



# Autonomy, Good Humor and Support Networks, Potential of Community Resilience Intervention in People Victims of the Earthquake in the Calderón Parish



Anicia Katherine Tarazona Meza <sup>a</sup>

Joaquín Ramón Alonso Freyre <sup>b</sup>

Miguel Giancarlo Ormaza Cevallos <sup>c</sup>

María Joaquina Mera Pico <sup>d</sup>

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## Abstract

Resilience is a concept widely used in recent years, especially when it comes to evaluating the level of recovery of communities that are hit by natural phenomena. It can be stated that conceptually resilience constitutes the ability to react effectively and quickly to the effects of disasters, being a complex phenomenon to evaluate and define. And although the level of resilience does not necessarily imply greater control of vulnerability, it can be affirmed that the reduction of vulnerable conditions can strengthen and consolidate the resilient capacity of individuals and communities, in the face of the effects of natural disasters.

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## Author correspondence:

Anicia Katherine Tarazona Meza,

Master, Ph.D. student, Faculty of Humanistic and Social Sciences

Universidad Técnica de Manabí, Portoviejo, Manabí Ecuador

Email address : [atarazona@utm.edu.ec](mailto:atarazona@utm.edu.ec)

## 1. Introduction

Resilience is a concept widely used in recent years, especially when it comes to evaluating the level of recovery of communities that are hit by natural phenomena. It can be stated that conceptually resilience constitutes the ability to react effectively and quickly to the effects of disasters, being a complex phenomenon to evaluate and define. And although the level of resilience does not necessarily imply greater control of vulnerability, it can be affirmed that the reduction of vulnerable conditions can strengthen and consolidate the resilient capacity of individuals and communities, in the face of the effects of natural disasters.

Many people know that they live in threatened areas, but they do not have the necessary resources to move to safer places, then they are permanently exposed and rather seek through formal and informal means to solve the

<sup>a</sup> Master, Ph.D. student, Faculty of Humanistic and Social Sciences Universidad Técnica de Manabí, Portoviejo, Manabí Ecuador

<sup>b</sup> Bachelor in Sociology, at the University of Havana

<sup>c</sup> Universidad Técnica de Manabí

<sup>d</sup> Faculty of Humanistic and Social Sciences

problems they face [1]. This is a situation that makes it difficult to build resilient communities and where the element of preparing people can play an important role in resilience. The objective of the work is to reflect on the promotion of resilience in people affected by intense telluric phenomena, encouraging the importance of community network supports.

## 2. Research Methods

The inductive method was applied to logically reason the concepts associated with resilience in natural disaster situations, especially during the occurrence of an intense earthquake such as the one that occurred in the province of Manabí on April 16, 2016, and its consequences for a youth organization of the Abdón Calderón parish of the Portoviejo canton. The investigative techniques associated with the performance of the SV-RES test prepared by the researchers [2], which allowed the study of the results of the resilience workshop for disaster situations, were applied. This instrument is based on the evaluation of 12 dimensions, which allow verifying the situation according to three scales: high, average and low. The dimensions correspond to the following: the identity; autonomy; satisfaction; pragmatism; link; networks; Models; goals; affectivity; self-efficacy; learning and; generativity.

The study is of a quantitative-descriptive nature, of primary data sources, transactional in the collection of information, micro-sociological in its sample coverage. The fields of study are psychology and society. The sample is intentional, looking for the attributes necessary for the study. Composed of 12 young Catholic leaders of the Kairos youth group of the Abdón Calderón parish community, aged between 18 and 32 years. All the above was applied in order to reveal the essence of the scientific problem in the processing of information and the definition of the system of central and operational categories. In addition, it developed a critical exercise of its own on the subject addressed, achieving a concrete result that responded to the objectives set.

## 3. Results and Analysis

Abdón Calderón also called San Francisco de Assis, or simply Calderón is a rural parish of the Portoviejo canton located in the province of Manabí, of the continental territory of Ecuador. This part of the country is included in the so-called Pacific Ring of Fire, which qualifies as one of the most earthquake generating zones worldwide. The Abdón Calderón parish is located at 1.03333 south latitude and 80.3333 west longitudes, with a territorial extension of 123.81 km<sup>2</sup>. According to data from the 2010 population census [3], it has a population of 14,164 inhabitants, of which 7,204 are men and 6,960 are women, with a population density of 114 inhabitants / km<sup>2</sup>. The most populated communities are Miguelillo, El Jobo, Quebrada de Guillén, La Balsa, Bijahual, El Hormiguero, Florestal, Maconta, Pimpiguasí. The parish of Calderón, together with that of San Plácido, after that of Portoviejo, are the largest in the canton. Calderón represents 13% of the cantonal territory.

