain tasks (Association, 2013):

- Level 3: Requires very noticeable help, present severe impairments in verbal and non-verbal social communication skills causing severe impairments in functioning [...], extreme inflexibility to change or other restricted behaviours [...].
- Level 2: Needs significant help, significant impairment in verbal and non-verbal social communication skills [...], difficulty coping with change or other restricted behaviours [...].
- Level 1: Needs help: communication deficits cause significant problems [...] atypical responses [...] difficulty in alternating activities [...] (p.31-p.32).

Methodology

This is a descriptive study with a quantitative approach due to the measurement of its variables, with an observational, cross-sectional and retrospective design.

Procedure

The selection of the sample was by convenience, due to the number of elements that make up the universe, requesting the participation of parents in an open manner, which is why parents who are in direct contact with their children were the ones who participated.

For data collection, promotion was carried out with the parents of children with disabilities enrolled in the Asociación Comunidad Autismo Cabos A.C., due to the health contingency caused by the COVID-19 pandemic, it was decided to manage it online through the platform <https://docs.google.com/forms> and telephone calls to explain the study proposal. Parents who agreed to participate in the study were sent the link to the platform.

Subsequently, parents had to read the informed consent form and agreed to it, and then began to answer the instrument online.

Results

The results found from the analysis of the study and socio-demographic variables, in addition to the areas contained in the Parenting Scale, are represented by means of tables, all based on the objectives set out from the beginning of the research, it should be noted that the analysis carried out was derived from the table of operation of variables. For the specific objective of characterising the socio-demographic data of the parents of children with disabilities, the following results were obtained:

Regarding the sex of the parents who participated in the study, it is observed that 78.6% are women and only 21.4% are men (Table 2), this result reflects that women are the most involved in the upbringing of the child.

Sex	Frequency	Percentage
Woman	11	78,6
Male	3	21,4
Total	14	100,0

Table 2 Distribution by sex of parents with children with autism of the Asociación Comunidad Autismo Los Cabos A.C.

Source: *Parentality Scale Instrument*

Regarding marital status, 42.9% of the parents live in a union, followed by 35.7% married and 14.3% single (Table 3).

Marital status	Frequency	Percentage
Single	2	14,3
Married	5	35,7
Unmarried	6	42,9
Divorced	1	7,1
Total	14	100,0

Table 3 Distribution by marital status of parents with children with autism of the Asociación Comunidad Autismo Los Cabos A.C.

Source: *Parentality Scale Instrument*

Of the children registered in the Asociación Comunidad Autismo Los Cabos A.C., 50% are in the age range of 4 to 7 years old and 42.9% in the age range of 8 to 12 years old. It is observed that the increase in the demand of attention is generated from the observation of the parents or diagnosis of the health team (Table 4).

Age ranges	Frequency	Percentage
0-3 years	1	7,1
4-7 years	7	50,0
8- 12 years	6	42,9
Total	14	100,0

Table 4 Distribution by age range of the children enrolled in the Asociación Comunidad Autismo Los Cabos A.C.
Source: *Parentality Scale Instrument*

On the other hand, the schooling of children with disabilities reveals that 57.1% are in primary school, while 21.4% do not attend school (Table 5).

Schooling	Frequency	Percentage
Out-of-school	3	21,4
Kindergarten	2	14,3
Kindergarten	1	7,1
Primary	8	57,1
Total	14	100,0

Table 5 Schooling of children enrolled in Asociación Comunidad Autismo Los Cabos A.C.
Source: *Parentality scale instrument*

The kinship of the people who participated in the study was 78.6% mothers of the children with disabilities and 21.4% fathers (Table 6).

Relationship	Frequency	Percentage
Father	3	21,4
Mother	11	78,6
Total	14	100,0

Table 6 Distribution by kinship of children enrolled in the Asociación Comunidad Autismo Los Cabos A.C.
Source: *Parentality scale instrument*

85.7% of parents affirm that their children have a disability and know their diagnosis, while 14.3% deny it or do not know it (Table 7).

Disability awareness	Frequency	Percentage
Yes	12	85,7
No	2	14,3
Total	14	100,0

Table 7 Knowledge of disability of parents with children with autism from Asociación Comunidad Autismo Los Cabos A.C.
Source: *Parentality Scale Instrument*

The disorders present in the children of the Asociación Comunidad Autismo Los Cabos A.C. are 78.6% of ASD, while only 7.1% of ADD (Table 8).

Type of diagnosis	Frequency	Percentage
Autism Spectrum Disorder (ASD)	11	78,6
Attention Deficit Disorder (ADD)	1	7,1
Speech Delay	1	7,1
No diagnosis	1	7,1
Total	14	100,0

Table 8 Distribution by type of diagnosis of children registered in Asociación Comunidad Autismo Los Cabos A.C.
Source: *Parentality scale instrument*

Table 9 shows that the bonding, protective and reflective competencies of the parent of the child aged 0-3 years are in the optimal zone and the formative competencies are in the monitoring zone.

Area	Frequency	Zone
Link	1	Optimum zone
Formative	1	Monitoring zone
Protective	1	Optimum zone
Reflective	1	Optimum zone

Table 9 Areas of competences in parents of children with disabilities from 0 to 3 years of age of the Asociación Comunidad Autismo Los Cabos A.C.
Source: *Parentality Scale*

Figure 1 shows that 75% of the parental competences of parents with children with disabilities of the Asociación Comunidad Autismo Los Cabos A.C. from 0 to 3 years old are in the optimal zone and 25% in the monitoring zone.

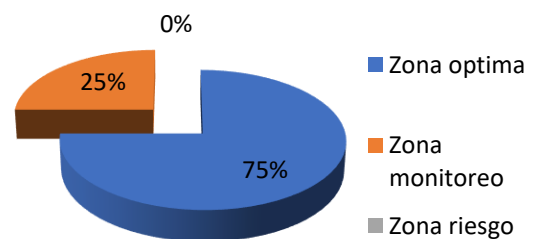


Figure 1 Parental competences in parents with children from 0 to 3 years old from Asociación Comunidad Autismo Los Cabos A.C.

Table 10 shows that 57.1% of parents of children with disabilities aged 4 to 7 are in the risk zone and 14.3% in the monitoring zone, while in the formative area 28.6% are in the risk and monitoring zones; likewise in the protective area 57.1 and 42.9% are in the risk and monitoring zones respectively; while in the reflective area 57.1% are in the optimal zone and 42.9% in the risk zone.

Area	Zones	Frequency	Percentage
Linking	Risk zone	4	57,1
	Monitoring zone	1	14,3
	Optimum zone	2	28,6
	Total	7	100,0
Formative	Risk zone	2	28,6
	Monitoring zone	2	28,6
	Optimum zone	3	42,9
	Total	7	100,0
Protector	Risk zone	4	57,1
	Monitoring zone	3	42,9
	Total	7	100,0
Reflective	Risk zone	3	42,9
	Optimum zone	4	57,1
	Total	7	100,0

Table 10 Percentage by areas of competence of parents of children with disabilities from 4 to 7 years old from Asociación Comunidad Autismo Los Cabos A.C.
Source: *Parentality Scale*

Figure 2 shows that 57% of the parental competencies of parents of children with disabilities aged 4-7 years are in the risk zone, 29% are in the monitoring zone and only 14% are in the optimal zone.

