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Grupo de capacitación e investigación pedagógica

# Development of research in science

# Development of
## research in science

**Title of the book**
Development of research in science

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## Validation of the survey measuring the need for the use of GeoGebra-based simulators for first semester students.

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### Introduction

In recent years technology has taken a fundamental role in the development and growth of young people, not only facilitating and expanding the terms of education by students. Naturally, due to technology, the methods and tools used by teachers when interacting directly in the development of students' skills have also expanded. Through the Covid-19 pandemic, decisions were made that would directly affect the education and health of young people. This led to the conclusion of a mandatory suspension of classes at all levels of education. This meant not only the confinement of students and teachers to their homes, but also the adaptation through a computer infrastructure. (Mejía-Flores et al., 2020).

This caused virtual education to be the spark that prompted most institutions globally to start using even more technology-enhanced learning methods such as software, applications and virtual tools.

The cause that generally originates the problem is the old teaching methods that with the passage of time become outdated and less effective for the development of students. Because of this, there has always been a need to update the methods to not only improve the learning process of the student, but also to attract the student's attention to a new and easy to adapt method, such as the lack of technological resources that connect to reality and especially the dependence on web resources, which often do not fit the classroom environment.

The need to develop our mathematical skills originates from an early age, it is fundamental to establish foundations that will be the starting point for the constant development of different skills, necessary for the future. In the last decades technology has become an important part of employment, as today there are several occupations related to technology.

"The notion of competency proposes that those who learn, find meaning in everything they learn [10]. That is, with competencies it is intended that students do not limit themselves to accumulating knowledge, but learn what is relevant and can apply it to solve problems in everyday situations". ( Pérez Higuera, Niño Vega, & Fernández Morales, 2020).

Technology offers us a wide range of variants and capabilities to interact with the development of the student. This leads us to a new world of possibilities for education, in which each teacher will be free to work with the design that he/she believes will influence his/her students in a positive way.

"Studying the behavior gradually and by performing the experiments, leads them to a better understanding of the theory, since the calculations are elaborated efficiently and quickly in an interactive way. This grants them to integrate into the simulation in such a way that the sessions are less burdensome and more understandable". (G. Ortega, Medellín-Anaya, & Martínez, 2010)

The development of mathematical thinking by students is a fundamental element that helps students to relate mathematics to the physical world, this will cause each student to analyze and find the best way to act in the face of any difficulty that arises in the student's daily life. To achieve this, students' competence in physics must be stimulated as they move up through the learning levels. For this, gamified activities have been involved and this method has generated an impact on education.

"By its English denomination Gamification, it is the application of principles and elements typical of the game in a learning environment with the purpose of influencing behavior, increasing motivation and favoring student participation."(Observatorio de Innovación Educatica, 2016).

This shows that with the advancement of time it is necessary to create new methods and the newest method is currently based on technology to educate students. Within the methodological applications that are sought in the face of the evidence of the need for change, implementations have been developed in the classroom, with different types of technology such as cooperative learning, learning landscape, comprehension projects, gamification, among others.

From what has been written it is very necessary that teaching and technology connect in the teaching-learning process is of vital importance, not only to motivate students to learn mathematics, but also to learn physics. In this sense, GeoGebra software, becomes a tool of immense importance as a partner in the teaching-learning process of mathematics and physics with a scope in other areas of knowledge, especially because it is a tool that allows to stimulate and develop the creativity of students.

In this project, we want to go beyond the program by designing an app with an animated approach and inserting gamification in a personalized way, exploiting the benefits of GeoGebra as mentioned by Arteaga Valdés in his article published in 2019, which states:

GeoGebra has the same advantages of any educational software, but the following stand out: It is conducive to various types of learning that can be individual or group, It encourages creativity: by challenging learning, to apply the knowledge and skills that already enables the search and / or discovery of new knowledge, It facilitates the construction of knowledge by the student, It favors autonomous learning and adjusts to the time that learning can have for that activity, It allows access to knowledge and participation of activities, They include elements to capture the student's attention, It favors the interactive nature of learning. (Arteaga Valdés et al., 2019).

Although there are a number of software that can be applied to stimulate the study of physics, the important thing is to be able to connect with students for the study of this subject and to obtain during the process metrics that can validate the objective of this project.

"The current world has been recognizing the advances and benefits of free software, which has made inroads in almost all branches of software, being the cradle of these developments the educational institutions, there is free software for administrative processes, for the development of software solutions, operating systems, database administrators, office automation software and security. Under this scenario, the question arises: in simulation with educational purpose, has free software had an impact, what exists in the market, and what have been its results? " (Rodríguez Hernández, 210)

For this reason, the present research was based on validating a survey that measures the need for the use of simulators based on GeoGebra for first semester students, by means of an exploratory factor analysis in SPSS. Which technique would help us to adjust the constructs of the dimensions established in the questionnaire based on the theoretical framework, as mentioned by María Luisa

Garmendia in her published article on factor analysis, saying:

Factor analysis allows the discovery of simple patterns in the pattern of relationships between variables. It explores whether the observed variables can be explained in terms of a much smaller number of variables called factors. The observed variables, therefore, can be modeled as linear combinations of factors plus measurement error. (Garmendia, 2010)

By having simulated activities and applying GeoGebra creatively, in a regular way accompanied by the customization of technological inputs, the student benefited directly, because thanks to the activity the social environment is visualized within the classroom with simulators containing gamification elements (objectives, narration with real data, pre-established instructions, missions, challenges, rewards and feedback), at the end they will present a report, which justifies the development of the project.

In addition, scientific dissemination is gradually strengthened because the project does not remain only in the result, but stimulates the argumentation, focused on the subject matter. Making the student the main actor of learning, respecting multiple intelligences, because he/she is placed in the group according to his/her expertise. In other words, there are competitive, explorer, achiever and sociable students.

For Gardner in Structure of Mind, he says:

> In my opinion, the mind has the capacity to deal with different contents, but it is extremely unlikely that the capacity to deal with one content will predict its facility in other fields. In other words, it is to be expected that genius (and, subsequently, everyday performance) will be biased towards particular

> content: human beings have evolved to display different intelligences and not to fall back in various ways on a single flexible intelligence. (Gardner, 1994)

Together, the student handles technology, learning to visualize the meaning of mathematical language when programming or validating an object (point, line, graph, text, image) and the behavior of a mathematical function on the Cartesian plane with its different characteristics, so that he/she can mathematically model a function and develop real projects in the future. Finally, it favors the good use of video games, internalizing in the student that each video game has a purpose and that they can also make a moderate and responsible use of it.

The teacher benefits because he/she develops personalized activities always thinking of the student's needs and not depending on a book, using it only for consultation or bibliographic material, and society in general because we will have young people with another vision, a proactive generation, turning the teacher into a constant innovator, opening the field to the student's context and leaving behind the dependence on didactic inputs, reinventing him/herself according to external demands.

The collaboration of students who used the simulator in the Physics subject, semesters (2nd Semester 2020) 2S2020 - 1S2021 and 2S2021, with ages between 18 years and 39 years old, was requested. There were 75 responses, of which 5 were female and 70 were male. A table of operationalization of the independent variable was made, marking three dimensions that refer to the content, the functionality of the simulators and the activities where a Likert-type scale instrument was elaborated with 3 indicators in the dimension of personal interaction (collaborative and cooperative learning), 4 indicators in the functionality of the simulator and 8 indicators of significant learning.

This form of application and instructions was chosen with the objective of measuring the effect of the use of customized GeoGebra-based simulators in the study of physics, since in this way the measurement projects the need for ludo-dynamic methodological changes in higher education students.

The research is quantitative, with a relational approach, where the three dimensions exposed are theoretically structured, for the validation of the survey will be used in factor analysis to identify a high correlation between each of the items grouping them by their similarity, through the SPSS statistical program, in addition a test of internal consistency was performed through an analysis of Cronbach's alpha reliability, also sought the correlation between variables, the correlation squared (variance explained) with the items on the scale.

In order to perform the exploratory factor analysis, first of all, it is necessary to determine the elaboration of the correlation matrix, where the correlations between variables can be observed, as mentioned by Omar Martínez in his article application of the analysis

Correlation is in essence a normalized measure of association or linear covariation between two variables. This measure or correlation index $r$ can vary between -1 and +1, both extremes indicating perfect correlations, negative and positive respectively. [...] The interesting thing about the correlation index is that $r$ is itself a measure of effect size, which is usually interpreted as follows: negligible correlation: $r < |0.1|$; low correlation: $|0.1| < r \leq |0.3|$; medium correlation: $|0.3| < r \leq |0.5|$ ; and strong or high correlation: $r > |0.5|$. (Pablo Vinuesa, 2016)

In order to perform the exploratory factor analysis, the factor rotation must be determined, as mentioned by Omar Martínez in his article on the application of factor analysis.

It is often difficult to interpret the initial factors, therefore, the initial extraction is rotated in order to achieve a solution that facilitates interpretation. There are two basic factor rotation systems: orthogonal rotation methods (maintain independence between rotated factors: varimax, quartimax and equamax) and non-orthogonal rotation methods (provide new rotated factors that are related to each other).(Montoya Suárez, 2007).

A principal components analysis with orthogonal rotation (Varimax) was performed, since the correlations between items were less than 0.7 (Table 2), in addition, the Kaiser - Meyer - Olkin (KMO) sample size indicator was used, as Montoya Suarez mentions that: "KMO values between 0.5 and 1 indicate that it is appropriate to apply factor analysis to the data matrix under study", but for this research the appropriate factor study would be $KMO > 0.6$

For the significance of the factor loadings, the percentage is with a variance of 0.5, i.e. 50% so that the factor study can be validated, as mentioned by Mavrou: "A final issue to be taken into account when carrying out the AFE is the relative significance of the factor loadings. As noted above, Osborney Costello (2004; Osborn & Costello,2005) are of the opinion that loadings of. 50 can generally be considered". (Mavrou, 2015.)

## Results

A large predominance of the male sex is observed in the last three semesters, 93.3%, although if we analyze it in the context of the career there was a significant increase in women, in addition to young people between 20 and 29 years of age with 48%, in the residence of the study population, 20% of the group is observed in the rural area, affecting or hindering the mobility of students.

In terms of academic performance, the grades are concentrated in very good, representing 56%, i.e. from 17 to 22 out of 25 points, while it is important to consider the group of students entering improvement, representing 8%, whose grades are concentrated between 7 to 12 points out of 25 (Table 2).

**Table 1** *Statistics of the study population*

| | | Ciclo - Semestre | | | | |
|---|---|---|---|---|---|---|
| | | **1er.** | **2do.** | **3er.** | **Total** | **%** |
| **Género** | **femenino** | 2 | 1 | 2 | 5 | 6.7% |
| | **masculino** | 37 | 14 | 19 | 70 | 93.3% |
| | **Total** | 39 | 15 | 21 | 75 | 100.0% |
| **Edad** | **menos de 19 años** | 12 | 6 | 4 | 22 | 29.3% |
| | **de 20 a 29 años** | 19 | 8 | 9 | 36 | 48.0% |
| | **de 30 a 39 años** | 6 | 1 | 6 | 13 | 17.3% |
| | **más de 40 años** | 2 | 0 | 2 | 4 | 5.3% |
| | **Total** | 39 | 15 | 21 | 75 | 100.0% |
| **Sector** | **Rural** | 9 | 2 | 4 | 15 | 20.0% |
| | **Urbano** | 30 | 13 | 17 | 60 | 80.0% |
| | **Total** | 39 | 15 | 21 | 75 | 100.0% |
| **Rendimiento** | **Mejoramiento** | 4 | 2 | 0 | 6 | 8.0% |
| | **Bueno** | 12 | 6 | 8 | 26 | 34.7% |
| | **Muy Bueno** | 23 | 7 | 12 | 42 | 56.0% |
| | **Excelente** | 0 | 0 | 0 | 0 | 0.0% |
| | **Total** | 39 | 15 | 20 | 74 | 98.7% |

*Note:* Table prepared in SPSS

Table 2 shows that there is no correlation because there is a low correlation of variables of the same dimension represented by the colors light blue, red and green, although there is a slight correlation of dimension three (green color), in items 13 and 14 there is high correlation and item 11 correlates with items 8 (0.713), 9 (0.726) and 19 (0.745), as can be seen in very isolated cases, concluding in general that there is a low correlation, i.e. it would be necessary to rotate the axes to be able to find a better relationship of the items, i.e. we will use the varimax rotation ($> 0.7$)

**Table 2.** *Matrix of Correlations between Items*

*Matriz de correlaciones* [a]

| | Ítems1 .TC | Ítems2 . TC | Ítems3 . TC | Ítems4 . ES | Ítems5 .ES | Ítems6 . ES | Ítems7 . ES | Ítems8 .AS | Ítems9 . AS | Ítems10 . AS | Ítems11 . AS | Ítems12 . AS | Ítems13 . AS | Ítems14 .AS. | Ítems15 . AS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ítems1.TC | **1.000** | | | | | | | | | | | | | | |
| Ítems2. TC | 0.665 | **1.000** | | | | | | | | | | | | | |
| Ítems3. TC | 0.540 | 0.497 | **1.000** | | | | | | | | | | | | |
| Ítems4. ES | 0.598 | 0.553 | 0.597 | **1.000** | | | | | | | | | | | |
| Ítems5.ES | **0.718** | 0.584 | 0.538 | 0.662 | **1.000** | | | | | | | | | | |
| Ítems6. ES | 0.598 | 0.615 | **0.731** | **0.764** | 0.691 | **1.000** | | | | | | | | | |
| Ítems7. ES | 0.515 | 0.527 | 0.571 | 0.631 | 0.679 | 0.572 | **1.000** | | | | | | | | |
| Ítems8.AS | 0.482 | 0.501 | 0.631 | **0.717** | 0.645 | **0.729** | **0.703** | **1.000** | | | | | | | |
| Ítems9. AS | 0.590 | 0.539 | 0.622 | 0.554 | 0.587 | **0.732** | 0.482 | 0.664 | **1.000** | | | | | | |
| Ítems10. AS | 0.451 | 0.439 | 0.574 | 0.513 | 0.565 | **0.706** | 0.484 | 0.666 | **0.845** | **1.000** | | | | | |
| Ítems11. AS | 0.462 | 0.431 | 0.592 | 0.592 | 0.603 | **0.743** | 0.551 | **0.713** | **0.726** | **0.745** | **1.000** | | | | |
| Ítems12. AS | 0.598 | 0.619 | 0.506 | 0.506 | 0.695 | 0.630 | 0.637 | 0.523 | 0.561 | 0.524 | 0.675 | **1.000** | | | |
| Ítems13. AS | 0.522 | 0.353 | 0.531 | 0.497 | 0.586 | 0.610 | 0.440 | 0.677 | 0.694 | 0.591 | 0.663 | 0.454 | **1.000** | | |
| Ítems14.AS. | 0.531 | 0.406 | 0.508 | 0.387 | 0.658 | 0.515 | 0.552 | 0.609 | 0.589 | 0.532 | 0.534 | 0.546 | **0.829** | **1.000** | |
| Ítems15. AS. | 0.582 | 0.479 | 0.621 | 0.525 | 0.618 | 0.605 | 0.570 | 0.668 | **0.722** | 0.585 | 0.625 | 0.603 | **0.757** | **0.749** | **1.000** |

*Note*. the values in bold have a value greater than 0.7, indicating that they correlate with each other, but there are low correlations in most of the items. Table elaborated in SPSS

Table 3 describes the mean scores of the 15 survey items. The averages of all the items do not show scores lower than 3, which means that the students approved the survey or the proposal to teach physics through personalized simulators. The highest average obtained is in the question that talks about the self-evaluation offered by the simulator that allows them to improve the practicality of the topics covered. ($4.55\ DS \pm 0.664$). The lowest average is in question 12, which refers to the use of the simulator as a complement to the theoretical aspect. ($4.25\ DS \pm 0.664$)The lowest average is in question 12, which refers to the use of the simulator as a complement to the theoretical aspect, concluding the satisfaction of the students in the use of the simulator.