Based on the knowledge of known natural geological processes, the probability of occurrence of a potentially dangerous natural phenomenon that could produce adverse effects on people can be determined [1]. The geomorphological structure of the area combined with anthropic actions such as deforestation of the mountains and construction of road infrastructure in the territory, internal tectonic processes that give rise to levels of seismicity or external tectonic processes that generate landslides on hillsides, expansiveness, erosions, flow of lahars, etc; have led to landslides that may have a future that can be very dangerous for human life in the parish. Before April 16, 2016, the Abdón Calderón rural parish was struck down by an intense winter that caused the river to rise, flooding the town, destroying houses, commercial premises, livestock, causing great economic losses and for the life of the society.

The 7.8 magnitude earthquake on the Richter scale registered on April 16 on the north coast of Ecuador is one of the most intense in Latin America in the last 20 years. Although the telluric movement took place between the coastal resorts of Cojimíes and Pedernales (north), in the province of Manabí and near Esmeraldas, in the Abdón Calderón parish, the abrupt movements of the bowels of the earth were felt with intensity. collapse the local market [4], causing cracks in columns, wall, and roof of the health area laboratory [5]. It was reported a significant volume of damage to homes with its total and partial destruction.

At Portoviejo canton level, the intense earthquake of April 16, 2016, produced the irreparable loss of 671 deaths, thousands of injured, more than 20,000 victims and 8 690 people who were required to evacuate because they lost their homes [6]. All these events generated a potential situation of traumas in the population. People who had suffered great material losses were now reduced their chances of facing such a disaster and achieve a gradual recovery from the damage suffered. The life of society practically froze into an inactivity that seemed endless. The sales of the star products in the territory, such as blood sausages and sausages, were practically reduced to zero. On the other hand, resilience refers to the ability of people to face adversity. In this sense, qualities such as optimism,

courage, self-knowledge, humor, the ability to work hard and relate to others are elements that can strengthen the resilience of individuals in situations of disaster [7].

Under the aforementioned approach, the person who possesses and develops these qualities is called resilient, since it is close to the factors that make possible the development of human capacities to face adversity, which are located in the environment and where the person assumes an active role to find the possibilities that can be deployed. In this way, the environment becomes the motivator for the deployment of resilient capacities [8].

### 3.1 Situational analysis

In recent years the Catholic Church authorities have endeavored to train young Catholic leaders in the community. In this way, the Kairós youth group, belonging to the Abdón Calderón parish, emerged. His plans are aimed at humanitarian aid, it is an institution open to social work projects. its members are always willing to participate and assist in different activities that help other people and the group itself.

Kairos, like any other organization, has had a complex development, several tests are evidence of its prevalence since the good coping of the problems has allowed it to continue functioning in a structured manner until today. The organization is based on good foundations, many young people in the community were interested in the noble proposal launched by the parish priest Vinicio Pinoargote. These people were not exactly very open about their personal affairs and they brought with them many internal problems, but little by little they were molding the attitudes and aptitudes of the same ones.

The members of the Kairós group have been subjected to considerable catastrophes, it should be noted the influence of the flood that occurred on April 12, 2016, which affected very early the homes of most of the community, even the Church suffered the consequences of the Flood. Despite the material losses and the destruction of certain sectors, adolescents of the youth group turned to cooperation; They not only cleaned their residences but also the Temple of their parish and offered solidary help to the needy.

Another of the experiences is related to the occurrence of the earthquake on April 16, 2016, which put at stake the stability of a significant number of young people belonging to the Kairós group. This nature event changed the lives of some of the members of the group. The fear had seized them, even after what happened some children stopped attending the monthly training that is customary, the earthquake proved the resilient attitude of the young people and the group to which they belonged.

Some teenagers lost family members and others were hurt not only physically by the ruins of what they once called home. The event was a phenomenon that affected the group in such a way that certain people could not handle it. Since that catastrophe the Pastoral Committee of Animation Kairos (PAK), has tried to carry out different actions to raise the confidence of its members, but these were not influential enough in the resilient attitude of the youth, as well as the resilience coordination team in Calderón, found an excellent opportunity to intervene, focusing on the vulnerable people of that group, beginning to conduct a research program aimed at Most research on disasters has focused on a risk approach, that is, analyzing the psychosocial impact that such an event represents and the psychological consequences that people develop. Since the 90s, driven by positive psychology, researchers began to experience a change of view and focus on an approach to human strengths, being necessary to know the characteristics or processes that follow the people who manage to adjust to the new situation after of a traumatic situation.

In this process, the social environment and the role of public authorities and institutions have a fundamental role in helping traumatized people, with special importance for studies and resilience workshops. However, sometimes the social context becomes a risk factor. This occurs when the person victim of a traumatic event is stigmatized, isolated and not given any kind of support. That is why when analyzing the resilience linked to an environment of natural disasters, it is important to study it in its social dimension and the role of the authorities and institutions in this regard.