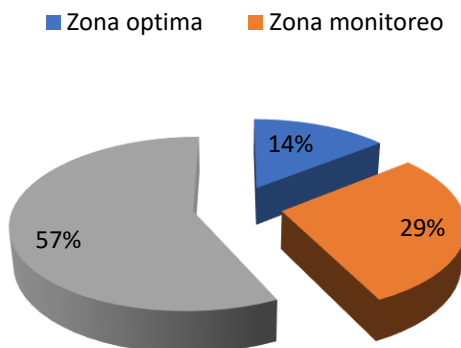


Figure 2 Parental competencies in parents of children with disabilities from 4 to 7 years old from Asociación Comunidad Autismo Los Cabos A.C.

Table 11 shows that in the areas of parental competencies of parents of children with disabilities between 8 and 12 years of age, 66.7% of the bonding area is in the risk zone; in the case of the formative and protective areas, 50% are in the optimal zone, and 33.3% of the reflective area is in the risk, monitoring and optimal zones.

Area	Zones	Frequency	Percentage
Link	Risk zone	4	66,7
	Monitoring zone	1	16,7
	Optimum zone	1	16,7
	Total	6	100,0
Formative	Risk zone	1	16,7
	Monitoring zone	2	33,3
	Optimum zone	3	50,0
	Total	6	100,0
Protector	Risk zone	1	16,7
	Monitoring zone	2	33,3
	Optimum zone	3	50,0
	Total	6	100,0
Reflective	Risk zone	2	33,3
	Monitoring zone	2	33,3
	Optimum zone	2	33,3
	Total	6	100,0

Table 11 Percentage by areas of competence of parents of children with disabilities from 8 to 12 years old from Asociación Comunidad Autismo Los Cabos A.C.
Source: *Parentality Scale*

Figure 3 shows that 50% of the parental competences of parents of children with disabilities aged 8 to 12 are in the monitoring zone, 33% in the risk zone and only 17% in the optimal zone.

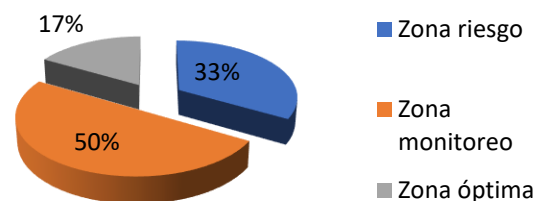


Figure 3 Parental competencies in parents of children with disabilities from 8 to 12 years old from Asociación Comunidad Autismo Los Cabos A.C.

The information presented below is to reflect objective 4 to determine the zone in which the parental competences of parents with children with disabilities are located and the general objective. The parental competences of the parents of the Asociación Comunidad Autismo Los Cabos A.C. are 43% in the risk zone and 36% in the monitoring zone.

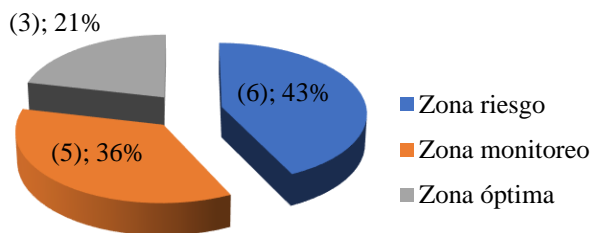


Figure 4 Parenting skills of parents from the Asociación Comunidad Autista Los Cabos A.C.

Analysis and Conclusions

After having gone through the experience in this new modality of distance intervention, working mainly with parents, it was possible to identify some needs to strengthen this process.

Firstly, in order for the patient with a disability to make significant progress, there must be collaborative work between parents and specialists.

Secondly, it is essential to underline the knowledge that parents have about the diagnosis of their children, as this would allow a better link with them and in turn prepare them for the modifications or accompaniment that should be carried out.

Thirdly, it is important to say that one of the benefits of children being understood and supported by the family reduces "inappropriate" behaviours, as they are included in different contexts and learn to cope with them, due to their relationship with other people, coexistence and routine bring about these changes, as well as the fact that parents get involved in a positive way, stimulate their learning, provide emotional warmth and offer guidance but without giving the answers, increases the development of cognitive and social skills.

Fourthly, having an organisation of daily life allows for a quicker adaptation and thus provides the patient with the security and confidence of being in that place.

It is important that when entering an intervention the parents are committed to support at all times, as it is ideal to work directly with the child and the parents, so that they know how to interact, intervene and support their child to develop in the most optimal and natural way.

It is concluded that in the Asociación Comunidad Autismo Los Cabos A.C. there are 43% in the risk zone and 36% in the monitoring zone with 21% in the optimal zone, presenting almost a continuous line in the formative area, where apparently the most important thing is education, but the other sections that are also important are left aside. In addition to this, the main ones apparently involved are the mothers, but to the extent that the fathers commit themselves to the new ways of intervention and evaluate the achievements, better results will be obtained and therefore instead of paying for a greater number of hours of therapy, they will save money and have more tools to intervene with their child.

References

- Acevedo, J., Ibarra, M.; Canchila, O. (2016). Prácticas parentales y conductas sexuales de riesgo (tesis de pregrado). *Universidad de Santa Buenaventura, Cartajena, Colombia*. <http://hdl.handle.net/10819/6071>
- Association, A. P. (2013). Guía de consulta de los criterios diagnósticos del DSM-5. Recuperado de <https://www.eafit.edu.co/ninos/reddelaspreguntas/Documents/dsm-v-guia-consulta-manual-diagnostico-estadistico-trastornos-mentales.pdf>
- Balsells, M. A., Vaquero, E., Fernández, L., Fuentes, N. y Mateos, A. (2020). *El ejercicio de la parentalidad positiva en un mundo digital*. Recuperado de <http://diposit.ub.edu/dspace/bitstream/2445/177959/1/buenas-practicas-ejercicio-parentalidad-positiva-mundo-digital.pdf>.