**Table 3.** *Descriptive statistics and Cronbach's alpha.*

| | Media | Desv. | Alfa de Cronbach si el elemento se ha suprimido |
|---|---|---|---|
| Ítems1. Las prácticas con los simuladores fomentan la interacción entre compañeros | 4.48 | 0.685 | 0.953 |
| Ítems2. Las prácticas con los simuladores fomentan la interacción entre estudiante y docente | 4.51 | 0.705 | 0.955 |
| Ítems3. Los escenarios o vistas gráficas que se utilizan en los simuladores son pertinentes a los temas estudiados | 4.51 | 0.685 | 0.953 |
| Ítems4. Los videos tutoriales de los simuladores facilitan el manejo de las funciones y herramientas que los componen | 4.51 | 0.685 | 0.953 |
| Ítems5. La información del simulador se encuentra ordenada 4 a la temática | 4.39 | 0.634 | 0.951 |
| Ítems6. El contenido práctico del simulador corresponde a los objetivos planteados de la asignatura | 4.47 | 0.600 | 0.951 |
| Ítems7. La autoevaluación que ofrece el simulador le permite mejorar la practicidad de los temas estudiados | 4.55 | 0.664 | 0.953 |
| Ítems8. El Uso de los simuladores facilitó el logro de los objetivos planteados en la asignatura | 4.43 | 0.681 | 0.951 |
| Ítems9. La actividad del simulador pone en práctica el contenido del aprendizaje de la Física. | 4.52 | 0.578 | 0.951 |
| Ítems10. Los simuladores son recursos didácticos útiles para el aprendizaje de la Física. | 4.48 | 0.644 | 0.953 |
| Ítems11. La experiencia con simuladores ha mejorado el aprendizaje de la Física | 4.32 | 0.661 | 0.952 |
| Ítems12. Los casos simulados complementan el aspecto teórico de la Física. | 4.25 | 0.755 | 0.953 |
| Ítems13. La experiencia práctica con el simulador aumenta la seguridad y confianza de los estudiantes en el aprendizaje de la Física. | 4.37 | 0.588 | 0.953 |
| Ítems14. La interacción con la simulación mejora también la competencia algebraica de los estudiantes. | 4.37 | 0.653 | 0.953 |
| Ítems15. En líneas generales, la experiencia práctica con los simuladores ha sido satisfactoria y significativa. | 4.39 | 0.613 | 0.952 |
| Alfa de Cronbach | 0.955 | | |
| Prueba de KMO y Bartlett | 0.907 | | |
| **Aprox. Chi-cuadrado** | 1005.581 | | |
| gl | 105 | | |
| Sig. | 0.000 | | |

*Note.* table elaborated in SPSS

Regarding the feasibility of an exploratory factor analysis using principal components, the KMO coefficient showed a value of 0.955 and Bartlett's test of sphericity was statistically significant. $(\chi^2 = 1005.581; gl = 105; p < 0.001)$which suggested the conformation of items into components. The overall Cronbach's alpha coefficient was $(\alpha = 0.955)$

Table 4 presents the principal component analysis, from which it was possible to extract 2 components, which together were able to explain 69.957% of the total variance. That is, the first component accounted for 36.086% and the second component for 33.871%.

**Table 4.** *Total variance explained*

*Varianza total explicada*

| Componente | Autovalores iniciales | | | Sumas de cargas al cuadrado de la extracción | | | Sumas de cargas al cuadrado de la rotación | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % de varianza | % acumulado | Total | % de varianza | % acumulado | Total | % de varianza | % acumulado |
| 1 | 9.353 | 62.355 | 62.355 | 9.353 | 62.355 | 62.355 | 5.413 | 36.086 | 36.086 |
| 2 | 1.140 | 7.602 | 69.957 | 1.140 | 7.602 | 69.957 | 5.081 | 33.871 | 69.957 |
| 3 | 0.900 | 6.000 | 75.958 | | | | | | |
| 4 | 0.688 | 4.590 | 80.547 | | | | | | |
| 5 | 0.594 | 3.959 | 84.507 | | | | | | |
| 6 | 0.463 | 3.083 | 87.590 | | | | | | |
| 7 | 0.390 | 2.601 | 90.191 | | | | | | |
| 8 | 0.342 | 2.278 | 92.469 | | | | | | |
| 9 | 0.289 | 1.924 | 94.393 | | | | | | |
| 10 | 0.216 | 1.438 | 95.831 | | | | | | |
| 11 | 0.170 | 1.134 | 96.964 | | | | | | |
| 12 | 0.140 | 0.931 | 97.895 | | | | | | |
| 13 | 0.129 | 0.860 | 98.755 | | | | | | |
| 14 | 0.108 | 0.720 | 99.476 | | | | | | |
| 15 | 0.079 | 0.524 | 100.000 | | | | | | |

Método de extracción: análisis de componentes principales.

*Note:* Table created in SPSS

Component 1 grouped questions that can be called "meaningful learning of physics", because it integrates items related to the formation of solid knowledge, based on the need of the simulator for meaningful learning of physics, that is, the items that contribute most to the proposal of this research; it is composed of 7 (items 8, 9, 10, 11, 13, 14, 15) of the 15 items of the original instrument, which explain 36.086% of the total variance. Component 2 presented items related to the structure and the way of using the simulator, since it points out relevant aspects of the simulator structure. It is composed of 8 items (1, 2, 3, 4, 5, 6, 7, 12), which explain 33.871% of the variance (Table 5 and Table 4) (Table 5 and Table 4).

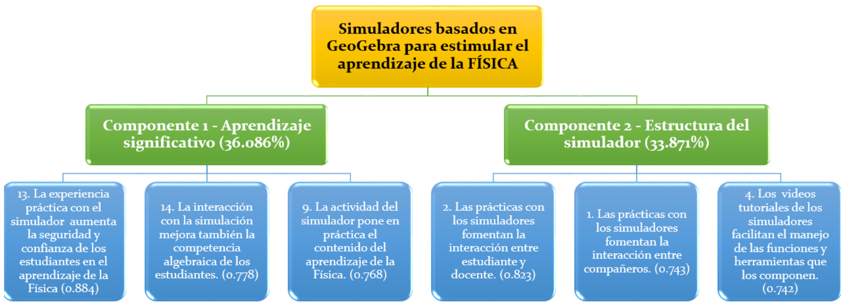
**Table 5.** *Rotated Component Matrix (n=75)*

| *Matriz de componente rotado* [a] | | | |
|---|---|---|---|
| | ***Componente*** | | ***Comunalidades*** |
| | **1** | **2** | **Extracción** |
| Ítems13.AS | **0.884** | 0.207 | 0.825 |
| Ítems14. AS | **0.778** | 0.280 | 0.684 |
| Ítems9. AS | **0.768** | 0.414 | 0.761 |
| Ítems15. AS | **0.763** | 0.392 | 0.736 |
| Ítems10.AS | **0.743** | 0.357 | 0.680 |
| Ítems11. AS | **0.717** | 0.438 | 0.705 |
| Ítems8. AS | **0.669** | 0.519 | 0.717 |
| Ítems2.TC | 0.162 | **0.823** | 0.704 |
| Ítems1. TC | 0.317 | **0.743** | 0.653 |
| Ítems4. ES | 0.354 | **0.742** | 0.676 |
| Ítems5. ES | 0.457 | **0.722** | 0.731 |
| Ítems12. AS | 0.382 | **0.706** | 0.645 |
| Ítems7. ES | 0.367 | **0.702** | 0.628 |
| Ítems6.ES. | 0.562 | **0.668** | 0.763 |
| Ítems3. TC. | 0.532 | **0.552** | **0.588** |
| Método de extracción: análisis de componentes principales. Método de rotación: | | | Método de extracción: análisis de componentes |

*Note:* Table created in SPSS

With the validation of the instrument to stimulate the learning of physics through simulators in GeoGebra, based on the factor analysis, it is grouped into two dimensions as illustrated in Figure 1. Items 1, 2 and 3, which are of the dimension Stimulates collaborative and cooperative work, are loading very strongly on the dimension structure of the simulator, i.e. the respondents are not interpreting in two dimensions what theoretically had been conceptualized in three dimensions.

***Figure 1.*** Restructuring of the Dimensions Generated by the Factorial Analysis




*Note:* Component 1 has 7 survey items, of which the first three are highlighted in the diagram, and component 2 has 8 items, focusing on the first three items.

In Figure 1, we want to structure a valid scheme for the use of simulators based on GeoGebra for first semester students, highlighting the strongest items in each dimension or component, although the study yielded 7 and 8 items per dimension, making this study reliable to be applied in other study groups.

In the present research, in order to validate the questionnaire items, we proceeded with the reliability analysis and the KMO, which were very satisfactory, in the same way we observe the analysis of Julio Pimienta 2014 mentioning that:

> ... the reliability analysis, taking into account its internal consistency, obtained a Cronbach's alpha of 0.965, which we consider high; therefore, from the point of view of this analysis, the instrument has adequate reliability....The sample adequacy index (KeiserMeyer-Olkin sample adequacy measure),

which is related to the extent to which factors can be derived from the correlation matrix, yields a coefficient of 0.985, which contrasted against the criterion of 0.70, indicates that it is feasible to derive factors in the correlation matrix. ( Pimienta Prieto, 2014)

The result obtained in terms of acceptance by experts in education gives a very significant boost, since this proposal was sent for review by an Educational Foundation FIDAL, with Rosalía Arteaga, former president of the Republic of Ecuador. In this proposal, items 12, 13, 14 and 15, which were of construct 3, were concentrated in the first construct, leaving the questionnaire with only two constructs. The correlations between variables were lower than 0.05, using varimax rotation to adjust the constructs according to the items, in the same way María Yagüe analyzed, affirming:

The mean value obtained shows results similar to those found in other questionnaire validation studies (Moreno, González-Cutre & Chillón, 2009; Ramis et al., 2010; Sánchez-Oliva et al., 2013). The existence of three factors is corroborated by the application of principal component factor analysis and Varimax rotation, with values in line with those obtained in other studies in which the same test was applied (Mendoza, 2011; Antolin et al., 2011; Latorre & Pantoja, 2013).( Yagüe Cabezón, et al, 2017).

The learning of physics grew significantly with the use of customized simulators in some cases and elaborated by the students themselves, involving them in the process. Likewise, David Pérez 2020 generated a great impact on the use of simulators for the teaching of physics, concluding as follows:

The statistical analysis shows that the students' performance improved after implementing the pedagogical strategy based on digital simulators. The simulations of the wave phenomena that were carried out in the classroom were pleasant for the students, since they state that they allow them to place themselves in a real scientific activity, through a virtual learning environment. In this sense, it would be interesting to articulate the area of Natural Sciences, applying the pedagogical strategy by means of simulators, which are integrated in the subjects of biology, chemistry, physics and mathematics. ( Pérez-Higuera, Niño-Vega, & Fernández-Morales, 2020, p. 23).

## Conclusion

This research validated a survey that measures the need for the use of simulators based on GeoGebra for first semester students, by means of an exploratory factor analysis in SPSS, due to the need to stimulate the study of physics in students of the Instituto Superior Tecnológico "Simón Bolívar" in the city of Guayaquil.

With the validation of the instrument by means of factor analysis, it was grouped in two dimensions, that is to say that items 1, 2 and 3, which are of the dimension Stimulates collaborative and cooperative work, are very strongly loaded in the dimension structure of the simulator, that is to say that the respondents are interpreting in two dimensions what theoretically had been conceptualized in three dimensions. This shows that the questionnaire demonstrates that the study of physics using simulators developed in GeoGebra is relevant in higher education, since it was designed to measure metrically this methodological adaptation.

The difficulty presented by this research is that the simulators are an unmet need for students who still do not have technological resources for the study of the subject, but they managed to comply, giving them the respective deadline to finish their work. But this, according to the questionnaire, stimulated the student to be recursive and autonomous.

## References

Arteaga Valdés, E., Felipe Medina Mendieta, J., & Luis del Sol Martínez, J. (2019). GeoGebra: a technological tool for learning mathematics in Basic Secondary by doing mathematics. *Revista Conrado*, *15*(70), 102-108.

Garmendia, M. L. (2010). Factor analysis: an application to the Goldberg general health questionnaire, 12-question version. *Revista Chilena de Salud Publica*, *11*(2), 57-65. https://doi.org/10.5354/0717-3652.2007.3095

Mavrou, I. (n.d.). *Exploratory factor analysis view*. 2015. Retrieved July 30, 2022, from http://revistas.nebrija.com/revista-linguistica/article/view/283/248

Mejía-Flores, O. G., Baidal, N. E. C., & Mackay-Castro, C. R. (2020). Education and learning in the face of Covid-19. *Dominion of The Sciences*, *6*(2477-8818), 1382-1400.

Montoya Suárez, O. (2007). Application of the factorial analysis to the investigation of markets. Case of study. *Scientia et Technica*, *3*(35), 281-286. http://dialnet.unirioja.es/servlet/articulo?codigo=4804281&info=resumen&idioma=ENG

Observatory for Educational Innovation (2016). GAMIFICATION. In *Edu Trends*. http://bit.ly/ObservatorioGPlus

Pablo Vinuesa (n.d.). *Topic 8 - Correlation: theory and practice*. October 14, 2016. Retrieved July 29, 2022, from https://www.ccg.unam.mx/~vinuesa/R4biosciences/docs/Tema8_correlation.html#introduction-the-concept-of-correlation.

Pérez Higuera, G. D., Niño Vega, J. A., & Fernández Morales, F. H. (2020). Simulator-based pedagogical strategy to enhance physics problem-solving skills. *Aibi revista de investigación, administración eingeniería*.

Pérez-Higuera, G. D., Niño-Vega, J. A., & Fernández-Morales, F. H. (2020). Simulator-based pedagogical strategy to enhance physics problem-solving skills. *Aibi journal of research, management and engineering*. doi:https://doi.org/10.15649/2346030X.863.

Pimienta Prieto, J. H. (2014). Elaboración y validación de un instrumento para la medición del desempeño docente basado en competencias. *REDU Revista de la Docencia Universitaria, 12*. Retrieved from https://riunet.upv.es/bitstream/handle/10251/139951/Pimienta%20-%20Elaboraci%c3%b3n%20y%20validaci%c3%b3n%20de%20un%20instrumento%20para%20la%20medici%c3%b3n%20del%20desempe%c3%b1o%20docente%20basa....pdf?sequence=1&isAllowed=y

Yagüe Cabezón, J. M., Azael Herrero , A., Tabernero Sánchez, B., & Veroz Domínguez, R. (2017). Design and validation of the questionnaire "Deporteduca" to know the incidence of competition on. *Challenges 31*.

G. Ortega, Medellín-Anaya , H. E., & Martínez, J. (2010). Influence on student learning using physics simulators. *Latin-American Journal of Physics Education*. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=3700367

Gardner, H. (1994). *Structures of Mind*. https://books.google.es/books?hl=es&lr=&id=Y9nDDQAAQBAJ&oi=fnd&pg=PT6&dq=1988,+Howard+

# Growth factors for Ecuador's oil exports during the period 2007 - 2020

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## Introduction

Oil is possibly one of the most important non-renewable natural resources for the world economy, since it is the main source of energy for the operation and performance of human activities, so much has been written about it from different points of view. Economically, the multiple benefits and detriments that this resource has brought to the countries that produce it have been studied, due to its ease of generating income, but also dependence on its production (Heidarian & Green, 1989; Fontaine, 2002; Mehrara, 2007; Berument et al., 2010; Benavides et al., 2017), especially if these resources are not well managed.

In 1972, Ecuador began large-scale exploitation of oil, marking the beginning of the oil era. Thus, this product became the main source of income for the country, via exports, surpassing bananas which, a few decades earlier, was the main export product. From that moment on, oil production attracted the attention of the public and private sectors and oil exports became the main item of the Ecuadorian economy, which has caused other productive sectors to fail to grow in a sustained manner, especially those linked to the agricultural sector, and the country has become dependent on this commodity.