It is very difficult for a person who has suffered a trauma resulting from a natural disaster and who is at a disadvantage to life, to generate a resilient process only with their internal strengths or individual characteristics. Undoubtedly, in these cases, the support provided by their environment, that is, society, authorities, and institutions, is needed. Social support is one of the main factors that indicate the victims of disasters as an important pillar of their adaptation to the new situation [7].

Some scholars have pointed out that, in order to have a trauma, the person must suffer two blows [11]: the first would be the traumatic situation itself and; the second the representation of the problem by the environment. If, as a result of a traumatic situation, society puts us in the role of victims, the trauma is likely to occur. In the same way,

if the presence of the authorities and the material support of public institutions is not received, people will feel abandoned, forgotten and isolated, which can increase depression and suffering. Under these conditions, it will not be possible to promote any feature or dimension of resilience.

The above can be corroborated when in situations of natural disasters there are traumatic consequences that generate the suffering of those affected, who suffer losses and damages of all kinds, the worst being the deaths of relatives, friends, and neighbors that can not be repaired. On the other hand are the actions that are made or that are omitted and that have a negative impact on the mental health of the affected person, contributing to the appearance of psychological disorders restoring the resilience of the Kairos group and restore normal functioning in the interest of social activities that develop them

### 3.2 The social and institutional role in terms of resilience

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### 3.3 Results of the test at the beginning of the workshop and after having finished this

The research work was applied to 12 young people of the Kairós group, where the following could be verified: Table 1 shows the general results related to the application of the SV-RES test prepared by the researchers [2], at the beginning of the workshop and once concluded.

Table 1  
Results of the test at the beginning and after the conclusion of the resilience workshop

Dimensions	HIGH		MIDDLE		LOW	
	Start	Concluded	Start	Concluded	Start	Concluded
Identity	6	10	5	2	1	0
Autonomy	5	9	5	3	2	0
Satisfaction	3	9	7	2	2	1
Pragmatism	6	9	6	3	0	0
Links	6	10	5	2	1	0
Networks	5	9	5	3	2	0
Models	8	10	2	2	2	0

Goals	7	10	4	2	1	0
Affectivity	3	6	9	6	0	0
Self-efficacy	5	9	7	3	0	0
Learning	6	9	6	3	0	0
Generativity	9	11	3	1	0	0

Figure 1 shows the comparative relationship of the results of the resilience study, at the beginning of the workshop and once the same was done.

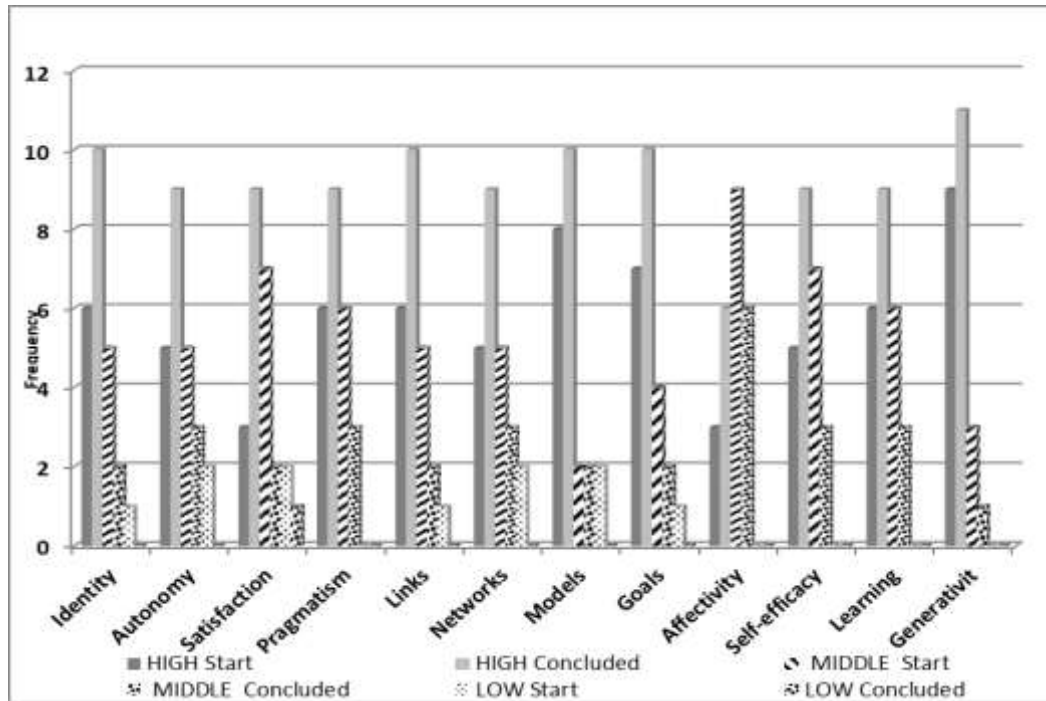


Figure 1. The results of the resilience study, at the beginning of the workshop and once the same was done

Figure 2 shows the comparative behavior of the score obtained in the percentiles at the beginning and after the resilience workshop.