- Benloch, S. (2020). Teoría del Apego en la Práctica Clínica: Revisión teórica y Recomendaciones. *Revista de Psicoterapia*, 31(116), p.169–p.189. doi.org/10.33898/rdp.v31i116.348
- Bernal, F., Rodríguez, M., González, J., Torres, A. (2017). Competencias parentales que favorecen el desarrollo de funciones ejecutivas en escolares. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud*, 16(1), p.163–p.176. doi.org/10.11600/1692715x.16109
- Bruck, S., & Ben-ariéh, A. (2020). La historia del estudio Children ' s Worlds. *Sociedad e Infancias*, 4, p.35–p.42. doi.org/10.5209/soci.68411
- Castillo, N., Saldarriaga, J. (2019, 30 de diciembre). Estilos de socialización parental: revisión sistemática. *PsiqueMag*, 8(2), p.55–p.76. Recuperado de <http://revistas.ucv.edu.pe/index.php/psiquemag/article/view/197>
- Dawson, S. J., Rogers y Geraldine (2021). *Modelo Denver de atención temprana para niños pequeños con autismo*. Ávila, España: Autismo Ávila.
- Domínguez, E.; Fortich, D.; Rosero, A. (2018, marzo). Competencias Parentales y Resiliencia Infantil en Contexto de Desplazamiento en Colombia. *Prisma Social*, 20, p.227–p.253. Recuperado de <https://bbibliograficas.ucc.edu.co/docview/2053252405?accountid=44394>
- Fundación ciudad del niño. (2017). *pauta guía "evaluación de las competencias parentales."* p.2-p.17. Santiago, Chile. Fundación ciudad del niño. Recuperado de <https://intranet2.ciudadelnino.cl/cid/pauta-guia-evaluacion-de-las-competencias-parentales-para-programas-de-proteccion-de-derechos/>
- Golanó, M., Perez, C. y Salamero, M. (2019). La mentalización parental en la investigación y la clínica con padres: La Parent Development Interview - Revised (PDI-R). Adaptación y validación al castellano y al catalán. *Revista de psicopatología y salud mental del niño y el adolescente*, (34), 91–103. Recuperado de https://www.fundacioorienta.com/wp-content/uploads/2021/07/REVISTA_34.pdf
- Gómez, E., y Muñoz, M. M. (2014). Escala de parentalidad positiva. Manual. *Fundacion Ideas Para La Infancia*. Santiago de Chile, Chile: Fundación Ideas para la Infancia.
- Granados, L. F., Alvarado, S. V., y Carmona, J. (2017). El camino de la resiliencia: Del sujeto individual al sujeto político. *Magis*, 10(20), 49–68. <https://doi.org/10.11144/Javeriana.m10-20.crsi>
- Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado. (2019). *Hablemos de Discapacidad*. Recuperado de <https://www.gob.mx/issste/articulos/hablemos-de-discapacidad>
- Kast, M., Farkas, C. y Vallotton, C. (2017). Diferencias en sensibilidad parental entre madres y padres de Chile y Estados Unidos. *Psicoperspectivas*, 16(3), p.137–p.148. <https://doi.org/10.5027/psicoperspectivas-vol16-issue3-fulltext-950>
- Lampert, M. P. (2021, 2 de junio). Trastorno del espectro autista: Características, epidemiología, marcos legales y políticas de apoyo en Argentina y España. *Biblioteca Del Congreso Nacional de Chile | Asesoría Técnica Parlamentaria*, 1–29. Recuperado de https://www.bcn.cl/asesoriasparlamentarias/detalle_documento.html?id=79488.
- Latorre, M. (5 de septiembre 2016). *Las competencias y sus clases* [Mensaje en un blog]. recuperado de <https://marinolatorre.umch.edu.pe/las-competencias-y-sus-clases/>
- López, D. A. (2017). De la familia sistémica a la familia global: Apuntes sobre la familia y sus dinámicas desde el enfoque sistémico y la sociología de la globalización. *Revista Lumen Gentium*, 1(2), 36–46. <https://doi.org/10.52525/lg.v1n2a4>

Martínez, D. D. (enero - junio de 2020). El apego seguro en niños con multidiscapacidad. *Dperspectivas Siglo XXI* (1), p.36-p.49.

Ministerio de Educación (2021). Guía de disciplina positiva para el desarrollo de habilidades socioemocionales en la escuela y el trabajo con familias (1). Recuperado de <https://repositorio.minedu.gob.pe/handle/20.500.12799/6982>

Paredes, J. I. (2020). *Competencias parentales y conciencia fonológica en niños de 5 años en la institución educativa particular la católica en el distrito san juan de miraflores, lima* (tesis de pregrado). Universidad nacional de San Agustín de Arequipa, Arequipa, Perú.

Rodrigo, M. J. (abril de 2015). Preservación familiar y parentalidad positiva: dos enfoques en convergencia. *Revista de Treball Social. Col·legi Oficial de Treball Social de Catalunya*, 204, p.36–p.47.

Rodríguez, S., Salas, D., Vélez, M. (2018). *Relación del involucramiento y la competencia parental con el bienestar infantil en familias bogotanas de estatus socioeconómico bajo* (tesis de pregrado). Pontificia Universidad Javeriana, Bogota D.C..

Sood, M., y Chand, D. (2021). Meta-Parenting, a New Concept in the India Context. *International Journal of Advanced Research*, 9(01), p.581–p.588. <https://doi.org/10.21474/ijar01/12331>

Unicef. (2017). *Habilidades Parentales*. Recuperado de <http://www.encyclopedia-infantes.com/sites/default/files/dossiers-complets/es/habilidades-parentales.pdf%0Ahttp://www.encyclopedia-infantes.com/es-mx/inicio.html>

Vera, L. Y., y Apolo, J. F. (2020, enero). Competencias parentales: percepciones de padres de niños con discapacidad. *Conrado*. Recuperado de <https://conrado.ucf.edu.cu/index.php/conrado/isue/view/51>.

Measurement municipal social development in the district of Etlá, Oaxaca**Medición del desarrollo social municipal en el distrito de Etlá, Oaxaca**

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Abstract

It is highly relevant to know the impact of social development programs, specifically the funds that arise from branch 33 (FAIS and FORTAMUN) whose objectives are to provide infrastructure and strengthen the municipality, to identify possible incidences on territorial disparities. These funds are administered by the municipal authorities and to know their effect on social development, it is proposed to use the basic Municipal Development Index (IDM), since it is considered a reliable, simple and adaptable option. The purpose of this article is to propose a series of complementary indicators based on the IDM, which are adapted to the characteristics of the State and especially to the region that makes up the district of Etlá, Oaxaca; in order to generate structured and real information for analysis and interpretation by all those interested in public action. This proposal is expected to be a useful management tool for municipal change towards higher levels of effectiveness and efficiency

Resumen

Resulta de gran relevancia conocer el impacto de los programas de desarrollo social, específicamente de los fondos que surgen del ramo 33 (FAIS y FORTAMUN) cuyos objetivos son dotar de infraestructura para fortalecer al municipio e identificar posibles incidencias sobre las disparidades territoriales. Dichos fondos son administrados por las autoridades municipales y para conocer su efecto en el desarrollo social se propone utilizar el Índice de Desarrollo Municipal básico (IDM), ya que se considera una opción confiable, sencilla y adaptable. Este artículo tiene como finalidad plantear una serie de indicadores complementarios a partir del IDM, que se adapten a las características del estado, especialmente a la región que compone el Distrito de Etlá, Oaxaca, con el fin de generar información estructurada y real para su análisis e interpretación por todos aquellos interesados en la acción pública. Se espera que esta propuesta logre ser una herramienta de gestión útil para el cambio municipal hacia mayores niveles de eficacia y eficiencia.