A productive sector began to develop around oil that would attract the attention of both the public and private sectors. The construction of oil pipelines, oil fleets and refineries began[1] . Thus, the country could produce high quantities of oil barrels for export and take advantage of the high prices of the good to have more income. However, this situation has caused the Ecuadorian economy to have an unsustained and vulnerable economic growth over time.

Thus, there is abundant literature on oil and its importance for the Ecuadorian economy, from different points of view. Fontaine (2002)in his research on oil dependence, indicates that the oil bonanza that Ecuador experienced in the 1970s had a dynamizing effect on the economy and this led to a structural change in the country. From this moment on, the Ecuadorian economy began to depend heavily on oil, so that production, sales and the price of oil in international markets became important factors for analysis.

For his part, Oleas (2018)in his work on the oil boom and the loss of the currency, argues that the sustainable growth of the country is related to oil exports. The author conducted a documentary and historical review of the behavior of variables and other determinants of oil exports such as external debt, investment, price volatility, oil production, volume of exports, in order to provide more information on the crises suffered by the country when the price of crude oil falls in international markets.

For Larrea (2020)once Ecuador becomes an oil producing and exporting country, it begins to have problems of stable growth because, among other things, the productive structure of the country does not diversify and continues to be primary-exporting. The author makes an evaluation of the results that the oil bonanza brought at the beginning until the effect was diluted over time, attributing to it the slow and unstable growth of the Ecuadorian economy. International prices, production and state policies are important to maintain the oil revenues that will be part of the general state budget.

[1] Esmeraldas, Shushufindi and La Libertad, operated by the public company EP Petroecuador.

With the arrival of a socialist government, oil and natural gas, as well as all non-renewable natural resources, are considered strategic sectors, as established in Article 323 of the 2008 Constitution of the Republic, granting the Ecuadorian state exclusive rights over the management of these resources.

Oil prices, the level of production and the investment made in the sector are factors that can have a decisive impact on the exports of a good, and oil is no different from this. Moreover, these are factors that cannot be controlled by a regulatory entity such as the state, which has control over this economic sector. Hence the interest in analyzing how these three factors relate to Ecuadorian oil exports during the period 2007 - 2020. Therefore, this research hopes to provide more information related to the Ecuadorian oil sector, in this case focused on oil exports and the factors that affect its growth and, although there are other factors, these three have been selected because of the access to information that allows the estimation of an econometric model and the results that emerge from this research, serve to advance in conducting more studies that analyze the impact of factors on the exports of a product.

## Petroleum in Ecuador

Although it is true that large-scale oil exploitation began in 1972, it is also true that the first oil explorations in Ecuadorian territory began in 1911, when a small oil field was located in Ancon, on the Santa Elena peninsula (Ecuadorian coast). The English company Anglo Oil took charge of exploration and exploitation and from the 1920s onwards oil production began on a small scale. The Ecuadorian government granted concessions to foreign companies to exploit the oil fields, receiving part of the oil revenues as royalties.

According to information from Petroecuador (2013)between 1928 and 1957, Ecuador exported 42 million barrels of oil, an amount that would be surpassed in a single year (1972) when large-scale oil exploitation began. In that same year, 1972, the Corporación Estatal Petrolera Ecuatoriana (CEPE) was created, which became the major partner of the CEPE-Texaco-Gulf consortium. In 1973, Ecuador joined the Organization of Petroleum Exporting Countries (OPEC) and reported an economic growth never seen before in its history, thus initiating the stage known as the "first oil *boom*".

This boom was accompanied by high oil prices in international markets, so that oil exports generated significant income for the Ecuadorian economy. The gross domestic product grew, on average, 10.9% between 1973 and 1976, rates that would not be repeated in the following decades. The national economy began to concentrate on the oil sector. However, at the end of the 1970s, oil prices began to fall and the Ecuadorian economy began to suffer. It should be noted that in 1976 a military dictatorship began in Ecuador, which lasted until 1979. During this dictatorship, the Ecuadorian state began a cycle of indebtedness to international organizations, with oil as a guarantee of payment. Thus, in the 1980s and 1990s, Ecuador encountered difficulties in meeting payments to its international creditors, in addition to internal problems of an economic, political and social nature.

In 1989, CEPE was replaced by the holding company Petroecuador, which later absorbed Anglo Ecuadorian Oilfields, expanding the state's dominance in the oil sector (oil fields, refineries and pipelines). With the creation of Petroecuador, the country expanded its existing production capacity and became an important oil producer at the regional level. In fact, in 2010, through Executive Decree No. 315, the state declared Petroecuador a public company, ceasing to be a holding company and becoming a company with operational and administrative autonomy and its own assets. It should be noted that in 2007, another state-owned company, Petroamazonas EP, was created to manage all oil production in the hands of the Ecuadorian state and is dedicated to the exploration and exploitation of crude oil. It is in charge of 23 blocks distributed both in the Amazon and on the coast, most of them located in the Ecuadorian Amazon region.

Thus, the Ecuadorian state has two large companies dedicated to oil activities: EP Petroecuador, dedicated to the production of gasoline, diesel, fuel oil, liquefied petroleum gas, asphalts and reduced crude oil; while Petroamazonas EP is dedicated to the production of oil derivatives, natural gas and exploration and exploitation activities. In April 2019, the acting president of the republic, through Executive Decree No. 723 has ordered the merger of these two companies, while, in July 2021, the president orders the privatization of Petroecuador.

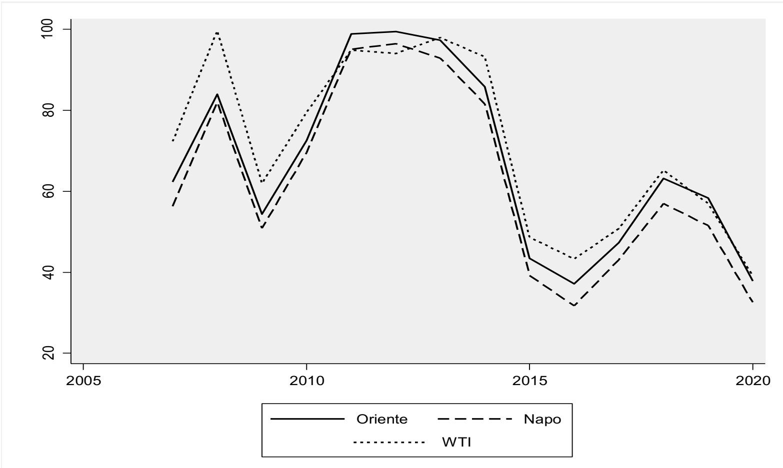
Between 2003 and 2008, a second oil *boom* began for Ecuador's economy when crude oil prices rose steadily due to, among other factors, a production cut by OPEC countries, wars in the Middle East, especially Iraq, due to terrorism, and the expansion of the economies of China and India. The Ecuadorian government took advantage of this situation to build the Heavy Crude Oil Pipeline (OCP), which would allow a considerable increase in daily oil production.

According to theories on foreign trade, exports play a fundamental role within an economy, especially in the context of globalization, since they allow a country to obtain profits from the surplus of its production. However, for Lederman and Maloney (2014) the importance of exports lies in the way exportable goods are produced, not so much in the quantity. In the case of natural resources, when they are exported as raw materials, it is difficult to obtain higher profits by exporting less quantity, in addition to the fact that they have low technological intensity.

Ecuador produces and exports two types of oil: Crudo Oriente and Crudo Napo. Of these two, it is the crude oil called Oriente that exports the largest amount of barrels and is the one that is better paid in the international market due to its better quality. The gravity or density of Oriente crude oil is 24 degrees API (American Petroleum Institute), considered a medium density oil, so its price is better quoted in the international market, while Napo crude oil has a gravity of 18 degrees API, considered a high density oil (heavy) and with a lower price in the market. The heavier the oil, the more difficult it is to extract. In addition, due to its high sulfur content and low kerosene content, the more expensive the refining process is.

Ecuadorian oil is quoted on the international market according to the price of a barrel of Texas oil, better known as WTI (*West Texas Intermediate*), which is the reference price for light oil in the United States[2] . It is important to note that the price of a barrel of Ecuadorian oil is penalized in relation to the WTI price, due to the quality of the product (density, sulfur content and acidity). Figure 1 shows the trend of Ecuadorian, Oriente and Napo oil prices during the period 2007-2020, as well as the WTI price.

***Figure 1***. Evolution of Ecuadorian oil prices , by crude oil type




*Note*. Oil price in Ecuador. Taken from Banco Central del Ecuador (n.d.) (www.bce.fin.ec)

The behavior of oil prices is quite volatile, as it responds to stimuli coming from the market (Parra et al, 2017), especially from the largest producers and buyers of this product worldwide. During the period of time analyzed, the unstable nature of the prices of this commodity becomes evident. The economic slowdown in the United States, European Union countries and China, in addition to the conflicts in the Middle East, the increase in unconventional oil production, the Covid-19 pandemic, among other factors, have directly affected oil prices.

[2] WTI crude oil prices refer to the price of oil on the New York Mercantile Exchange (NYMEX) and are used to sign oil futures contracts.

Regarding foreign direct investment (FDI), several studies have found evidence of the positive effects it has on the economic growth of a developing country (De Vita & Kyaw, 2009), however, evidence has also been found that FDI can increase the income gap between workers in the primary, secondary and tertiary sectors of an economy, i.e., it increases income inequality between unskilled workers, generally within the primary sector and skilled workers (Feenstra & Hanson, 1997). Moreover, in the primary sector this aspect tends to be exacerbated, especially in an economy based on natural resources, given that with these goods production tends to be monopolized and is in few hands (Suanes, 2014).

One situation regarding FDI directed to the oil sector in Ecuador is that, according to several analysts, investors seek short-term profitability and the objectives of encouraging technological progress are not met because the sector does not require large investments in human capital. According to Fontaine (2002), when a sector is booming, it can cause diversion of productive factors from other sectors to the booming sector, causing "perverse effects on the economy as a whole".

Although oil production is dominated by the state, there are still private companies operating in the country, such as Andes Petroleum of China, Repsol of Spain, Agip of Italy, among others, which contribute approximately 20% of crude oil extraction.

According to the Central Bank of Ecuador (2021), the main countries purchasing Ecuadorian oil are: United States, China, Panama, Chile, Peru, Japan, India and Colombia. It is important to note that most of the Ecuadorian oil exported is crude, i.e., it has not undergone refining or derivation processes.

In order to carry out the research on the dependence of oil exports on international crude oil prices, production and foreign investment, statistical data of the variables are analyzed, which have been obtained from the Central Bank of Ecuador and the US Federal Reserve, so the focus of this research is quantitative and no sampling technique has been applied. Table 1 presents the variables, their typology and data source.

**Table 1**. *Variables of the research*

| Type of variable | Variable name | Data source |
|---|---|---|
| Dependent | Oil exports, in millions of dollars | Central Bank of Ecuador (BCE) |
| Independent | WTI prices, in dollars | Federal Reserve Economic Data (FRED) |
| Independent | Foreign Direct Investment in the oil sector, in millions of dollars | Central Bank of Ecuador (BCE) |
| Independent | Oil production, in barrels | Central Bank of Ecuador (BCE) |

According to Cadena-Iñiguez et al. (2017), the quantitative approach is the most widely used within statistical studies that aim to obtain observable and measurable results by comparing figures. It is also an explanatory type of research given that it attempts to determine the dependency relationship between the variables under study. As it is a research that uses data obtained from secondary sources that are not manipulated, it is a non-experimental research, a very common design in quantitative research. This research is also longitudinal, which, according to the criteria of Álvarez Risco (2020), measures the variables under study over periods of time or a temporal sequence, in this case quarterly.

An econometric model is proposed based on a mathematical model of linear regression, which allows relating two or more variables of interest. A linear regression model studies the relationship between a dependent variable and one or more independent variables. This type of model is useful because it allows simultaneous analysis of the data to determine whether or not there is dependence between variables. For this purpose, the ordinary least squares (OLS) method is applied, since it allows finding the best possible unbiased linear estimators, i.e., it allows obtaining the values of the parameters of the econometric model based on the observable variables. These parameters can be interpreted as slopes of the line between $Y$ and $X$ and indicate how much the dependent variable moves with a one-unit increase in the independent variable. The proposed econometric model is as follows:

$$expetrol_t = b_0 + b_1 precioWTI_t + b_2 produccion_t + b_3 iedpetrol_t + u_t$$

Where

$expetrol_t$ is the dependent variable of the model and is Ecuadorian oil exports in millions of US dollars in FOB (*free on board*) value;

$precioWTI_t$ is one of the independent variables of the model and is the price of oil on the New York Mercantile Exchange NYMEX WTI in U.S. dollars;

$produccion_t$ is another independent variable and it is the Ecuadorian oil production in millions of barrels;

$iedpetrol_t$ is another independent variable in the model and represents foreign direct investment in Ecuador's mining and oil sector and is in millions of dollars;

$b_0$ is the constant parameter of the model and indicates how much $Y$ is worth when $X$ is equal to 0.

$b_1, b_2, b_3$ are the parameters of the model, also known as the slope of Y when X increases by one unit. They indicate how much oil exports change when oil prices, oil production and foreign direct investment increase by one unit, separately.

$u_t$ is the model error term; and

$t$, is a subscript indicating the temporality of the model.

To estimate the proposed econometric model, the RStudio statistical software is used, which allows, by means of the appropriate routines, to obtain results of the model parameters by means of OLS. It is necessary to indicate that, for a better estimation of the model and a more accurate analysis, logarithms of the variable data have been taken and first differences have been applied to reduce the problems of non-stationarity, something usual in time series. The use of logarithms allows the interpretation of the model parameters in terms of elasticities. The model is as follows:

$$\ln(expetrol_t) = b_0 + b_1 * \ln(precioWTI_t) + b_2 * \ln(produccion_t) +$$

$$b_3 * \ln\,(iedpetrol_t) + u_t$$

Where ln denotes the natural logarithm of the observed variables.

The hypotheses are as follows:

- On prices: There is a statistically significant relationship between Ecuadorian oil exports and the price per barrel in international markets. $b_1 > 0$
- On production: An increase in domestic oil production directly affects the increase in Ecuador's oil exports. $b_2 > 0$
- On foreign direct investment: There is a statistically significant and positive relationship between foreign investment in the oil sector and Ecuadorian oil exports. $b_3 > 0$

To verify the existence of multicollinearity problems among the variables, Table 2 presents their correlations, where it can be verified that there is a low correlation among the independent variables of the model.

**Table 2** *Correlation of variables*

| Variables | Oil exports | WTI Prices | FDI | Production |
|---|---|---|---|---|
| **Oil exports** | 1.000 | 0.958 | -0.220 | 0.121 |
| **WTI Prices** | 0.958 | 1.000 | -0.310 | 0.019 |
| **FDI** | -0.220 | -0.310 | 1.000 | 0.066 |
| **Production** | 0.121 | 0.019 | 0.066 | 1.000 |

The results of the model are shown in Table 3, where information is presented not only on the model coefficients, but also on the normal and robust standard error, Student's t-test and the p-value of the coefficients. Information on the statistical tests used to validate the results of the model is also presented.

**Table 3.** *Results of the econometric model*

| | Coefficient | Standard Error | Robust Standard Error | Student's t-test | p-value |
|---|---|---|---|---|---|
| Intercept | 0.0035 | 0.0119 | 0.0118 | 0.298 | 0.7675 |
| WTI Prices | 1.1058 | 0.0771 | 0.0936 | 14.345 | 0.0000*** |
| Production | 0.4801 | 0.1631 | 0.1447 | 2.943 | 0.0052*** |
| FDI | -0.0091 | 0.0087 | 0.0046 | -1.051 | 0.053[*] |

***Model validation and reliability***

| | |
|---|---|
| *Test F* | 124.5 (0.000) |
| *$R^2$ adjusted* | 0.8895 |
| *Kolmogorov Smirnov* | 0.0951 (0.3566) |
| *Durbin-Watson* | 2.3854 (0.9297) |
| *Breusch-Pagan* | 0.7332 (0.8654) |
| *Dickey-Fuller Augmented* | -5.1803 (0.01) |
| *Box-Pierce (white noise)* | 3.036 (0.0814) |

*Note.* *** Significant at 0.001. [Significant at 0.05 with the robust model. In parentheses the p-values of the tests of the model validation statistics.