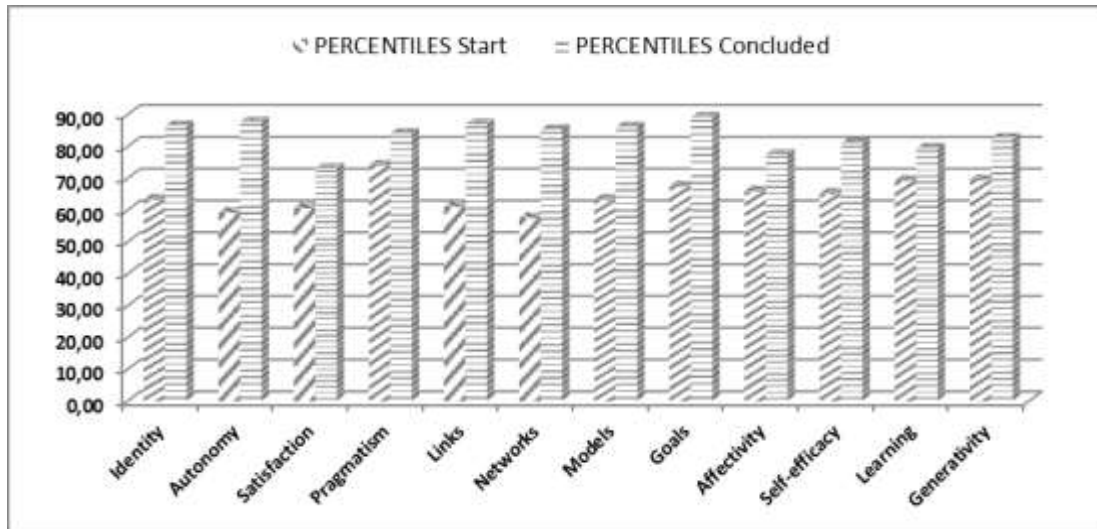


Figure 2. Comparison of the score obtained in the percentiles at the beginning and after the resilience workshop

The data show the effectivity achieved through the application of the resilience workshop to the 12 young people studied by the Kairos youth group, where a higher score is appreciated in all the dimensions assessed after the work was completed. After the natural phenomenon of April 16, 2016, occurred, that adolescents who seemed self-confident and apparently had a high degree of self-esteem, could not assimilate the consequences of the earthquake and collapsed in themselves, doing away with the resilient strengths of the group.

It is important that young people from the KAIRÓS youth group internalize the need to keep alive the experiences acquired during the workshop "Resilience before catastrophes" to continue promoting a high level of resilience as demonstrated in the SV-RES tests at the end of the activities and transmit that knowledge to other members of the group and society in general. The KAIRÓS youth group is encouraged to expand its horizons towards other groups in the community, with the aim of achieving greater integration that replicates the techniques acquired in the workshop, for the benefit of other groups of young people and society in general.

The work fails to deepen the role of society, public authorities, and institutions, in terms of fostering and strengthening resilience in situations of natural disasters, so it is proposed to the direction of the Faculty, the development of projects of research that can deepen the study of this important topic.

#### 4. Conclusion

The application of the SV-RES tests prepared by Saavedra and Villalta 2008, made it possible to calculate the level of resilience at the beginning and after the conclusion of the workshop, constituting a relevant method based on compliance with the objectives proposed in the work. It was proved that after carrying out the resilience workshop with the members of the KAIRÓS youth group, it was possible to reinforce and raise the resilience level of the youth, which was used to benefit the group and society.

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**Biography of Authors**

	<p><b>Anicia Katherine Tarazona Meza</b> Degree in Educational Psychology, Master in Educational Management, Professor Principal Universidad Técnica de Manabí Research Coordinator of the Faculty of Humanities and Social Member of the Scientific Council of the University Project Coordinator Sciences University Lecturer internationally accredited Resiliency</p>
	<p><b>Miguel Giancarlo Ormaza Cevallos</b> Master of Business Administration, Commercial Engineer Teacher in the administration department of the Technical University of Manabí. Full-time professor, Ph.D. student at the University of Córdoba (Spain) Ph.D. in Social and Legal Sciences</p>
	<p><b>María Joaquina Mera Pico</b> Graduated from the Faculty of Humanistic and Social Sciences, has participated in different pieces of training and scientific events</p>