Territorial, Municipality, Development, Indexes**Territorio, Municipios, Desarrollo, Índices**

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Introduction

The World Summit on Social Development held in 1992 marked the beginning of negotiations on the Copenhagen Declaration. At this summit, the founding committee was established, which held several meetings in the following years, but it was not until March 1995 that the World Summit for Social Development was held in the capital of Denmark. Representatives from 187 countries met to discuss issues related to social development and agreed to draft a declaration containing ten commitments and a program of action. This declaration represented a major international achievement in placing human beings at the center of development strategies.

The program of action determined actions at the national and international levels to fulfill the ten commitments, urging governments to measure the social impact of their microeconomic, macroeconomic and sectoral policies; at the same time, equality between women and men was included as a relevant aspect.

Of the ten commitments established, number one was to create an economic, political, social, cultural and legal environment conducive to social development. In this regard, the importance of increasing the resources allocated to social development is emphasized, as well as the criteria suggested at the national level that incorporate the review of resource allocations for public expenditure, giving priority to social development and increasing the effective and efficient use of public resources (United Nations, 1995).

Based on the above, several conceptualizations of social development have emerged, some of which will be reviewed below, and which are undoubtedly related to the definition of society from which they are based. All definitions of society have in common human beings as the center of the organization, around them different problems are solved, such as survival needs, coexistence, economic organization, democracy, in short.

The basic Municipal Development Index (IDMb) is considered as a measuring instrument that provides real values for the territorial divisions of each state, whether of a political-administrative nature or some other.

Concept of social development

The first concept of social development is that of the author (Uribe Mallarino, 2004) who states that development can be defined as the growing tendency of a society along a *continuum*¹, The extremes of which would be, on the one hand, the most advanced societies and, on the other, the most backward ones. Understanding that progress or backwardness is subject to goods, technology, productivity, accumulation and a concept further removed from what is considered survival. Therefore, we would speak of social development as the result of the improvement in collective welfare indexes such as life expectancy, infant mortality, disposable income, caloric intake or access to social services; understanding that all this would point to a longer life, greater and better enjoyment of goods, protection against natural adversities, health ailments and risks in general.

For his part (Zuluaga Monsalve, 2017) states that the correspondence between development and society is known as social development, so this is conceived as the socioeconomic change in which society is a participatory actor; development seeks to improve living conditions, quality of life for society in general and dignify the human being.

The formal and informal relationships and institutions² existing between people, build the ideals of society that determine the distribution of resources and forms of access to them, which in turn mark the conditions of life according to the possibility of satisfying the needs of the individual, first in material form through housing, clothing, food, education, recreation and health. On a second level, the immaterial aspects such as coexistence, protection, security, solidarity, organization, participation, love, respect, among others.

¹ Concept used in various branches of knowledge, which expresses the variation of a living being, object or scientific, social or psychological process through a progressive transformation in a given time.

² These institutions are understood as the conventions and norms of a group in a specific space.

In relation to the above, Jorge Villalón *apud* (Zuluaga Monsalve, 2017) considers that social policies are determined by the current economic model, and each of them must be approached from three indispensable aspects in their formulation. First, the productive apparatus, which is related to the generation of resources and their distribution; second, the social structure, which refers to overcoming unfair living conditions and the development of human potential, the fair distribution of opportunities for the entire population. He argues that social development must have a broader concept that transcends the economic and linear, conceiving it beyond consumerism, productionism and the satisfaction of basic needs.

The definition of (Alaminos & López, 2009), with which this analysis is aligned, defines social development as the achievement of economic, social and ecological balance where inequalities are understood as imbalances, whose response is human rights. In other words, it considers that the charter of human rights should be the basis for social development proposals.

It is logical that at the international level and especially at the national level, some relevant aspects of social development such as health, education, public safety and employment should be considered; by addressing these issues, an improvement in the indicators of social problems such as poverty, inequality, exclusion, isolation and vulnerability of the most vulnerable groups is expected. At an aggregate level, it could be argued that these are the objectives of public interventions in the area of social development.

Therefore, governments promote social development through institutions and agencies, with the function of implementing social protection policies and programs to generate inclusion, considering in the design of interventions (policies) those beneficiaries who are part of vulnerable groups or who live in marginalized or marginalized conditions. Simply put, with what has been pointed out so far, the complexity inherent to the definition of social development is evident, which acquires new degrees of difficulty when trying to evaluate or measure this social development. Given that social development is a complex process, there are various proposals for its measurement.

Development indexes

The *Human Development Index* (HDI), which emerged in 1990 in a report presented at the UNDP, identifies the situation of a country in terms of the basic human development of its population by means of a composite index. The HDI is made up of three fundamental elements that determine the development of a society, all of which have the same relative weight, thus avoiding the undervaluation of any of the elements.

To calculate the HDI, the following indicators are considered: life expectancy, education and GDP per capita; the value resulting from this formula responds to a progression of low - medium - high, taking as a reference the following values: high HDI greater than or equal to 0.8, medium HDI between 0.5 and 0.8 and low HDI less than 0.5. However, one of the limitations attributed to this index is the change in the methodological criteria that is carried out year after year, making inter-temporal comparisons difficult to elaborate, obtaining less accuracy on the progress or setback in terms of human development. On the other hand, being a very general index, it presents certain limitations to identify particularities of the cases.

Another index is the *Gender-Related Human Development Index*, which takes up the three dimensions of the HDI, but also considers and quantifies social and economic inequalities between men and women, making it sensitive to gender inequalities. This term was introduced in the Human Development Report in 1995 together with the Gender Empowerment Measure (GEM).

In the same vein, the *Human Poverty Index* (HPI) emerged in 1996, when the UNDP made its first attempt to measure poverty in order to introduce a new quantitative perspective in development studies. Subsequently, the Capability Poverty Index (CPI) emerged, this index measured human development through three basic dimensions, including the insufficiency of available income to acquire the value of the food basket and to make the necessary expenditures in health and education, even dedicating the total income of households only for these purposes. (CONEVAL, n.d.)

For the first time in 1997, the UNDP proposes the HPI, which has an inverse relationship to the HDI, since it focuses mainly on deprivations such as survival, health and education³, knowledge⁴ and a decent standard of living⁵. This is why, while a high HDI score implies high development, high HPI values imply a situation of greater poverty. There are two variants of this index, the HPI1 applicable in developing countries, and the HPI2 which is aimed at the study of poverty situations in developed countries.

The *Genuine Progress Index* (GPI) originated as an alternative to GDP as an indicator of social welfare. It was created by a group of researchers in California in the 1970s, and its main difference from GDP is that it distinguishes between economic activities that produce benefits and those that cause harm. This implies a different perspective, as it does not conceive of all activities as generators of common benefit.