The results of the econometric model are consistent, the goodness of fit of the model is 0.8895, that is, the explanatory variables explain 88.95% of the variability of Ecuadorian oil exports.

There is a statistically significant and positive relationship between oil prices and oil exports. This relationship is explained as follows: if oil prices in Ecuador increase by one percentage point, there is a probability that oil exports will increase by 1.11 percentage points.

In the same way, it is obtained that oil production and exports maintain a significant and positive relationship, which means that it is very likely that if crude oil production increases by one percentage point, so do exports by at least 0.48 percentage points, indicating a benefit to the Ecuadorian economy.

On the other hand, it was found that, applying the conventional OLS method, no statistically significant relationship was found between FDI and oil exports; however, applying robustness (White's test), a statistical significance was found at 0.10 confidence, and this relationship is negative between both variables, i.e., if FDI in Ecuador increases, it is possible that oil exports decrease by 0.01 percentage points.

Relatively speaking, the coefficient of determination $R^2$ indicates that oil price, oil production and FDI are able to predict the variability of oil exports up to 89%.

## References

Álvarez Risco, A. (2020). Classification of research. Universidad de Lima, Facultad de Ciencias Empresariales y Económicas, Carrera de Negocios Internacionales. https://hdl.handle.net/20.500.12724/10818

Central Bank of Ecuador (2021). Oil Sector Report IV Quarter 2020. https://contenido.bce.fin.ec/documentos/Estadisticas/Hidrocarburos/ASP202004.pdf

Benavides, C., Reinoso, M., & Estevez, E. E. (2017). The influence of oil and non-oil products on Ecuador's trade balance. Period 2014-2016. Revista Publicando, 4(13 (3 (3)), 379-397. https://core.ac.uk/download/pdf/236643959.pdf

Berument, M. H., Ceylan, N. B., & Dogan, N. (2010). The impact of oil price shocks on the economic growth of selected MENA1 countries. *The Energy Journal*, *31*(1). https://www.iaee.org/en/Publications/ejarticle.aspx?id=2362. https://www.iaee.org/en/Publications/ejarticle.aspx?id=2362

Cadena-Iñiguez, P., Rendón-Medel, R., Aguilar-Ávila, J., Salinas-Cruz, E., Cruz-Morales, F. D. R. D. L., & Sangerman-Jarquín, D. M. (2017). Quantitative methods, qualitative methods or their combination in research: an approach in the social sciences. *Mexican journal of agricultural sciences*, *8*(7), 1603-1617. http://www.scielo.org.mx/scielo.php?pid=S2007-09342017000701603&script=sci_abstract&tlng=pt

De Vita, G., & Kyaw, K. S. (2009). Growth effects of FDI and portfolio investment flows to developing countries: a disaggregated analysis by income levels. *Applied economics letters*, *16*(3), 277-283. https://doi.org/10.1080/13504850601018437

Feenstra, R. C., & Hanson, G. H. (1997). Foreign direct investment and relative wages: Evidence from Mexico's maquiladoras. *Journal of international economics*, *42*(3-4), 371-393. https://doi.org/10.1016/S0022-1996(96)01475-4.

Fontaine, G. (2002). On bonanzas and dependence Oil and Dutch disease in Ecuador. *Iconos. Revista de Ciencias*

*Sociales*, (13), 102-110. https://www.redalyc.org/pdf/509/50901311.pdf

Heidarian, J., & Green, R. D. (1989). The impact of oil-export dependency on a developing country: The case of Algeria. *Energy economics*, *11*(4), 247-261. https://doi.org/10.1016/0140-9883(89)90041-8

Larrea, C. (2020). Why we need to overcome oil dependence in Ecuador. *Digital repositories of FES-ILDIS, Geografía Crítica and Editorial Abya Yala.* , 63. https://library.fes.de/pdf-files/bueros/quito/17540-20210420.pdf?fbclid=IwAR1yvVy5BbKEou9UmhxczQ7p7HFR9XtejGtsATF1P5YGPSoiaulHQxAgAY0#page=64

Lederman, D., & Maloney, W. F. (2014) How important is what you export? A practical guide to industrial policymaking. Journal of public policy and issues, 285. http://www.dspace.uce.edu.ec/bitstream/25000/16318/3/Pol%C3%ADtica%20industrial%20neoliberal%20y%20posneoliberal%20ecuatoriana.pdf#page=285

Mehrara, M. (2007). Energy consumption and economic growth: the case of oil exporting countries. *Energy policy*, *35*(5), 2939-2945. https://doi.org/10.1016/j.enpol.2006.10.018

Oleas, J. (2018). Ecuador 1972-1999: from the oil boom to the loss of the monetary sign. *IAEN, Quito*. https://editorial.iaen.edu.ec/wp-content/uploads/sites/12/2019/05/Ecuador-1972-1999-del-boom-del-petr%C3%B3leo-a-la-p%C3%A9rdida-del-signo-monetario-Tesis-J.-Oleas.pdf

Petroecuador (2013). *Petroleum in Ecuador. The new oil era. Quito*. EP Petroecuador. https://www.eppetroecuador.ec/wp-content/uploads/downloads/2015/03/El-Petr%C3%B3leo-en-el-Ecuador-La-Nueva-Era.pdf

Suanes, M. (2014). Impact of foreign direct investment by sector on inequality in Latin America. In *XXI Encuentro Economía Pública (*p. 93). Universitat de Girona.

# Ethnoarchaeology: the quishuar, an ontological tool in prehispanic cumbayá tombs and sanctuaries in the central-northern highlands of Ecuador

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## Introduction

In the archaeological site of Acuarela-Cumbayá, during the years 2020-2021, 137 burials were recorded with a total of 161 tombs and in some of them more than one individual; of these, several were deep shaft with chamber up to 3.50 meters, and most of the individuals were in the dorsal cubitus position; along with them, a trousseau containing complete ceramic vessels, ceramic fragments such as rims, bodies and bases; metates and retouched flakes; needles, bone flutes and among organic remains, seeds and charcoal.

Historical and ethnographic data show that in the sanctuaries of Pomasqui and San Antonio in the province of Pichincha and Cuicuno and Maca Chico in the province of Cotopaxi, there was a quishuar on the main altar with a crucified Christ from colonial times, which the faithful and pilgrims worshipped at certain times of the year.

The first research question was, if the coals recorded in the archaeological site of Aquarela, would belong to the quishuar, since it was venerated during the colony and possibly in pre-Hispanic times, since it was already known that for the Incas it was a sacred tree and for the Ecuadorian inter-Andean region during the colony it was the tree of god. If the hypothesis was positive, as in fact it happened, we would continue with the following question: What was the function of the quishuar in the tombs found in the Acuarela-Cumbayá area?

In the absence of significance and to answer the question, it was planned to carry out an ethnoarchaeological study, in which not only the quishuar participated, but also other elements that appeared as the research progressed; elements that became variables, which could have been many; however, for the study they would be comparable variables that would help to establish relationships in both ethnography and archaeology, although in fact some data would come from ethnohistory.

These variables are: a) medicine, b) beliefs, faith and amulets, c) fire, d) containers and food, and e) spaces. Medicine would also be linked to the cleaning of spaces and other uses. Beliefs and amulets are difficult to locate; however, there were facts that for hundreds and thousands of years have been practiced by the ancestral peoples and by the mestizo in the sanctuaries and in the funerary process of some peoples of the northern highlands. The fire linked to post-mortem bonfires and the attached containers found in the tombs of Cumbayá with food remains such as corn, beans, squash, quinoa and others. Finally, the spaces linked to the burial pits with or without chamber and the new forms of burial, imposed by Catholicism.

To answer the aforementioned questions, a sample of five tombs from the Aquarela-Cumbaya project dated between 800 and 1200 A.D. was investigated. **(Sánchez F. , 2021)** and ten interviews with key informants living in the sectors of Maca, San Antonio, Cuicuno and Pomasqui who could be local historians, priostes and aborigines of the sectors. In addition, the stories of how the apparitions originated were analyzed.

The research was conducted through ethnoarchaeology:

...sub-discipline of archaeology and sociocultural anthropology, also considered as a methodology for obtaining data from living societies, from an archaeological perspective (ethnography) or from ethnohistory. Therefore, this research strategy involves fieldwork primarily (but not exclusively) through participant observation, i.e. the use of ethnography and ethnohistory in the interpretation of archaeological data. **(Politis, 2002, p. 69)**.

In these theoretical concepts, the Andean cosmovision will be taken into account, through ethnographic works, sometimes increased or transformed by the Catholic Church, in which rites and games are a determining part of funerary practices.

Then, different methodologies for ethnography, ethnohistory and archaeology will be applied, each one with its respective techniques and once these data were partially obtained, the contrast between them was made in order to answer the questions posed. In this context, the archaeo-biological analysis of seeds and charcoal, the open interviews and the ethnographic and ethnohistoric data of the Señor del Arbol in each of its jurisdictions will be valuable.

## PHYSICAL CHARACTERISTICS OF QUISHUAR

The quishuar (Buddleja Incana) is a species of tree belonging to the family Scrophulariaceae, Andean tree of Colombia, Ecuador, Peru and Bolivia, which is located between 2300 and 4500 m s n m, since the time of the Incas is known to meet the need for fuel and its wood is used for spoons, keros and figurines that the Inca threw during rituals.

**(https://colombia.inaturalist.org/taxa/704537-Buddleja-incana)**

The quishuar tree is easily recognized by its small size and globular crown of dense and compact foliage of a dark green color, its leaves are short, white and velvety on the underside, and its flowers are small, abundant and bright red or orange from January to July.

The current belief is that quishuar trees protect from frost and when the tree is cut, intense frosts occur that end with all crops, possibly because it is so leafy despite being small. Its leaves have medicinal properties in infusion for ovarian problems, gastritis, kidney disease and ulcers, including wound healing.

**https://es.scribd.com/doc/95686413/Quishuar-El-Arbol-Sagrado-de-Los-Incas-Shismay-Huanuco-Peru**

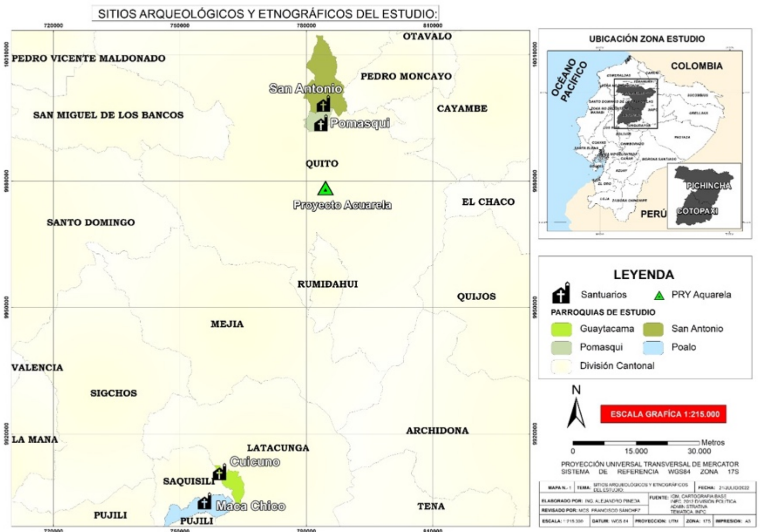


***Figure 1.*** Archaeological and ethnographic study sites

## FOR ARCHAEOLOGY:

During the years 2020-2022 the archaeologist Fausto Sanchez conducted rescue archaeology in the sector of Cumbayá east of the city of Quito, a project called: Excavation and Archaeological Monitoring for the Construction of the Acuarela Housing Complex. **(Sánchez, 2021)**.

This project was divided into three zones according to the excavation process: Rescue Area, Casa Modelo and Ex Chevrolet, names given to the recent occupations prior to excavation by the construction company.

The project found several burials, some of them with up to four tombs, defined as individual and collective. Of these, five were chosen for biological analysis, i.e. the identification of seeds and charcoal, noting this presence in almost all the graves, but those that were in good condition were sent to the laboratory ARQUEOBIOS (Center for Andean archaeobiological and paleoecological research of Peru), in order to know the taxon to which they belong.

The grave goods were also determined contextually, with the purpose of making comparisons with the current reality, especially with the burials of the natives of the northern highlands of Ecuador, always within the five variables studied.

## FOR ETHNOHISTORY:

The stories of colonial times that have been recorded by priests and have lasted until today, have been collected by local historians and Decentralized Autonomous Governments, captured in magazines and now on the Internet, although there are also stories in pictures in the same church as a memory of priests and faithful. These are the miraculous events of the apparition of the Christ in Quishuar that were enriched with interviews with historians and experts on this subject, especially concerning the years of appearance and important contexts in those times, as well as certain events that have marked this religious phenomenon since its inception to the present.

## FOR ETHNOGRAPHY:

Ten key informants were interviewed, including historians, priests, devotees and community members from Pomasqui, Cuicuno, Guaytacama and San Miguel del Común, near Pomasqui, sites where the quishuares are exhibited with the crucified Christs, who were investigated: 1) The relationship of the quishuar tree with the crucified Christ; 2) The relationship of the quishuar and its medicinal powers, cleansing or otherwise; and 3) The relationship of the quishuar with the ritual process.

## FOR THE CONTRASTING

The relationship between archaeological, ethnographic and ethnohistoric studies was decisive in contrasting the causal elements for the practicality of the process from colonial times to the present, taking into account that the quishuar is a native tree venerated by the communities of the inter-Andean region.

## FRAME OF REFERENCE:

The conceptual framework was based on two aspects: one to the ethnoarchaeological theory, its material, ethnographic and ethnohistorical relationship and the other to the ontology described in the beliefs of the ancestral peoples of Otavalo and Cotacachi, with customs that combine with the Catholic, and that have increased and remain active in these peoples.

Almudena Hernando, explains that ethnoarchaeology only becomes ethnoarchaeology when the usefulness of the information obtained for the knowledge of the past is clarified, between ethnographic and archaeological patterns, then the archaeologist can rely on published sources, archival, experimental results or field work. **(Almudena, 1995, p. 19)**However, to this is added the concept of ethnographic analogy, which together with ethnoarchaeology are two profoundly different ways of approaching the prehistoric past, because this analogy classifies the attribution of meanings to objects, structures, spaces, etc., their identification would not have been possible without it. **(Almudena, 1995, p. 20).**

Linking these concepts to the materiality itself Gonzalez Ruibal points out that archaeological ethnography takes into account materiality, multi-temporality and alternative experiences of history and places, **(Gonzalez, 2017)** as it happens in our field of action, which is sought and suspected in the first instance to issue a hypothesis; as an archaeologist the empirical data of characterization is empty and inappropriate for a significance, but it is important for hypotheses, so that information is expanded through laboratory technical resources, without in many cases the laboratorian knows of the hypothesis but simply performs its analysis in terms of finding taxa, which is what is of interest in the first instance.

Thus, the archaeological context consisted of tombs containing human and animal bones, charcoal remains and other elements. The question was, if rituals were performed at that time (800 A.D. to 1200 A.D.) and what were the indications for that? Bioarchaeological analyses were important for this context, so it was decided to identify the taxon to which the charcoals and starches found in closed contexts belonged. Once this process was completed and in the face of common and uncommon results, the following questions were: What is the relationship of the taxon of wood used in funerary contexts and what role did the seeds play?

Knowing that the quishuar tree was significant and possibly sacred to our pre-Hispanic inhabitants and that quishuar trees are currently venerated with crucified Christs created during the colony, the assumption arises that some indication of this species should be found in the tombs excavated at the Aquarela site, as indeed it happened. So, there was the archaeological link and the ethnographic link; but for the analysis it was also necessary to incorporate the ethnohistoric link, so that regardless of the period of time (the present, the recent past or the remote past), these would be linked, so that the ethnographic relationship in an ethnohistoric environment would be in correspondence with the archaeological, without this necessarily being the center of the research, concluding that these relationships are dynamic in materiality, in time, in variables and that in some cases ethnography will be the starting point and in others archaeology will be the starting point.

The other aspect is related to the conception after death, both from the western side as well as from the Andean cosmovision. But since we are dealing with the archaeological world, we will enter the world of ancestry, customs on funerary practices and even more the cosmovision related to death.

Within this aspect, it is vital to mention the Andean conception of death, for this I quote what is mentioned in the last book on the funerary ritual of the current populations of Otavalo and Cotacachi:

Andean beliefs about death, its causes, meanings and mainly what happens after death, have voice and meaning through their interlocutors and leaders of the political and socio-organizational scenario. According to some authors, for the Kichwa, death is not funereal or macabre, but rather, when the signs of death appear, the whole community ayllu is ready to face, not necessarily adversity, but the departure of their loved one to the other dimension. According to ethnologists, the runes are composed of two natures, the first called aytsa [aycha] which means flesh or material nature and the second known as hayni, which refers to the immaterial or spiritual nature. (Benítez, et al., 2021, p. 70)..

In addition, the manifestations of reciprocity, as well as the funeral rites converted into sacred acts, prevent death from becoming an insurmountable situation. These traditional practices maintain and transmit principles, values, knowledge and above all what they consider necessary to perpetuate. (Benítez, et al., 2021, p. 71).

To this it is added that death is the conclusion, the fulfillment and culmination of a stage of life, in an earthly sense. (Benítez, et al., 2021).and then points out that it is the continuity of being within the existential and universal totality.

The Inca conception and before them, the Andean native has understood the world from three levels or dimensions.

The first refers to the Kay Pacha (world of the living), it is the here and now, it is the place where human beings live and develop. The second is the Hanan Pacha (celestial world or above), it is the place where the gods are found. The third dimension is the Uku Pacha (World below), the place where the dead are found, with whose world the natives maintain an indelible link. (Benítez, et al., 2021, p. 77)..

It is necessary to clarify that the world of the dead is staged according to the principles of life, but not to its performance after death, as will be seen later in the analysis of the details of materiality in spiritual function.

It should also be mentioned that, funerary practices are intimately related to the rituals of passage or transition from life to death, in which the individual has lost his previous status and has not yet acquired the next, so it is ambiguous and indeterminate. (Benítez, et al., 2021)..

Trying to order the data and to give their meanings, it has been thought convenient to begin with archaeology.

## ARCHAEOLOGICAL STUDY:

The Aquarela project yielded the following information during the research carried out in 2020-2021:

| INVESTIGATED AREAS | EXCAVATED BURIALS | EXCAVATED TOMBS |
|---|---|---|
| Rescue area | | |
| Model House | | |
| Ex Chevrolet | | |
| TOTAL | | |

**Figure 2.** Data from the Aquarela archaeological project (Sanchez, 2021)

Taking into account that the burials and tombs are closed contexts, some of them were chosen for this study, from which charcoal and seed samples were obtained in a good state of preservation for botanical analysis, especially to determine the taxa and species to which they belong, with the result:

***Graph 3.*** Identity of seeds and charcoal analyzed

| Sample No. | Trinch. | Quad. | Feature | Tomb | Taxon | Remarks | Microphoto |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 7-8 | | | Zee mays | 3 coronta fragments, 6 seed fragments and 2 complete charred seeds | 906-908 |
| | | | | | Zee mays | 3 carbonized coronet fragments and 1 coronet with fragmentation in carbonized apex. | 910-912 |
| | 1 | | | | Alnus sp. | Fragments of charcoal from funerary context. | Alnus sp. |
| | 1 | 11-12-13 | | | Polilepis sp. | Fragments of charcoal from funerary context. | |
| 5 | 1 | 12-13 | | | Polylepis sp. | Fragments of charcoal from funerary context. | 8645-849 |

Taken from: Analysis Report and Aquarela site seeds and coals, 2022. (Vásquez & Rosales, 2022)

Analyzing the archaeological contexts and the variables used, we have the following:

| RASGO | TUMBA | VARIABLE 1<br><br>(Medicine) | VARIABLE 2<br><br>(Beliefs, faith, amulets) | VARIABLE 3<br><br>(Containers and Food) | VARIABLE 4<br><br>(Fire) | VARIABLE 5<br><br>Spaces | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | | Vessels, pots, ceramic plates with corn, beans and other foods.<br><br>Corn<br><br>(Charred grains) | Carbonized corn | Tomb in the archaeological site Aquarela-Cumbayá | Primary burial of ventral cubit. Burial goods: Faunal bones, spindle whorl, fragment of figurine, rims, bodies and bases of pots, grinding hands, flakes, fragment of metate, polishers, faunal skull. |
| | | | | Vessels, pots, ceramic plates with corn, beans and other foods.<br><br>Corn<br><br>(carbonized grains) | Carbonized corn | Tomb in the archaeological site Aquarela-Cumbayá | Fragmented vessels, ceramic whorls, metate fragments, polishers, obsidian flakes, mortars, faunal bones, rims, bodies and vessel bases. |
| | | | | Beans | Charred bean | Tomb in the archeological site Aquarela-Cumbayá | Primary burial of right lateral ulna. Fragment of a figurine, fragment of a whorl, edges, bodies and bases of vessels, flakes with retouch, diagnostic faunal bones, incomplete bone needle and fragments of podos. |
| | | Quishuar | Quishuar | | Charred quishuar | Tomb in the archeological site Aquarela-Cumbayá | Primary individual burial of extended ventral ulna. Contains the tomb: rims, bodies, pot bases and compotera. Incomplete fired clay molds. Fragment of figurine. Flakes of |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | **obsidian with retouch. Polishers.** |
| **17-18** | **Quishuar** | **Quishuar** | **Baked clay and charcoal** | **Tomb in the archeological site Aquarela-Cumbayá** | **Secondary burial, bone flute, rims, bodies and bases of pots and compoteras. Faunic bone remains. Flakes with retouch, complete grinding hand, faunal jaw.** |

Archaeological analysis of the contents of the tombs of the Aquarela archaeological site.

The space is decisive in the funerary context, since it works with arguments, as in the case of San Agustin in Colombia, in which the structure is horizontal and not vertical, as is the case of the pre-Hispanic cemeteries of the Ecuadorian-Colombian border on the highland side, in which there are tombs up to 50 meters deep in the case of the area of Nariño and Carchi.

With respect to this same description, it is evident that there is a variety of shaft tombs, commonly between 2 to 10 meters and in exceptional cases reaching up to 50 meters. The section is circular, ellipsoid, rectangular and there are several chambers at different heights of the shaft, also at the bottom; their shape is rounded or ellipsoid. They are single, isolated or collective and inter-connected. The wells with several chambers and interconnected are exceptional. (Verneau & Rivet, 1912)..

These chamber tombs were also found in the archaeological site of Aquarela, a situation that according to some authors could mean the road traveled, that is, the duration of the deceased's life. The chamber would represent the universe, the house or the place to which one enters, but does not leave, it would be the womb of the Pacha Mama, the maternal womb or the uterine cave. (Benítez, et al., 2021).. Similarly, in the Acuarela sampling, four of the five tombs studied are primary burials, in which the individual is in the dorsal cubitus position (fetal, which would be equivalent to being born again).

In the trousseau, there are several elements such as faunal bones, torteros, polishers, metate hands, metate fragments, pots, compoteras and pots filled with food, including grains, as shown in Figure 4, instruments and food that would serve for the journey from death to the other state, because, if we make a relationship and assessment, the material elements return to Pachamama or mother earth, and the spiritual elements return to the space where the souls possibly dwell.

## ETHNOHISTORICAL STUDY:


***Photo 1:*** Lord of the Maca Chico tree Photo 2: Lord of the Pomasqui tree


**Photo 3.** Lord of the tree of San Antonio de Pichincha Photo 4.

The historical study was focused on finding out: 1) The circumstances and actors of the appearance of the Crucified Lord in the studied sites, 2) The assertion that it is a quijuar or quishuar, 3) Time of the appearance and 4) Possible archaeological site.

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## Pomasquí

The story goes that a farmer named Jerónimo Guañuma who lived with his family in the El Común neighborhood was a good worker and follower of the Catholic religion. Every Sunday he went down to mass at the church of Pomasqui, having as a custom to leave his mule tied to the Quijuar tree under the shade and near the church. On one occasion at the end of the celebration, he went to pick up his animal to return home and was surprised to find his donkey kneeling in front of the Quishuar, which caused surprise.

The following week, together with his wife, he attended the mass and did the same with two mules and again found the two animals kneeling in front of the Quishuar tree, a situation that shocked him greatly, without finding any explanation.

One day Guañuma went to visit his compadre and after saying goodbye, for the third time he saw his mules prostrate on his knees before the Quishuar tree. It is then when the Indian decides to tell these facts to the priest, who accompanied him to see the animal and ratifies what he saw, being tremendously surprised, a version that he would later comment to the superiors of his Franciscan community.

(https://pomasqui.gob.ec/pichincha/capilla-y-museo-del-sr-del-arbol/#)

With respect to the dates of appearance, Oswaldo Aízaga (Interviewee No. 4) mentions that Father Eduardo Alencastro in 1960 is concerned and is responsible for conducting an investigation, in which he mentions that in 1561 the town of Pomasqui is founded in the Veintimilla sector, where there was a large tola and by 1566 Martin Collaguazo son of Alonso Collaguazo cacique of Quito and Pomasqui, gives the space for the convent and others.

## Cuicuno

Legend has it that the Indian Domingo arrived with his family to the site of Yugsiloma, a frozen grassland, with the intention of staying; that is why he decided to buy with the savings of all his life the lot where

Cuicuno is today. There the Indian built his hut and planted some trees to cover himself from the wind; of these, only the quishuar resisted, which developed a powerful trunk, strong branches and dense foliage in a very short time, which was a source of admiration.

One day, the Indian Domingo noticed that he had lost a sheep and blamed the tree. He went in search of an axe and broke off the first branch and in doing so he could clearly see a beautiful miracle perfectly carved on the trunk was a crucified Christ looking at him. His arms were the two branches of the tree still unharmed, full of leaves, small red fruits and nests.

With respect to the years of appearance, an inventory of 1835 already cites "an image of Our Lord Crucified in an already dry quishuar tree. In an inventory of 1875, it says that the image has existed since time immemorial and may be more than 200 years old. According to comments The Lord of Cuicuno differs from other images, this one has not been uprooted and continues with its roots sunk in the earth. In the parish inventories there are gifts of valuable objects for the sanctuary from before 1829". Archivo de Exvotos Revista Sans Soleil - Sanctuary of the Lord of the Tree in Cuicuno.

(http://archivoexvotos.revista-sanssoleil.com/santuario-de-cuicuno/)

## San Antonio de Pichincha

In the middle of the XVIII century, in one of the sites near the main church of San Antonio de Pichincha, in the middle of a shady grove, the face of Christ appeared agonizing in a "Quijuar" tree. A shepherd boy who grazed his flock on the banks of the San Antonio River (now called Monjas River), in his quiet wanderings, among grass and dry leaves, discovered between fearful and surprised the image of the Savior.

He returned the following days with other companions and never got further than a place from where the vegetable figure of the miracle could be seen. The fact came to the knowledge of the Cacique of the place called "Sotaminga", who with a deep religious spirit, invited the natives to kneel before the sacred image.

As time went by, the number of devotees increased, when the image was covered with a wide branch with millions of white and perfumed flowers that sprouted from this miraculous tree.

(https://sanantoniovirtual.com/imagenes/sitiosturisticos/historiasenordelarbol.pdf)

## Maca Chico

In the year 1705, when Maca was a ranch, there was a deluge in the entire mountain range, so the river grew and brought in its path a very small quishuar plant, which remained on top of a stone. After the rain stopped, the Indian Marco Oña, as usual, went down to the beach to collect firewood, found this plant and planted it in the middle of the bushes where no one could see it and made it grow in his eagerness to secure firewood. The seedling soon grew with two branches in the shape of a cross, as if it had been made by man's hands.

One day, Marco went in search of firewood and hit him three times with an axe, and when he saw blood splashing from the tree, he no longer had the courage to continue, surprised by what had happened, he went to tell his wife and relatives and fearfully went to sleep.

In the dream he heard that the Christ said to him: Why are you hurting me? The Indian woke up with the roosters crowing in desperation and quickly went to the place of what had happened and when he looked at the tree he noticed that a Christ was tied to its base and that there was a large amount of blood, worried he returned to tell what had happened to the family and neighbors, -almost no one believed him-.

The herdsmen went to that sector, they were playing with candle in the bushes, they found a rake and realized that it belonged to the indigenous Marco who was walking around there, they followed the chaquiñán and saw that in a tree was tied the Christ, they were scared and as they were playing with candle they put on top of the tree and surprisingly six popcorns flew out (Picture of Marco Taipe, devotee).

| SITE OR SANCTUARY | CIRCUMSTANCES AND ACTORS | TREE TAXON | TIME OF APPEARANCE | ARCHAEOLOGICAL SITE |
|---|---|---|---|---|
| Pomasqui | Acémilas and indigenous | Quishuar | Approximately 1561 | Tola de Veintimilla |
| Cuicuno | Sheep and indigenous | Quishuar | 1675 approx. | Remains of pre-Hispanic pottery throughout the Cuicuno hillside |
| San Antonio de Pichincha | A shepherd, an indigenous | Quishuar | Approximately 1750 | No evidence |
| Maca Chico | An indigenous | Quishuar | 1705 | No evidence |

***Graph 5.*** Historical analysis of crucified Christs

Graph 5 reveals that the oldest sanctuaries where the Lord of the Tree appeared are Pomasqui and Cuicuno, because for the Catholic religion it was effective, as were those of Maca and San Antonio, but apparently it was not as effective as the first ones, which demonstrates the lack of devotion to these sanctuaries. Pomasqui and Cuicuno were also in archaeological sites and possibly these were sacred for the natives; as the quishuar tree was increased with a crucified Christ, the success was greater.

Among the actors there had to be an indigenous person, as in fact happened, because the quishuar with the crucified Christ was directed towards them. The tree was always a quishuar, because the priests knew that the Indians worshipped it.

## ETHNOGRAPHIC STUDY

This research used the same variables, with different actors, collected through interviews, ethnographic studies in recent years and observations of crucified Christs in quishuars. For the respective study, two indicators were determined: the coffin and the quishuar with the five corresponding variables, obtaining:

| | VARIABLE 1 (Medicine) | VARIABLE 2 (Beliefs, faith, charms) | VARIABLE 3 (Food) | VARIABLE 4 (Fire) | VARIABLE 5 Spaces |
|---|---|---|---|---|---|
| FÉRETRO | **Rosemary, chilca,**<br>**They do not use quishuar, because it is no longer available.** | | **Vessels, pots, wooden or ceramic plates, wooden spoon with food for the journey, such as bunches of corn, barley, quinoa,** | | **Tombs in the general cemetery for indigenous and mestizos.** |

| | | | | |
|---|---|---|---|---|
| | | | **rosemary branches, twisted string of branches.** | |
| THE QUISHUAR | **Quishuar (Infusion for people who are about to give birth).** | **Cut pieces of quishuar from the lord of the tree.**<br><br>**Quishuar worship and veneration** | | **Burn quishuar to smoke to bless the houses.** |

**Figure 6. Ethnographic analysis of the quishuar and the coffin or casket.**

The Casket: Currently in the western and indigenous world, the casket, coffin or mortuary box is used to place the deceased prior to burial. According to their worldview, the indigenous people perform a series of activities such as rituals and funeral games to facilitate the transition from death to the new state, with the desire that this path is not tortuous.