The GPI is composed of 26 variables of a social, economic and environmental nature. It is calculated when domestic commercial consumption adjusted for economic inequality is adjusted by adding domestic and community labor services, public expenditures and subtracting private and defensive public expenditures, as well as the costs of environmental degradation and the devaluation of natural capital. The GEM introduces new variables that allow for a better and more realistic estimate of a territory's well-being. The importance of this index lies in knowing the country's rise and fall, taking into account the aspects that will have a future impact.

To close this review of proposals, two more indexes based mainly on the analysis of subjective variables such as life satisfaction or individual and social well-being are considered citation.

Within this group, the Happy Planet Index was created by the New Economics Foundation (NEF), based on the need to add environmental factors to the study of the development of societies and people; it assumes that without a healthy environment, complete development is not possible.

The result is achieved through a non-mathematical formula that takes into account three dimensions: life expectancy, life satisfaction (happy years of life) and the ecological footprint (relationship between quality of life and the resources obtained through the planet).

The Gross Domestic Happiness Index (GDP), whose term was proposed by the monarch of the Kingdom of Bhutan, Jigme Singye Wangchuck in 1972, as a response to criticism of the constant economic poverty affecting his country. To obtain this FIB, perception surveys are carried out, constructed with a matrix of 150 indicators that highlight nine dimensions for the study of societies: psychological well-being, health, use of time, community vitality, education, culture, environment and government (Alaminos & López, 2009).

All of the above places the discussion in a context of crossroads between approaches that reflect different models of social duty that guide priorities for efficient public management, as part of the path to achieve the long-awaited social development. To be socially developed will therefore mean optimal levels of quality of life for citizens, in terms of a peaceful, fair, free, tolerant, egalitarian and supportive environment, where there are great possibilities for each individual to satisfy his or her needs, develop his or her potential and achieve personal fulfillment. Within this framework, Amartya Sen's concept of development is enunciated:

In order to talk about the development of a society, it is necessary to analyze the lives of those who are part of it, since it is impossible to consider that there is economic success without taking into account the lives of the individuals who make up the community. Development is then the development of the people in society. For this reason it defines it concretely: Development is a process of expanding the capabilities enjoyed by individuals (London & Formichella, 2006) p. 19).

³ Vulnerability to death at a relatively young age

⁴ To be excluded from reading and communications

⁵ General economic procurement

It is also inferred that social development is conceived as the next step after the economic development of a country; being its final objective to achieve the welfare of citizens, understanding that welfare refers to the effect of development on the individual, families and society.

In Mexico, inequality prevails due to the fact that individual opportunities are limited by gender, socioeconomic level and geographic location, as main factors; when this reality is recognized, the need to recover these differences in the measurement instruments used as a basis for intervention decision making and evaluation of the situation in state, municipal or other territorial scales, defined with political-administrative or other criteria, becomes evident.

An example of a measurement instrument was applied in 2005, when the National Council of Science and Technology (CONACYT) and the National Institute for Federalism and Municipal Development (INAFED), through the Segob-Conacyt Fund for Research and Development, selected El Colegio de la Frontera Norte, in coordination with municipal, state and federal public officials, as well as academic specialists, to develop a municipal index calculated for 2,418 Mexican municipalities.

The objective was to reflect the general tendencies of the level of development of each municipality with respect to others in the same state or the country, considering socioeconomic indicators that have been used to quantify or measure development, as well as institutional and environmental indicators, which in their convergence allowed us to obtain an overview of the level of development of the municipalities studied.

The result was the basic Municipal Development Index (IDMb) (Flamand, Martínez, & Hernández, 2007). Its conception prioritized broad applicability to allow its calculation for all Mexican municipalities and comparisons, as well as the use of information from official sources and continuous generation so that it could be replicated at different times.

Therefore, the basic Municipal Development Index can be described as a simple and transparent instrument that allows classifying Mexico's municipalities according to their respective levels of development. This index concentrates information on the situation of the municipalities to guide public actions aimed at local development. It is transcendental to highlight that the bMDI does not seek to grant a qualification of municipal performance, but rather to be a relative indicator of the position of each municipality with respect to the rest of the country's local entities.

Measuring the basic Municipal Development Index (bMDI)

The bMDI can be quantified for all of the country's municipalities, this index allows each one to be placed according to the desired context; it collects information on four dimensions with equal weightings. These dimensions are: environmental, economic, institutional and social; considered fundamental to achieve an integral and sustained municipal development, therefore they were calculated to obtain the total value of the bMDI.

The development dimensions that make up the index are shown in Figure 1.

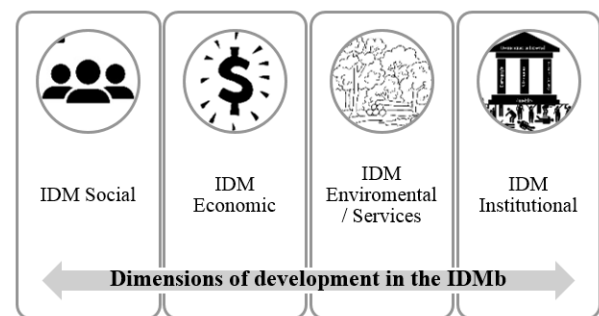


Figure 1 Development Dimensions

Source: Own elaboration based on (Flamand, Martínez, & Hernández, 2007)

In order to better understand the bMDI, each of the dimensions will be discussed in more detail. First, the environmental or services dimension includes two indicators that show accessibility to water resources and waste management through the existence of drainage; the variables are therefore the number of dwellings with piped water and the number of dwellings with drainage out of the total number of inhabited dwellings.

It was assumed that access to water and wastewater disposal is a basic resource and a potential pollutant with serious repercussions on public health.

The economic dimension describes the municipal productive dynamics in summary form using the gross census value added per capita, as well as the level of employment as an approximation to the inclusion of the population in the labor force and as an indicator of the economic dynamism of the local productive system.

The institutional dimension includes the tax effort as an indicator of governmental financial performance and citizen participation in municipal elections as a sign of the municipality's institutional vitality and general interest in public affairs.

Finally, the social dimension includes indicators that represent the opportunities to acquire minimum knowledge with the proportion of the population with completed primary education and a health indicator with infant mortality.

The index is constructed in three major stages, which are described below:

1. Obtaining and organizing the information that feeds the basis for the calculation,
2. Calculation of the indices by development dimension (called sub-indices), 3.
3. Calculation of the bMDI, defined as the average of the four sub-indices.

The calculation of the bMDI for each municipality is based on 28 data that allow the calculation of 8 indicators, two for each of the development dimensions considered, which are subsequently integrated into four sub-indices and finally into the basic Municipal Development Index (bMDI).

According to (Vargas, 2022) the importance of the indicators lies in the information they allow to obtain, through the observation of the progress of a project and whether it has achieved a proposed objective. Table 1 below shows the data, indicators and subindices to be analyzed to obtain the bMDI.