The food and other belongings are part of the trousseau, wooden or ceramic plates are placed, including a wooden spoon; containers containing potatoes, corn, beans, quinoa and other foods; some coins for the deceased to pay the entrance to the Chaishuk Paccha; favorite clothing; a branch of rosemary to keep the house clean, considering that metal utensils are forbidden, due to the risk of burning; a rope of totora cabuya or blessed branch to carry the grains of the crops; a musical instrument to interpret the traditional melodies; a halter for the care of their animals; a needle with thread to fix or make their clothes, some tools and seeds. (Benítez, et al., 2021, pp. 55, 174)..

As a complement to the data on food and belongings, is the celebration of the dead, in which the living and the dead are summoned to share food both in the cemetery and at home (Day of the Dead, ethnographic works of Salasacas, Calderon, Santa Elena, among other experiences in Ecuador).

Seventy games are reported during the funeral according to ethnographic data in the towns of Otavalo and Cotacachi, although not necessarily all are performed; among the main ones is the chunckana, which consists of:

The tayta maestro is the main figure of the ludic ritual, therefore, who initiates by burning with a candle or painting one side of the six grains of corn black, to be used as katsas (major grains) or Andean dice. Generally, the total number of grains destined to the game is 54, including the six major grains. Then, the master tayta organizes the male participants in each group, and immediately requests the election of a representative or leader for each group. After a few minutes, the same person proceeds to distribute 24 grains of corn for each group, which are piled up on a white tablecloth that is lying on the ground in front of the feet of the deceased (coffin). According to this version of Chunkana, the winning team will be the one that runs out of corn kernels. The game lasts between 35 and 45 minutes. (Benítez, et al., 2021, p. 214)..

Another important activity is the Wantyay ritual that consists of:

The wantyay is considered the most exalted ritual in the Andean world. This ritual is solemn and takes place at dawn (05h00), once the funeral ritual concludes and prior to the transfer of the deceased both to the Catholic church and to the local cemetery. By tradition, the bereaved usually distribute enough food and drink to all present between 01h00 and 03h00 in the morning; that is, at a propitious moment during the funeral games. In some cases, the owners of the house serve caldo de borrego and the infallible chicha de jora, although in recent years, the Kichwas have also incorporated the consumption of a variety of soft drinks. The main course is served once three very particular games or ludic representations have been performed, such as: "peeling the lamb", "killing the lamb" and "cooking the lamb". And in other cases, the families do not consider it appropriate to offer a dish with meat, but prefer to offer a plate of mote, with potatoes and watercress. (Benítez, et al., 2021, p. 295)..

## El Quishuar:

Known as the god tree in the aborigines of the central highlands and northern Ecuador, possibly because of the following facts:

1) According to ethnographic data, the plant is used to facilitate the birth of a child, as reported by Mauricio Sigcha:

The Quishuar is known as the tree of God, the tree of life, it is an ancient plant venerated by our ancestors. On the trunk is placed the face of Christ. My grandparents, on behalf of my father who was an herbalist and my mother who was a midwife, told us that the flower of this tree was infused and given to women who were about to give birth so that the delivery would be normal, so the idea that it is the tree of life is ratified. That is why the Quishuar tree was venerated (Interview No. 1).

2) According to the ethnographic and historical data, the Catholic Church at the beginning of the colony, knowing that the indigenous people were venerating the quishuar for being medicinal and a helper in the birth of a child as a regenerative plant, implanted and made in a theatrical way that in some sectors of the highlands appeared a crucified Christ in the branches of a quishuar also taking advantage of the indigenous artists who were instructed by the priests in the best way for these carving works, in which the main actors were: A mules that could be a donkey or a horse, a quishuar and an Indian, because the encounter had to be done by the latter, to be more credible and instill the cult of Catholicism, this is how the syncretism formed by facts and symbols of two conceptions appears, the one ancestral and the other of a new imposition.

3) In one of the interviews in the Guaytacama sector, in relation to the veneration of the quishuar it was said: "In the quishuar rested the pumasiqui, because there are pumas in Cotopaxi, it knew to be lying in the bushes in the lushest ones, in the quishuar bushes, the puma climbs the trees and borders on the trees" (Jami to Carranza, 2021, Interview 5).

Alegría Jami, a native of the Cuicuno sector, interviewed by Luis Carranza on several occasions on the subject of the death of sheep in the Saquisilí sector, mentions:

In the old days, my grandparents and my mother told me that a big, ugly, strange animal had been known to come along (as for the covid animals came along, they did not know the puma as a name for an animal); So, she says that this animal kills animals and even children had these stories in Cuicuno, and the people got angry, the people of the town and started to follow the traces that the animal was pulling, a very big animal and they found a leafy tree of quishuar, So they see the tree, not the animal, bathed in blood, then the animal has been known to eat sheep and all kinds of animals, then the people were frightened to see the tree bathed in blood and thought that the tree came to life, and then began to worship the tree. And that is where the theme of the lord of the tree was born, that tree was thrown away, it disappeared, but they continued to worship the other trees, that is, they planted to continue worshipping (Interview 5).

As Cuicuno is located on a hilltop in the middle of the valley, the puma would stop there, due to the existence of some quishuares, which it had hunted in the lower parts, i.e. Guaytacama, Toacaso and other sectors (Alegria Jami to Carranza, Interview 5).

Then the priests began to evangelize and as they had the quishuar, they carved it and according to Carranza, the Lord of Cuicuno has feline features (Interview No. 5).

## INTERRELATION AND CONTRAST:

| VARIABLES | ARCHAEOLOGICAL DATUM | ETHNOGRAPHIC DATA | ETHNOHISTORICAL DATA |
|---|---|---|---|
| Medicine | **Presence of quishuar in two of the five tombs sampled.** | **Quishuar (Infusion for people who are about to give birth, ovaries, kidneys).** | |
| Beliefs, faith and amulets. | **Quishuar** | **Cut pieces of quishuar from the lord of the tree.**<br><br>**Worship and veneration of the crucified Christ in El Quishuar.** | **Christ crucified on a quishuar** |
| Fire | **Quishuar, charred corn and beans.** | **Burning quishuar to smoke to bless the houses.** | |
| Spaces | **Tombs in the archaeological site Aquarela-Cumbayá-.** | **Tombs in the general cemetery for indigenous and mestizos.** | **Christ crucified on a quishuar inside a shrine** |
| Containers and Food | **Vessels, pots, ceramic plates with corn, beans and other foods.** | **Vessels, pots, wooden or ceramic plates, wooden spoon with food for the journey, such as bunches of corn, barley,** | |

| | |
|---|---|
| | **quinoa, rosemary branches, twisted string of branches.** |

Correlation of ethnographic, archaeological and ethnohistorical data.

To arrive at Graph 7, we took into account the different elements of the variables, which did not change with respect to the archaeological theme, because it is known that they are static, evident elements, characteristic of the materiality, similar situation occurs with the elements of ethnography and ethnohistory, however in order to contrast with archaeology, we have had to join those elements that have been produced during the colony and that remain latent in our days. Ethnohistory served as data within the process of continuity to the ethnographic data, especially in what refers to the formation of the syncretic state, taking care of the ancestral.

The quishuar is present in three variables: a) medicine, b) amulets, faith, beliefs and c) fire; taking into consideration that fire is an emission of light and heat produced by the combustion of a material, in this case quishuar and food.

The spaces in the funerals have changed, especially the shape of the cylinder or ellipsoid with their respective chambers, elaborated in the integration period for the Aquarela-Cumbayá site (800 A.D. to 1200 A.D.), in which the deceased is in connection with nature, positioned as a fetus and accompanied by a trousseau rich in belongings for his journey and his stay in the other state; a situation that changed with the arrival of the Spaniards and their imposition of having a coffin and placing the deceased horizontally.

Within this rich trousseau there is an almost total correspondence in the story between the ethnographic experience and the archaeological evidence, which has not yet lost the essence of placing both the instruments and the crockery with the necessary food, as well as certain instruments and utensils such as needles, halters, flutes and other necessary items that were used during their existence on this land and that will be necessary for their new state.

As initial information it was known that in the provinces of Pichincha and Cotopaxi, in the places of Maca Chico, San Antonio, Cuicuno and Pomasqui there were sanctuaries of the Catholic religion, some more important than others, and that these coincided in their image, venerated by the pilgrims who full of faith attended these centers of worship and of course had dates for their annual feast, although the faithful could always visit their rooms especially on Sundays.

This image was a quishuar tree, where the Christ was crucified; it was known beforehand that in miraculous acts had appeared during the colony in times of Lent, coinciding with Catholic events, precisely so that the profane, in this case with the intention that the indigenous be incurred in an ontological way in Catholicism; But in this miraculous act had to intervene ordinary elements of that time as a mules that could be donkey or horse, an Indian and the quishuar. So the question was, why were the Indian and the quishuar used?

The answer to the first question was more than obvious, because the indigenous people were the ones who had to be Christianized, as Mr. Oswaldo Aizaga (Interview No. 4) mentions in the ethnographic data when he says: "the Spaniards from the beginning of the conquest already brought this custom of the crucified Christ", what the religious did not know with certainty was in which tree the Christ should appear. By the customs of the Incas and the conquered by them Cayambys, Otavalos, and others, they realized that they venerated the quishuar, so the crucified Christs should be in a quishuar, as it happened in the four places.

As background, the tombs were dated between 800 A.D. and 1200 A.D. and were within the middle integration period for the highlands in Ecuadorian archaeology.

For the archaeological studies recently carried out in Aquarela - Cumbayá, a sample of starches and coals was obtained for archaeobotanical analysis, to determine to which woods and seeds these remains belong; samples were chosen from five different tombs of the first rescue phase, from strictly excavated closed contexts.

With the results of these analyses, the seeds belonged to calcined corn and beans and the woods to alders and quishuar, and that this had been venerated in pre-Hispanic times and the Spanish conquest, the study required an ontological and material relation on the elements that intervened in pre-Hispanic tombs, crucified Christs in the quishuar, tombs of the indigenous communities with ancestral customs, determining five variables: 1)Medicine, 2) fire 3) Beliefs faith and amulets, 4) Spaces, 5) Vessels and food.

Two variables were exclusively ontological (a) fire, (b) beliefs, faith and amulets, demonstrated in pre-Hispanic times through archaeology with material evidence and an ethnographic relationship of beliefs and faith, especially when the ethnohistoric relationship is in correspondence with that same quishuar, where the Christ is crucified with the quishuar buried in the pre-Hispanic tomb, perhaps because it is a regenerative and medicinal plant for the advent of a new being; then, the indigenous belief acquired by experimentation knew the faculties of the quishuar, which gave beneficial results and on the other hand, it was a regenerative and life-giving plant, so our pre-Hispanic believed convenient to burn quishuar during ceremonies and funeral rituals.

The Catholic Church, considering these acts and the veneration of the quishuar practiced by the conquered Indians, took it as a precursor symbol of the faith, imposing and adding other actors to affirm the Catholic beliefs and faith.

There must be complementary actors, symbols and beliefs, such as amulets, but this study has a theoretical, spatial and time limitation that will be essential in the rituals and in the trousseau of the deceased.

Of the four sanctuaries studied, Cuicuno in Cotopaxi and Pomasqui in Pichincha are important because of: a) the influx of the public and pilgrims to visit as an act of faith, belief and religiosity to the Lord of the Tree, b) for being possibly important sites in pre-Hispanic times; the archaeological evidence shows this, observing elements such as pottery and stone at the site of Cuicuno and tolas at the site where the Lord of the Tree originated in the ancient Pomasqui. Similarly, with respect to the antiquity both belong to the 16th and 17th century, not so Maca Chico and San Antonio that are from the 18th and 19th century and possibly did so because of the success of the first two.

What is related in the interview of the community of Cuicuno about the puma's intervention in a quishuar tree is an event with precedents of activities in the area. In pre-Hispanic times and during colonial times, the puma was a mythical animal and to a certain extent sacred, but before that, it was feared because of the bloody acts it could produce and this image was transferred to the quishuar, which was its exclusive feeding area and possibly for this reason the tree became venerated.

The funeral rites of the indigenous communities were related to planting and harvesting in the northern highlands of Ecuador. (Sánchez F. , 2019)It should not be forgotten that the quishuar is a leafy plant and therefore would slow down the frosts, so it is mentioned in several historical and ethnographic passages that many trees were planted possibly for this function; A similar situation occurs with the planting in times of death, (late October and early November) in which the Otavalos and Cayambys mention that the deceased are present in the farms, especially loved ones, so that funeral practices are recreated at this time in the sharing with the deceased both in the cemetery and at home through meals.

The ancestral customs on the funeral activities in the northern highlands of Ecuador, still persist in the indigenous peoples, to this has increased the customs imposed by the Catholic religion that in a way transformed the form of burial, but not the rituals embodied in games and recreational activities.

The current peoples of Otavalo and Cotacachi, as well as the pre-Hispanic peoples of northern Ecuador, because of their ancestral customs of transit from death to the other state through liminity, have the belief that their soul has finished its life cycle and will continue to live in the other state, for this reason, the coffin is accompanied by utensils for eating such as pots, ceramic and wooden plates and others such as needles for making clothes and sewing, halters for tying up animals, flutes for music and other important elements in daily life.

Quishuar, chilca, rue, rosemary are plants that have been used before the Spanish conquest as plants for cleaning, medicinal use and in funeral rites, as is also verified by ethnographic data in which these same customs are still in force in the native peoples of northern Ecuador.

The five variables studied correspond to each other, some with the help of the ethnographic field and others with the ethnohistoric data, always correlating, sometimes starting with archaeology or sometimes with ethnography and in many occasions helping us with ethnohistory. The important thing about this work is that research can begin with any discipline and correlate in the same way in different time and space with the disciplines involved.

The quishuar will always be related to regeneration, a situation that our indigenous people made a comparison with the birth of the human being on earth and then on the way to the other state or possible dimension, always involving reciprocity, correspondence and gratitude, in being in communion, that is why the trousseau and the position of the deceased in pre-Hispanic times will be correlated with the Pachamama, not only in modern times.

The quishuar is an important funerary element in pre-Hispanic times in northern Ecuador, as asserted in the tombs of the archaeological site of Aquarela as a regenerating plant of life, as shown by ethnography to say that this plant serves as medicine to facilitate the coming of a new human being; likewise the Catholic religion picked up this iconographic symbol for its imposition of faith and beliefs for the respective domination.

## References

Almudena, H. (1995). Ethnoarchaeology, Today: An effective way to approach the past. *Trabajos de prehistoria*, 15-30.

Benítez, N., Posso, M., Echeverría, J., Naranjo, M., Maldonado, A., & Cevallos, R. (2021). *The funerary ritual from the cosmovision of the Kichwa people of Otavalo and Cotacachi*. Ibarra: Universidad Técnica del Norte.

González, A. (2017). Ethnoarchaeology, ethnographic archaeology and material culture. *Complutum*, 267-283.

Politis, G. (2002). About Ethnoarchaeology in South America. *Horizontes antropológicos*, 61-91.

Sánchez, F. (2019). Ethnoarchaeology: rituality in planting in camellones and Andean culture in southern Lake San Pablo, Otavalo, Ecuador. *Arqueología Iberoamericana*, 28-41.

Sánchez, F. (2021). *Excavation and Archaeological Monitoring for the Construction of the Aquarela Housing Complex*. Quito.

Vásquez, V., & Rosales, T. (2022). *Seed and charcoal report from the Aquarela site*. Piura.

Verneau, R., & Rivet, P. (1912). *Ethnographie ancienne de L' Ecuateur* . Paris.

# Women and gender relations in blue power. A case study: The Metropolitan Police of Quito

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## Guardians of a safe and orderly public space

This research, from a gender perspective, analyzes the incorporation of women in a local police force, revealing the gender relations established in this process.

The study focuses on investigating the way in which the police institution incorporates women, examining what this represents for it, as well as the construction of the police subject that they carry out. This research also seeks to unravel the gender relations that arise in the process of recruitment, training and permanence of women. To this end, it analyzes sociological and gender variables that condition the processes of recruitment, training, job assignment and promotion of men and women in the police institution.

In order to carry out this research work, we took as a case study the Metropolitan Police of Quito, which is an entity dependent on the Municipality of the Metropolitan District of Quito, whose main function is the control of the public space of the Metropolitan District.

This research is proposed in a context in which the Police is changing, in a process of institutional reform that opens the way for women to enlist in its ranks.

It must be said that the police is a social institution with a long history in society. This institution is little studied because it is visualized as a hierarchical institution of military type, with a scope of action ascribed to the confidential, to the secret. This vision of the Police turned it into a closed redoubt for civilians. This is why police actions and gender relations within the police institution are little analyzed, due to the difficulty that this closed field of study presents for civilians. However, it can be said that the "traditional police institution of repressive and conservative character of the status quo of society, is now in a process of redefinition of its role in the democratic context" (Torrente, 1992, p. 291), in a framework of police reform and institutional modernization.

Since 1990, several Police Reform experiences have been developed in Latin America, influenced in their content and characteristics by three parallel processes: the democratization process, the increase in crime and insecurity or public fear, and the transformation of the State (Dammert, 2006, p. 3).

In the context of Police Reform, the traditional role of the Police is redefined, as the Police no longer only guarantees the security of the rulers in power and the State, but also represses and prevents crime, thus guaranteeing the security of citizens.

In this context of change in the police, a new stage begins for this institution, in which not only the institutional role is redefined, but also the profile of the police officer. The police profile changes to the extent that the police officer must stop being reactive and become a proactive agent to prevent crime and ensure the safety of citizens.

The rethinking of the role and profile of police officers makes the conception of the police institution more flexible. It is no longer required exclusively male police officers, strong, tough and with an intense military training to be police. In the new times, the police role requires proactive men and women who are close to the community.

Due to this change in the police institution, the formation of police groups called in some countries Community Policing or Community Proximity Policing, which opens the doors to the entry of women into the police institution, has been originated.

In this context of change and modernization of the police institution, which includes women, the question arises: why do women join the police force? There are two hypotheses in this regard: the first, and perhaps the most relevant, is the need for women to find a job and a steady income. The second, no less important, is perhaps related to the strong influence of family and friends who recruit them through family ties and friendship.

In this context in which women join the police institution, the question arises: how are women incorporated into the Metropolitan Police of Quito and what does this incorporation represent for them? It should be mentioned that "the Metropolitan Police of Quito is a public entity dependent on the Municipality of the Metropolitan District of Quito, in charge of controlling public space, based on the ordinances, regulations, norms and resolutions issued by the Metropolitan Council" (Metropolitan Police, 2008, p. 7).

The Metropolitan Police was founded in 1825 and only in 1978 it opened its doors to receive the first woman. She joined the institution, not with the function of public space control that the rest of the male police officers performed, but she joined to work as an attaché of the Hygiene Directorate of the Municipality of the Metropolitan District of Quito. The Metropolitan Police currently has 776 officers, of which 735 are men and 41 are women, who are currently working in tourism, public space control and administrative activities.

In this space where there is room for women in the Metropolitan Police, some specific questions should be asked: how are women incorporated into the Metropolitan Police of Quito and what does this incorporation represent for them? when does this institution begin to enlist women in its ranks? Why do women join the police force? how are women recruited to join the Metropolitan Police? at what age do they join? what occupation did women have before becoming police officers? what obstacles do they face in joining? what is the process by which they are selected? With regard to the police training received by these women, the following questions arise: where do they receive their police training; what are the subjects with which they are trained; does the police training they receive emphasize the use of physical force rather than knowledge; and is the police training they receive based on a military training model?

In addition to these questions related to the entry and training that women receive upon entering the police force, it is necessary to ask some complementary questions about the permanence of women in the police force. Thus, it is worth asking whether women are assigned differentiated roles according to sex or gender, whether the gender relations that are present in the incorporation of women into the police institution delineate and affirm a certain way of being and acting in the police agency, and whether this particular way of acting and being that women assume in the police force leads them to ascribe to a different gender. These questions should be investigated jointly: whether women subordinate their individual bodies to the social body of the institution in order to construct the police subject, and what police subject do they construct? Finally, what does it mean for women to join the Metropolitan Police?

The contribution of this study is that it constitutes a pioneering and innovative study, which opens a space for debate on the subject, providing elements of analysis from a sociological and gender perspective and introduces analytical concepts such as: police subject, police culture, females gender, among other theoretical notions that will allow us to enter into the debate. It should also be said that the importance of this work lies in the fact that the results of the research contribute to gaining a better understanding of the labor situation of women in the police institution. With this knowledge, the local government will be able to formulate adequate public policies for the insertion of women in the police force. The same should consider a gender perspective that allows for the equal and equitable incorporation of both women and men in the institution.

## Police Institution

The study of the police as an institution and the incorporation of women into it is a new concern, which has begun to be analyzed with greater emphasis in the last decade. "The police is a mythical institution. In general, the everyday world of the police is a world unknown to citizens" (Torrente, 1999, p. 85).

The police issue has been investigated from different perspectives of analysis. Thus, from the jurist analysis to investigate the police institution always relating it to crime, as an institution of legal-criminal control.

The sociological analysis of the police institution began in the 1990s, with research that explored the police institution in its historical development, observing it as a profession that can be exercised by both men and women.

In the perspective of analysis of Police Reform , it can be said that most of the works carried out on the police in recent years can be found. These studies analyze police institutions, linked to the profound transformation process initiated by these institutions in recent decades.

According to some authors, this transformation of police institutions, known as Police Reform, is due not only to the democratization and modernization of the States, but also to the urgent need to demilitarize and de-bureaucratize these institutions, which were in crisis due to their inability to adapt to rapid social change.

Broadly speaking, the main cause of these reforms was society's concern over the sharp increase in crime, coupled with the widespread perception of law enforcement as a corrupt and ineffective institution. The reforms revolved around gradual efforts to reorganize the police, purge corrupt officers, improve recruitment and training, and improve oversight and civil society participation. (Dammert and Bailey, 2005, p.140)

This approach to police reform proposes that the transformation of the police institution redefines the traditional and repressive role of the police, which had traditionally been oriented to support State order. At the same time, other important aspects such as the entry of human resources to the police institution are changed, not only men are allowed to enter the police service, but also women.

### Gender Analysis

In this perspective of the study of the police institution from a gender perspective, it can be said that there is still little research. There are studies that approach the police as a masculine profession, and other studies that deal with gender differentiation, the discourses of masculinity production and the conformation of the police subject. Thus, the work proposed by Arteaga (2000), examines the police as a masculine profession, in which he argues that women face a series of obstacles from the time of entry, training and in the very permanence in the police institution. Arteaga points out that they face obstacles from the entrance exams, which tend to prioritize the use of force rather than other skills. They even face obstacles in police training, as well as in professional life on the street (p.78).

Arteaga argues that both men and women join the police for the same reason: to get a job and a steady income. He further proposes that the way women are recruited is through kinship.

[A] A relative or friend becomes the link for joining the police. However, in the case of women who decide to become police officers, there are some cases in which the husband convinces his partner to join. Be it one or the other case, the fact is that family relationships, kinship or friendship circles play a determining role, although in the admission process, conditions do not always favor the latter (Arteaga, 2000, p. 78).

For this author, women in the police institution are subjected to all kinds of pressures of physical resistance and sexual harassment, displacing them to activities considered by the police themselves as second-rate, such as administrative and secretarial functions. "[W]omen are assigned to surveillance work in public spaces-parks, museums, gardens-and not to the prevention activities to which men are regularly assigned" (Ibid., 2000, p. 80).

Varona argues that culture marks individuals with gender and gender marks the perception of social, political, religious and daily life, and this marks social relations in the police. Institution in which unequal gender relations are raised, supported by values, norms, and institutional codes that are related to masculinity, "thus nurturing the idea of the police as an activity monopolized by men (Ibid., 2000, p. 81).

While Sirimarco's proposal pays particular attention to studying the police institution from the point of view of gender differentiation and the discourses of masculinity production in the conformation of the police subject. Sirimarco argues that the discourses and procedures for the production of masculinity that are part of the instruction in schools for entry into the police career determine the formation of a totally masculine police subject.

In this space of initial socialization, such practices and narratives speak to us of a framework of discourses that forge not only a masculine subject, but also an institutional subject.

It is a matter of glimpsing how, through these generic indexes, a certain way of being and acting within the police agency is delineated-and endorsed-which, by subordinating the individual body to the social-political body, helps to shape a certain police subject (Sirimarco, 2004, p. 61).

In this approach, Sirimarco states that power in the police institution separates and isolates, which results from the play of differences, their symbolization and their spectacular manifestation. "Power itself becomes an exercise of institution, insofar as it sanctions and consecrates -through its discourses and dramatizations- a system of differentiation". (Sirimarco, 2004, p. 64).

Sirimarco argues that hierarchical power requires subordination of subordinates to superiors, which is generally accepted and shared by both.

From this perspective, (hierarchical) subordination is homologated to humiliation, and authority is transformed into the power to make everyone bow down before one (Sirimarco, 2004, p. 65).

In this sense, it can be said that there is a close relationship between gender, power and subordination, so that everything related to women is feminized as a symbol of subjugated bodies and in this way the civil is transformed, consequently, also in a feminized universe.

Nanda (2024) argues that it will be necessary to analyze the extent to which binary notions of gender must be transcended in order to analyze whether both female and male police officers constitute genders other than masculine and feminine in Latin American societies and whether female police officers, like the "Suku", are part of a male secret society.

The research was carried out with a participatory-direct methodology, in two specific moments: first, the researcher conducted participatory observation during the daily practice of metropolitan police officers, and held direct conversations with those involved to collect oral information. Secondly, the information was collected by means of instruments designed for this purpose, such as a survey, in-depth interviews and horizon tour.

In relation to the survey, a survey form was designed to obtain information from male and female police personnel. The questionnaire was applied to a sample of 29 women and another sample of 155 men. These samples were randomly drawn from the universe of men (N=735) and the universe of women (N= 41). The sample size was calculated using Triola's formula (2000).

$n = N Z^2 p q / (e^2 (N - 1) + Z^2 p q)$

Where:

n= sample size

N= 735 men and 41 women

Z = 1.96 corresponding to 95% confidence level

p = proportion corresponding to a dichotomous response, a value of 0.50 is assigned when this proportion is unknown.

q = proportion corresponding to the second dichotomous response, as this proportion is also unknown, a value of 0.50 is assigned.

e = assigned margin of error 7%.

The sample of men was randomly selected from among 735 male metropolitan police officers, mainly those working in the Historic Center of Quito, and the sample of women was taken from the universe of 41 female metropolitan police officers.

## The blue space that incorporates women
## Entry to the police institution

The Metropolitan Police is a space of blue power of men, in which women were accommodated. The Metropolitan Police of Quito has a long history to tell since the date of its foundation on May 11, 1825. However, the history of the recruitment of women in the Metropolitan Police is not very old and it would seem that the history of the Metropolitan Police was gestated only by men, since the presence of women as a historical subject does not appear in the memory of the Metropolitan Police.

It is an effort to incorporate the voice of women in the historical process of the Metropolitan Police. To this end, the question is: since when did women join the Metropolitan Police? It can be said that it is in 1978 when the institution allows the enlistment of the first woman, who does not enter with the proper function of metropolitan police: control of public space, but she is enlisted as an attaché of the Hygiene Directorate of the Municipality of Quito.

This first woman enlisted in the police institution, after a short tenure in the institution requested an administrative change to another agency of the Municipality of the Metropolitan District of Quito.

Between 1988-1992, a new woman was integrated to the institution, who was assigned to escort the mayoress. This policewoman, once the mayoral term for which she was integrated to the police institution was over, ceased to be part of it, becoming just another official of the Municipality of the Metropolitan District of Quito. Her name was Ligia Herrera and she entered with the rank of Inspector, she never fulfilled the normal function of metropolitan police, she never exercised authority, nor command with the rank and file personnel.

In 1998, four more women became metropolitan police officers: Patricia Andrade, Katty Quinteros, Silvana Arboleda and Jacqueline Ramos, and like the previous police, these four women were not given the function of controlling public space, but were integrated with the functions of tour guide and protocol.

In 1999, the Metropolitan Police called for the first time for women aspiring to become metropolitan police officers, and in May of that year the first group of twelve women joined the institution to be trained as tourist guides.

In 2001, a group of twenty women joined the institution and were given tourism functions. From this moment on, each group of aspiring metropolitan police officers includes female personnel, and in 2002, nine women joined the institution.

It is concluded that women who initially enter the Metropolitan Police are integrated with functions that are considered proper or essentially for women.

## Permanence in the Police Institution

Now, once it is known when and how women are entering the Metropolitan Police institution. The need arises to ask why women join the police force. To answer this question, we examined among men and women of the Metropolitan Police, what did they consider to be the main objective for women to join the Metropolitan Police, and the result was that 65% of the men and women surveyed considered that women join because of their conviction to be metropolitan police officers.

If the conviction of being a police officer, work and family are social variables that influence women's entry into the police force, then the question arises, how are women recruited to join the Metropolitan Police? Generally, women are recruited in two ways: unofficially and officially. The unofficial route makes use of two means to enlist women in the police institution. One means is family relations and the other is friendship. In the process of incorporating women into the police force, it is often friends who have already joined the institution who invite them to join.

The official call for applications is made by the Metropolitan Police, through the Metropolitan Directorate of Human Resources of the Metropolitan Municipality of Quito, by means of a press bulletin and an announcement on the institutional website.

Now, did these women who entered the police force face obstacles that hindered their entry? When asked if, when entering the Metropolitan Police, they faced obstacles related to their sex, the answer obtained was significant ($P<0.01$): only 16.5% of men faced obstacles based on their sex, while 62% of women had to face obstacles due to their sex, that is to say that women have to face obstacles based on their sexual difference in a higher percentage than men.

To find out whether women faced other obstacles to their entry into the institution, we asked whether the internal structure of the Metropolitan Police was modified with the entry of women? 46.7% of the men indicated that the structure was modified for the entry of women into the institution and 48.3% of the women affirmed the same. The organizational structure of the Metropolitan Police had to be modified to accommodate women. For this purpose, the Tourism and Protocol Unit was created in the institutional structure, an area in which the 12 female police officers were housed.

Men and women were asked: Did the values, norms and traditions of the Metropolitan Police change with the entry of women? 51.6% of the men responded that the values, norms and traditions of the Metropolitan Police did not change with the entry of women, while 48.3% of the women responded in the same sense. According to the responses of male and female police officers, there is no significant difference, although the percentage and absolute results are different.

An attempt was made to find out what men and women thought about the presence of women in the institution by asking whether women contribute to the security of women or of men and women. The results showed that 76.3% of the men thought that the presence of women in the institution contributed to the security of both men and women, and 89.6% of the women answered the same. This suggests that both men and women are aware that the presence of women in the police force contributes to the security of citizens in the metropolitan district.

When investigating between male and female police officers, what is reinforced in the training course for aspiring police officers? 90% of men and 96.4% of women stated that the strength of the police officer is reinforced as opposed to the weakness of the civilian.

### Individual Body Subordinated to the Social Body Generic Markings in policewomen

Now, it is worth asking here how the institutional culture of the social body influences policewomen? The answer is that institutional culture marks the bodies of these women in two different ways. On the one hand, institutional culture imprints its marks on policewomen in such a way that it leads them to construct a specific police subject, and on the other hand, when women receive the cultural marks on their bodies, they ascribe to a particular gender identity.

## Subject Construction Police

The first cultural mark is imprinted when the institutional culture with its values, norms and traditions of a military-masculinizing type, engrave their masculine gender mark on the bodies of policewomen during the training course and during their permanence in the institution, leading them to constitute a masculine police subject. This police subject begins to be constructed from the moment the women enter the institution as aspirants and receive the training course.