Sub Index	Datos
Municipal-Social Development Index	Literacy
	School attendance
	Basic and post basic education
	Entitlement
	Floor different from ground
	Sanitary toilet
	Piped water
	Drainage
	Electric power
	Washing machine
Refrigerator	
Municipal-Economic Development Index	Gross census value added
	Per capita agricultural index
	Employed population
	IMSS-insured workers
Municipal Development-Environment Index	State of aquifers
	Water supply
	Drainage coverage
	Protected Natural Areas
	Deforestation
	Forest cover
	Recovery indicator
Erosion risk indicator	
Municipal-Institutional Development Index	Percentage of electoral participation
	Transparency evaluation
	Public administration employees
	Percentage of own income
	Common law crimes

Table 1 bMDI data and subindices
 Source: Own elaboration based on (Flamand, Martínez, & Hernández, 2007)

The table above shows in a structured way the data to be analyzed, then the indicators that will be measured through normalized mathematical equations, to later constitute each one of the sub-indices. Finally, the bMDI will be the result of the average of the sub-indices.

We start from the assumption that each municipality, through its management, facilitates the means to raise the welfare of the population, achieve higher levels of social development and equal opportunities; an example of management is the implementation of resources from branch 33, in its FAIS and FORTAMUN funds, these are a strategy of attention to the vulnerable population, which aims to provide the districts with adequate infrastructure and public services that improve and in turn improve living conditions.

Local governments should base their management on trying to raise the standard of living, improving the social conditions of vulnerable groups and favoring equity, until reaching community strengthening, where all inhabitants feel an important part of the community and contribute to a common goal.

AQUINO-HERNÁNDEZ, Perla Viridiana, MARTÍNEZ-PELLEGRINI, Sarah Eva, RUÍZ-MARTÍNEZ, Alfredo and CASTILLO-LEAL, Maricela. Measurement municipal social development in the district of Etna, Oaxaca. Journal of Contemporary Sociology. 2022

Making a constant or permanent integration between the government and the citizens.

Based on the above, the bMDI is chosen as a mechanism that allows a clearer understanding of the lines of action in which the resources of government programs are invested at the municipal level. Taking as a premise that the ultimate goal of any municipal authority is to reduce social backwardness and the social gaps it causes.

Once the results of the sub-indices and the bMDI are obtained, it will be possible to first identify the focal geographic area of attention, then the demographics of that area, the main need that is being addressed, and finally, to test the hypothesis that indicates that municipal governments have a good understanding of the needs of their inhabitants.

The main aspects of the district of ETLA, Oaxaca, which will be the area of study to be analyzed, are presented below, as well as relevant information on the 23 municipalities that make up the district, as well as their degree of marginalization and social backwardness.

District of ETLA

The State of Oaxaca has a political division considered the most complicated in Mexico, since it is made up of eight regions: Cañada, Costa, Istmo, Mixteca, Papaloapan, Sierra Sur, Sierra Norte and Valles Centrales; with 570 municipalities divided into 30 districts (delimited in Figure 2); the State of Oaxaca is home to a little more than 11 thousand communities.



Figure 2 State of Oaxaca with regional and district divisions
Source: (Wikimedia, n.d.)

In order to understand the territory under analysis, it is essential to recognize cultural diversity and take into account the struggle of the peoples to maintain their identity, in this sense, communality is a determining aspect in understanding the dynamics among Oaxacan peoples (Broca & Torres, 2022).

For this case, district 11 ETLA is examined, belonging to the Valles Centrales region; district 11 is integrated by 23 municipalities that are listed in table 2, in the first place, there is the municipal code that consists of a unique three-digit number, which allows identifying the municipality within the federal entity, then the name of each municipality; table 3 includes the municipal code, the total population; finally, it includes the degree of marginalization and degree of social backwardness, for each municipality.

The marginalization index is considered important, since it considers education, housing, income from work and population distribution, and its breakdown is state and municipal; at the same time, it is considered convenient to include the social backwardness index, which addresses indicators of education, health, basic services, housing quality and space, and household assets; its breakdown is state, municipal and by locality.

Municipality code	Name of municipality
33	Guadalupe ETLA
45	Magdalena Apasco
63	Nazareno ETLA
77	Reyes ETLA
84	San Agustín ETLA
102	San Andrés Zautla
135	San Felipe Tejalápam
150	San Francisco Telixtlahuaca
161	San Jerónimo Sosola
175	San Juan Bautista Atlatlahuca
178	San Juan Bautista Guelache
179	San Juan Bautista Jayacatlán
193	San Juan del Estado
227	San Lorenzo Cacaotepec
293	San Pablo ETLA
294	San Pablo Huitzo
426	Santa María Peñoles
483	Santiago Suchilquitongo
487	Santiago Tenango
494	Santiago Tlazoyaltepec
531	Santo Tomás Mazaltepec
539	Soledad ETLA
338	Villa de ETLA

Table 2 Municipalities and municipal code
Source: Own elaboration based on (INEGI, 2020).

Municipality code	Total population	Degree of marginalization	Degree of social backwardness
33	2 929	Very low	Very low
45	7 888	Very low	Very low
63	4 293	Very low	Very low
77	4 370	Under	Under
84	4 168	Very low	Very low
102	5 326	Medium	Under
135	8 231	Medium	Medium
150	13 856	Very low	Under
161	2 730	High	Medium
175	1 424	High	Medium
178	6 692	Bajo	Very low
179	1 447	Medium	Under
193	2 807	Under	Under
227	18 339	Very low	Very low
293	17 116	Very low	Very low
294	7 035	Very low	Under
426	8 967	Very low	Very high
483	10 886	Under	Under
487	1 966	Medium	Medium
494	6 300	Very high	Very high
531	2 612	Medium	Under
539	6 348	Under	Under
338	10 361	Very low	Very low

Table 3 Municipal code, total population, degree of marginalization and degree of social backwardness of the district of Etlá

Source: Own elaboration based on CONAPO Estimates based on the (INEGI, 2020); Basic Questionnaire Tabulations, as well as the Social Gap Indicators of the (CONEVAL, 2020).

Having knowledge of the indicators and values of the district of Etlá with its 23 municipalities, taking into account its characteristics and the results of the documentary research, it is considered that the degree of effectiveness of social programs affect the reduction of deficits in public services, the generation of employment and it is expected that, consequently, it will bring an increase in the income of the population.

This is due to the fact that social policies aim to reduce or combat high levels of poverty; their main objective is to guarantee citizens access to basic goods and services that are considered part of social rights, which are contemplated in the Political Constitution of the United Mexican States. Social programs are a form of State intervention that attempts to reduce social inequalities and their attention was mainly directed to rural areas; however, in recent years there has been an increase in the population living in conditions of poverty in urban areas. Initially, policies were the responsibility of the federal government, but thanks to decentralization processes, the operation and administration of education, health and housing programs, among others, became the responsibility of state and municipal governments.

The little or almost null positive result in the reduction of social deprivation of citizens, implies a redesign of social policies that are adapted to the different areas, where labor instability, access to basic services not guaranteed, the population living below the basic survival level, flimsy housing, as well as meager incomes are recognized.

The new reality demands a renewal of the political system, creating better and new relations between the State and society, where the decision-making processes include social issues that allow improving the quality of life of the inhabitants of the districts.

Methodological proposal

In this sense, certain determining indicators must be included in the characterization of a territory; it is essential that those who elaborate and determine the scope of social policies, through social programs and aid, have relevant information on the regions and municipalities, thus providing greater resources for the municipalities, and that these are used to carry out public works that attempt to solve the priority problems of the population.

To get into the subject, it is important to know that the definition and construction of an index takes place during three interrelated stages: first, defining the dimensions to be considered; second, choosing the values or indicators that best reflect these dimensions, taking into account the possibility of obtaining them. The second is to have efficient and reliable statistical information systems as a source and, lastly, the definition of an index to operationalize what is to be quantified, which is also comparable in time and space, interpretable and useful for decision making.

In recent years, a large number of methodologies have been developed in the search for a more accurate measurement of poverty; however, lately, unidimensional methodologies predominate, thus replacing multidimensional ones (Reyes & López, 2016).

For this study, a methodology is proposed that takes as a basis the basic Municipal Development Index (IDMb) with some adaptations that together build an overview of the standard of living, access to services, income, environmental context, citizen participation, among other data of interest about the municipalities that make up the district 11 Etna of the State of Oaxaca. Consequently, to enable the comparability of the development of each municipality, so that this instrument can be replicated in other districts and, in turn, at the regional level. The data and sources are shown in Table 4.

By the year 2021, the number of inhabitants aged six years and older who have a computer is only 23.4% of the total population of Oaxaca; likewise, the state is the second state with the second lowest percentage of population using the Internet with 56.9%, only behind Guerrero with 61.4%. These data are taken into account due to the adjustments that have been made so that the school-age population can continue their education through electronic media.

Access to medical care is also included, since they serve the population without social security; they also bring health services closer to the most vulnerable areas with difficult road access.

People with disabilities are also taken into account, since they represent approximately 20% of the total population of the state, and their importance in the economy of any region is considered.

On the other hand, the population with an income lower than 2 minimum wages, which, by the way, increased as a consequence of the pandemic, is analyzed together with the population that performs non-formalized economic activities since their salary is insufficient. In the same vein is food poverty, which according to data from the (CONEVAL, 2019) the lack of access to food went from 21.7% to 20.4% between 2008 and 2018.

Forest nurseries are also included, since currently the state of Oaxaca has a network of technified forest nurseries in charge of producing native plants depending on the region where the nursery is located. In the same vein, reforestation, land use and vegetation are added as intervening factors in the economic activities of the regions.

Finally, aspects such as municipal public security personnel, audits of the municipality and assistance programs are studied as part of the management of state and municipal authorities. The primary objective of obtaining the Municipal Development Index for the district of Etna is to measure progress in four dimensions of development: social, economic, environmental and institutional, in order to present an integral evaluation of the situation of each of these.

Dimension	Data proposal	Source
Municipal-Social Development Index	Piped water	INEGI
	Indigenous language speaker	INEGI
	Higher education	INEGI
	Entitlement	INEGI
	Drainage	INEGI
	Schooling	INEGI
	Electric power	INEGI
	Sanitary toilet	INEGI
	Computer	INEGI
	Floor different from ground	INEGI
	Medical care	SSO
	Disability	INEGI
Municipal-Economic Development Index	Population with income below 2 minimum wage	INEGI
	Percentage of population employed	INEGI
	IMSS-insured workers	INEGI
	Economic activities	INEGI
	Food poverty	INEGI
Municipal Development Index-Environment	Non-formalized activity	INEGI
	Water supply	CONAGUA
	Forest nurseries	CONAFOR
	Drainage coverage	INEGI
	Reforestation	CONAFOR
	Deforestation	CONAFOR
Municipal-Institutional Development Index	Land use and vegetation	CONAFOR
	Common law crimes	INEGI
	Municipal public safety personnel	INEGI
	Audits of the municipality	INEGI
	Electoral participation	INE
Percentage of own income	INFDMINAFED	
Assistance programs	CONEVAL	

Table 4. Proposed data for the bMDI
Source: Own elaboration

It is proposed to add the population speaking an indigenous language, since in 2020 Oaxaca had the highest percentage of population aged 3 years and older speaking an indigenous language with 31.2%, occupying the number one at the national level (INEGI, 2020).

The average level of schooling of the population 15 years and older is included, also the population with higher education, according to (INEGI, 2020) in Oaxaca the average level of schooling of the population 15 years and older is 8.1, which indicates that they have reached a little more than the second year of high school. It is assumed that by acquiring higher level knowledge, job opportunities and growth opportunities also increase.

Due to the different nature of the variables that make up the bMDI and its four dimensions, a typical form will be used to transform variables, normalize them and achieve similar magnitudes between them using the following formula:

$$\text{Normalized variable} = \frac{(\text{Municipal value} - \text{Minimum})}{(\text{Maximum} - \text{Minimum})}$$

By applying this formula, all the data would be on a scale between zero and one, so that the bMDI and its four dimensions would be on a scale that reflects the level of achievement and, in turn, would provide a quantification of progress and setbacks. Thus, municipalities with values close to one will represent those with the highest level of development and those close to zero will correspond to a lower level of development.

Since the purpose is for the indexes and the variables themselves to have an intuitive and positive interpretation, this means that the higher the value, the better the conditions. However, in the case of the indicators that have a negative sense, a complementary operation will be applied that will invert their scale; in other words, those variables that, by their nature, show less desirable circumstances the higher the value.

Acknowledgment

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Conclusions

Municipal authorities require clear, timely, accurate and reliable information on the social, economic and environmental aspects of their districts in order to make decisions.

The basic Municipal Development Index has the objective of measuring the capacity of the transfers of branch 33 in its FAIS and FORTAMUN funds to satisfy the needs of the population in a broader sense than other indexes. The premise is that economic growth improves the conditions of a community, but it is insufficient to increase its level of development through the management of municipal authorities, who listen to the requests of the inhabitants directly.

This exercise aims to promote the use of the bMDI at the municipal level to show the trends of the level of development first at the municipal, district, regional and state level, which in the future will represent in an integral way the level of development of the Oaxacan municipalities. The information obtained will be sent to the municipal authorities so that they will have a better understanding of the situation of their municipality and at the same time real data on its evolution.

According to the data proposal, it is expected to recognize the success or failure of the policies, taking into consideration the degree of complexity and interdependence of the economic, social, environmental and institutional dimensions. Few studies have been conducted to evaluate the performance of municipal governments, mainly due to the availability of information. Therefore, in the selection stage of the indicators for the proposal in the different dimensions, the availability of information was confirmed, especially with regard to the environment and services dimension, because the disaggregation of information does not reach the municipal level.

From the author's perspective, it is deduced that the application of the bMDI provides a closer approach to the real situation of the country. Once the bMDI is analyzed in the 23 municipalities that make up district 11 ETLA, Oaxaca, we expect to obtain an overview of the situation of each of the municipalities in relation to their level of development. In addition, each of the dimensions will reveal the strengths, weaknesses, opportunities and threats of each municipality.

Finally, by detecting key points of development, municipal authorities can design specific actions to combat and, if necessary, eradicate the causes of low levels of development, but this index only shows the starting point. Finally, it is important to recognize that, when obtaining bMDI values, it is only representative of a moment in time, but the final purpose of implementing the bMDI is to provide data for a given moment, but if a comparison over time is desired, certain adjustments are required that consider as a reference point the development potential of each municipality and the extent to which this potential is used.

References

- Alaminos, A., & López, B. (2009). La medición del bienestar social. (I. U. Paz, Ed.) (4) 11 -29 <https://revistaobets.ua.es/article/view/2009-n4-la-medicion-del-desarrollo-social>
doi:<https://doi.org/10.14198/OBETS2009.4.02>
- Broca, D. L., & Torres, G. L. (2022). Patrimonio agroindustrial e historia del territorio en México. La fabricación del piloncillo en Zimatlán, Oaxaca. *Revista Latinoamericana e Caribenha de Geografía e Humanidades*, 5(9), 71-93. <https://periodicos.unb.br/index.php/patryter/article/view/41186/33810>
doi:<https://doi.org/10.26512/patryter.v5i10.41186>
- CONEVAL. (2019). 10 AÑOS DE MEDICIÓN DE POBREZA EN MÉXICO, AVANCES Y RETOS EN POLÍTICA SOCIAL. Ciudad de México: DIRECCIÓN DE INFORMACIÓN Y COMUNICACIÓN SOCIAL. Recuperado el noviembre de 2019, de https://www.coneval.org.mx/SalaPrensa/Comunicadosprensa/Documents/2019/COMUNICADO_10_MEDICION_POBREZA_2008_2018.pdf
- CONEVAL. (2020). Índice de Rezago Social. Consejo Nacional de Evaluación de la Política de Desarrollo Social, Ciudad de México. Obtenido de https://www.coneval.org.mx/Medicion/IRS/Paginas/Indice_de_Rezago_Social_2020_anexos.aspx
- CONEVAL. (s.f.). Medición de la pobreza. Glosario. Recuperado el julio de 2022, de <https://www.coneval.org.mx/Medicion/Paginas/Glosario.aspx#:~:text=%E2%80%8BPobreza%20de%20capacidades%3A%20Insuficiencia,m%C3%A1s%20que%20para%20estos%20fines.>
- Flamand, L., Martínez, S., & Hernández, A. (febrero de 2007). Índice de Desarrollo Municipal Básico 2005 (IDMb). (E. C. Norte, Ed.) Obtenido de http://www.veracruz.gob.mx/finanzas/wp-content/uploads/sites/2/2021/04/NUM-9_DocumentoAnalisis.pdf
- INEGI. (2020). Censo de Población y Vivienda 2020. Tabulados del Cuestionario Básico. Obtenido de [inegi.org.mx: https://www.inegi.org.mx/programas/ccpv/2020/](https://www.inegi.org.mx/programas/ccpv/2020/)
- London, S., & Formichella, M. M. (enero-junio de 2006). El concepto de desarrollo de Sen y su vinculación con la Educación. (U. Michoacana, Ed.) *Economía y Sociedad*, XI(17), 17-32. Obtenido de <https://www.redalyc.org/pdf/510/51001702.pdf>
- Naciones Unidas. (1995). Cumbre Mundial sobre Desarrollo Social. Copenhague, Dinamarca: ONU. Recuperado el septiembre de 2022, de https://www.semujeres.cdmx.gob.mx/storage/app/media/DerechosMujeresyNinas/Cumbre_De_sarrolloSocialCopenhague.pdf
- Reyes, M., & López, M. (mayo - agosto de 2016). El método de Bienestar SocioEconómico (MBS) como alternativa para la medición multidimensional de la pobreza: una visión desde los salarios. <https://reader.elsevier.com/reader/sd/pii/S0186602817300117?token=0EE010CE4D53A7737CFB43CF79501473A746A7FF45E14CD53400D1257CCC5EF5B50454898C080FDF69D8429FC6722A8&originRegion=us-east-1&originCreation=20221118204843>
doi:<https://doi.org/10.1016/j.acso.2017.01.011>
- Uribe Mallarino, C. (2004). Desarrollo social y bienestar. (P. U. Javeriana, Ed.) *Universitas Humanística*, XXXI(58), 11-25. Obtenido de <http://www.redalyc.org/articulo.oa?id=79105802> ISSN: 0120-4807
- Vargas, M. Y. (junio de 2022). Repositorio Dspace. Recuperado el noviembre de 2022, de Establecimiento de una unidad de producción familiar sustentable de *Pleurotus* spp. en San Juan Yatzona para la contribución a la seguridad alimentaria: http://literatura.ciidiroaxaca.ipn.mx:8080/xmlui/bitstream/handle/LITER_CIIDIROAX/643/Vargas%20Mendoza%2c%20Yanet%20%282022%29.pdf?sequence=1&isAllowed=y
- Wikimedia. (s/f). Oaxaca_regions_and_districts. Obtenido de https://upload.wikimedia.org/wikipedia/commons/thumb/3/3e/Oaxaca_regions_and_districts.svg/330px-Oaxaca_regions_and_districts.svg.png

Zuluaga Monsalve, A. M. (julio - diciembre de 2017). ¿Desarrollo Social? (U. A. Manizales, Ed.)

<https://publicaciones.autonoma.edu.co/index.php/anfora/article/view/312>

doi:<https://doi.org/10.30854/anf.v7.n14.1999.312>

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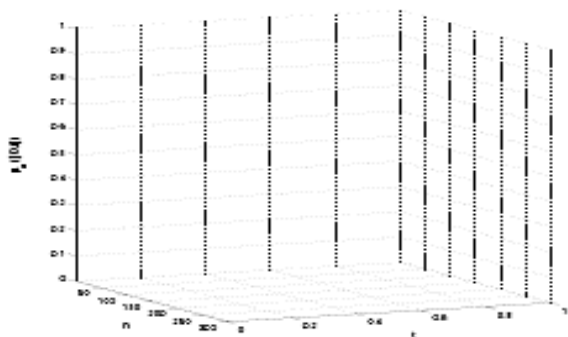
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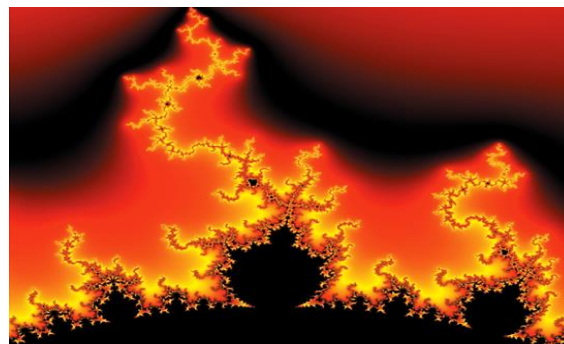


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