The entrance schools become the means that allow women to move from a civilian status to a military status. These spaces are conquered by overcoming physical tests, challenges, where the aspirants are humiliated, mistreated and their bodies are subjected to new markings.

The body of the aspirants thus becomes "the support for the internalization of the norm", the tests, humiliations and mistreatment become a way for the women aspirants to break with their past as women and civilians, to relate to the hierarchical, police and masculinizing present. In this way violent and demeaning practices, as well as "macho" discourses are delineating a way of being and acting in women." Such "macho" practices and narratives bring to light the web of discourses that forge not only a masculine subject, but also an institutional subject". (Sirimarco, 2004, p. 63), where the individual body is subjected to the social or institutional body, through the extreme physical sufferings that are imprinted on the individual body, through the constant practice of running, jumping, bending down, throwing oneself on the ground, crawling and running again.

This practice of trotting and jogging is conceived by Sirimarco as a "dance" which she calls "milonguear". This "dance" becomes a very important mechanism that allows to achieve the docility of the bodies. Once the individual body has become a submissive and obedient body, the "civilian body" can transit to the "police body".

Punishment and suffering then internalize in the unconscious of the aspirants the obedience to hierarchical power, which "requires subordination for its existence. Both - superior and subordinate - are positions within a common structure, accepted by both and shared by both" (Sirimarco, 2004, p. 65).

The police subject constructed by women in the Metropolitan Police is thus constructed by rejecting the civilian and appropriating the masculinizing nature of being a police officer and rejecting everything that is feminizing, since, in the police and military institution, the civilian is associated with the feminine.

In this sense, to treat Cadets and Aspirants as "sissies" is to feminize their bodies, investing them with those attributes that are considered proper to the universe of the feminine: to be conquered, to be dominated, to be subjugated. In short, the inferior being. It is common to hear police officers expound on the reasons for women's inferiority (Sirimarco, 2004, p. 65).

Women then construct a police subject, as Judith Butler (2002) would say, in opposition to that which should not be, in repudiation of the abject. Women are policemen to the extent that they do not identify with the civilian, nor with the feminine, but with the hierarchical and masculinizing. As Sirimarco (2004) would point out, the police subject constructed by women is a markedly masculine social being, the product of the subjugation of the individual body to the police body through suffering, that is, that being the product of disciplining the individual body to the social-political body.

## Generic Identity of Female Police Officers

The second cultural mark is imprinted on the women's bodies during their stay in the institution, when the institutional culture imposes values of a heterosexual patriarchal family on them, emphasizing in them a role of mothers, of traditional women typical of a heterosexual system, which is expressed mainly in the assignment of functions and jobs as already analyzed in the preceding chapters, which leads them to construct a generic identity of their own.

Now, these marks that are imprinted on women's bodies, which on the one hand bring them closer to the masculine and on the other distance them from the feminine, will obviously lead them to construct their own gender identity. But what gender identity are they constructing, are they constructing a new gender identity? Certainly women in the "blue space", due to the cultural markings on their bodies that lead them to construct a male police subject with feminizing maternal functions, are endorsing a new gender identity, since they are women who are torn between what Epple (1998) calls two spirits, or dual spirits, terms that describe those who have a "masculine spirit and a feminine spirit" in terms of gender. Epple argues that two spirits are terms that evaluate or measure the degree of masculine or feminine tendency or spiritedness, which varies according to the cultural context, i.e., if a person at one time reflected more feminine than masculine characteristics, at another time and cultural context he or she may present the opposite characteristics. Such is the case of policewomen, who before entering the blue space, surely reflected feminine characteristics in civil society, but when they enter police society, due to the marks that the culture of this institution imprints on their bodies, they become more masculine.

Epple reveals that in the oppositional male-female dualism, two-spirited people are seen as exotic or different, because they do not conform to the characteristics of a single gender.  Following this reflection, it can be affirmed that policewomen are seen as different women from civil society, where they are seen as women-men, as *carishinas*, who have assumed a role different from the role determined for the female gender, according to the dominant heterosexual cultural pattern, so that socially they are seen as women-men.  In this sense Epple contributes by introducing the use of the term alternate gender, to understand this new form of gender identity, suggesting that in certain cultural contexts there is a mixture of gender behaviors, so that there is significant evidence to think of a gender totally different from male or female, emphasizing "the multidimensional role.

In this way it can be said that policewomen create a new generic identity, which corresponds to an alternate gender, which can be called femas gender and which would be invoking a subject crossed by interconnections of the feminine and the masculine and which, as Epple points out, not only demarcates a specific type of person with "particular" characteristics, but a wide range of individuals situationally defined and characterized, as is the case of women in the Metropolitan Police.

Policewomen as seen from Nanda (2004) would be nothing but women who do not have a female identity, but an identity that the Maidu call Suku. The Suku identity is presented in women who have a non-feminine identity as a woman that allows them to be part of a male secret society such as the police.

It is worth insisting that these gender identities and practices are not fixed, but changeable, and although the assertion of gender identity "can be used to exclude and control oppressed people, it can also be used by those people to respond to such domination." (Gutmann, 1997, p. 160)

To conclude this research, it only remains to ask what has their incorporation into the Metropolitan Police meant for women? The incorporation of women in the "blue space" of the Metropolitan Police means for them to make great physical and social efforts, as well as to resort to strategies that allow them to survive in a hierarchical, masculinizing, excluding and gender discriminatory space. In this way, it was observed how women are forced to construct a male police subject with a new generic identity which I call femas gender. This new gender refers to a mixed subject with a feminine and a feminine part that allows them to be part of the secret police society.

These women with a new gender must adapt to the small space that the police institution gives them among inequitable gender relations, where women do not have the same formal duties as their male colleagues, nor the same rights. This is expressed in the different possibilities for women to enter the institution, to remain in the institution, to be assigned jobs and to be promoted in rank, as well as in the unequal assignment of roles in the performance of functions.

Women in the Metropolitan Police of Quito are incorporated without an adequate labor insertion policy that incorporates them with equality and gender equity in the institution. For this reason, the enlistment of women in the "blue space" of the Metropolitan Police has meant for them to make great physical and social efforts. As well as having to resort to defining survival strategies that allow them to remain in a hierarchical, masculinizing, excluding and gender discriminatory space. In this way, women are forced to construct a half masculine and half feminine police subject with an alternate gender identity that allows them to be part of the secret police society.

The incorporation of women into the blue institution is carried out with a marked differentiation and inequity for the female gender. This is evident from the very moment of entry of aspiring women into the police force, as well as in their participation in police training, where gender differentiation and inequality are even more accentuated.

Women and men are apparently recruited in a similar way. However, a process of gender discrimination occurs in the recruitment of women when the Metropolitan Police opens a call for applications that generalizes the content of the invitation and specifies entry requirements for women.

The permanence of women in the "blue space" of the Metropolitan Police does not constitute a stay that implies gender equity; on the contrary, it must be said that, in this blue space, a hard power struggle is fought around the differentiated gender roles that are established within the institution. The presence of women in the "blue space" of the Metropolitan Police must make its way through sexist prejudices, sexist censorship and gender discrimination. An example of this is the limited possibility that women police officers have in this institution to move up in rank or position, despite the fact that in many cases they have a better academic education than their male colleagues.

It can be concluded then that, in the Metropolitan Police, being a policeman is not a profession, it is a state of life, which implies forgetting the weak civilian life, in order to pass to the new state of "policeman". Where being a policeman is presented as a preform whose identity characteristic necessarily excludes the civilian, the weak and the feminine.

Regarding the gender relations established in the process of incorporating women into the Metropolitan Police, it can be said that unequal gender relations are produced, where gender, power and subordination are closely linked to each other.

It should be noted that the police institution needs to initiate a process of institutional reform that will allow it to move from a military structure to a civilian structure. This change must involve a total transformation of institutional practice and culture. In such a way that, within the institution, equitable gender relations are generated and that this can be crystallized in the relations it maintains with civil society. In such a way that this institution can deliver a quality service, free of violence, which does not include repressive actions for the citizens of the Metropolitan District of Quito.

Finally, it is concluded that this police institution should be governed by the Organic Law of Public Service and not by a Military Career Law, which the institution does not really need, since it is not a military agency but a public civilian agency. To be governed by the Organic Law of Public Service would allow the possibility of equal opportunity for entry, institutional permanence and promotion of positions for both women and men, thus generating gender equity within the institution.

## References


Arteaga, N. (2000). *The work of policewomen*. El Cotidiano

[online] No. 16:74-83 (May-June): [date accessed July 16, 2009]. Available at: <http: //redalyc.vaemex.mx/Redalyc/src/inicio/ArtPdfRed.jsp?iCve=32510107> ISSN0186-1840

Butler, J. (2002). *Cuerpos que importan*. Buenos Aires. Editorial Paidos: 352

Dammert, Lucia and John Bailey, (2005), Reforma policial y participación militar en el combate a la delincuencia. Analysis and challenges for Latin America. *Armed Forces and Society Magazine*. Year 19. Nº 1: 133-152

Dammert, M. (2006). *Police Reform*. Safe City Magazine. Programa de Estudios de la Ciudad. Ecuador. FLACSO Nº 4: 1-11

Epple, Carolyn (1998), Coming to terms with Navajo nádleehí: a critique of berdache, gay, alternate gender and two spirit. In: American Ethnologist No. 25: 267-290.

Gutmann, M. (1997). *True Mexican males are born to die*. Isis international. Ediciones de las Mujeres Nº 24:153-160.

Nanda, S. (2004). *Multiple Genders Among North American Indians, in Gender Diversity*: *Cross-Cultural Variations, by the author*. Prospect Heights, IL: Waveland Press: 11-26, reprinted in: Katherine Dettwyler (2004), and Vaughn M. Bryant, eds. Reflections on Anthropology, Boston, McGraw Hill: 277-287.

Metropolitan Police (2008), "*Memorias"*. Quito. Gráficas Carlitos

Sirimarco, M. (2004). *Marks of gender, bodies of power: Discourses of masculinity production in the conformation of the police subject*. Cuadernos de Antropología Social. ISSN 1850-275X. July-December. Nº 20: 61-78

Torrente, D. (1992). *Researching the Police*. Spanish Journal of Sociological Research REIS. ISSN 0210-5233. 59. (Dedicated issue: organizations and professions) Madrid. University of Barcelona: 289-300

Torrente, D. (1999). *Prevención del delito y futuro de la Policía*. Spanish Journal of Sociological Research REIS. ISSN 0210-5233, Madrid. Universidad de Barcelona, Nº 85: 85-96

Triola, M. (2000). *Estadística Elemental*, Addison-Wesley. México. Iberoamericana: 319-324

# Compendium on the diagnosis and design of organizational structures and sales processes with alternative delivery channels supported by ICTs for companies in the tourism sector in the cantons of Sucre and San Vicente, Manabí - Ecuador

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## Introduction

The present work is a compendium of research embodied in scientific articles that was conducted in the context of the pandemic by COVID-19, the research was part of an empirical investigation that was developed in the Knowledge Integrating Projects (PIS) of students of the Business Administration career of the Universidad Laica Eloy Alfaro de Manabí (ULEAM) Sucre extension as part of the activities developed by the Department of Linkage and Entrepreneurship (DVE) of the Academic Unit and the institutional research projects entitled: "Sustainable entrepreneurship from educational practice in training processes to promote professional and organizational activity, ULEAM Sucre"; and "Museum of History, Archaeology and Paleontology as an instrument of local development: Chirije and San Isidro Cases".

As part of the academic offer in the extension are, among others, the career of the faculty of administrative and economic sciences, specifically Business Administration, the same that is part of the domain 2 of Social and Solidarity Economy for Good Living, in which "is configured from the innovative learning environment, innovation understood as the permanent action carried out through research to seek solutions to the problems posed." (Reyes, 2016, p. 30)Under these general guidelines, a compendium of publications is presented under the same approach and with a holistic conception: To study the organizational structures and designs for the adequate development of the administrative process of the enterprises of the cantons of the northern zone of Manabí.

For the development of the chairs, the Constructivist Paradigm was used, thus: "One of the outstanding characteristics of the constructivist paradigm is the development of autonomy - critical and reflective - necessary for the performance of the chosen profession, to train people capable of learning to learn throughout their lives, since learning takes place over time, that is why we talk about learning histories, built from individuality..." (Reyes, 2016, p. 4).

The PIS was applied as an action-research educational strategy that is part of the micro-curricular planning of the educational model of the Higher Education Institution, constituting progressive methodological strategies at each level of curricular organization, from the admission stage in the leveling courses it is established to link knowledge and propose a project, This task is regulated by the current Academic Regulations (RRA), which establishes the development of the Knowledge Integration Project (PIS) in each of the semesters of every university career in the country, which forces Higher Education Institutions to introduce and structure new teaching methods that not only combine knowledge but also serve as evidence of the teaching process. (Zamora Moscoso & Alvarado Quiñonez, 2018).

In the Business Administration career, the Integrating Knowledge Project was developed, among the disadvantages encountered, in addition to those mentioned above, was the deficiencies in Scientific Research Methodology, but it was a positive and enriching experience in knowledge for students, so eight group projects were developed with administrative issues (which had as an object of study: Organizational structures and management by processes as well as Procedures Manuals; they worked with a level of 30% theoretical and 70% practical so that for the development of each of the parts of the project they learned how to write, structure of contents in an interdependent and interrelated way, development of bibliographic and field research, application of citation standards and referencing for the production area; In the accreditation course, the evaluation was developed through the presentation of their projects, reflecting overall course averages of 9.83 points, favoring the initial learning in projects and induction to the career with administrative issues.

All this, allowed to contribute to the formation of the student's profile that in addition to working in teams; oral, written and digital expression; use the resources of the New Information and Communication Technologies NTIC to expand the sources of information, achieving "Develop research projects, in the field of their competence, for the identification, diagnosis and/or solution of problems; and ability to solve problems assertively applying assertive strategies in the field of their profession." (Reyes, 2016, p. 14).

The development of knowledge integrating projects is an imperative element for training and induction to the career, but more time is needed for its development. Finally, the planning of the subject was fulfilled, the required knowledge was leveled, it contributed in the beginning of a new educational stage to familiarize professionals in training with the IES and encourage them to empower themselves in their career and the mission of their alma mater to "*Train competent and enterprising professionals from the academic, research, and linkage, which contribute to improving the quality of life of society*." (Reyes, 2016, p. 13).

The purpose of this research is the integration of the substantive functions of the Higher Institution in its Sucre extension, through: Teaching, we worked with the different subjects of the professional level that from the contents of the curriculum the activities were directed towards the development of the integrating project; the linkage, in this way the dicentes proceeded to carry out activities in companies of the tourism sector assessing their organizational situation, proposing alternatives for improvement; and research, with which they conducted a field research and transformed this research into scientific production. With all this, an integration of the substantive functions at this level of the ULEAM, Sucre extension, is shown.

From teaching, these works began by developing a diagnosis of the current situation of businesses dedicated to the restoration, specifically developed: a field research with the identification of key areas of the business, description of internal processes, market research of their products, development of Procedures Manuals, development of communication strategies based on Information and Communication Technologies (ICTs), among others.

In terms of outreach, the students went in situ to establishments in the catering sector of eight establishments located in various cantons in the northern zone of Manabí, which allowed them to learn about the impact of the pandemic in the context of COVID-19, to learn about their processes and strategies for adaptation to the impact of the pandemic, information that allowed them to design Procedures Manuals adjusted to their new realities.

Through research, we were able to develop scientific articles that were published in indexed scientific journals, with which students developed their research skills and obtain scientific production that contributes to their resumes at the professional level from their professional training stage.

In this sense, the works presented below mainly show:

1. Organizational diagnosis of the organizational structures of catering establishments.
2. Descriptive field research through a market study of its products and services in the current situation.
3. Design of Procedures Manuals.
4. Biosecurity Protocols that responded to the legal requirements through the ordinances of the local authorities of the Decentralized Autonomous Governments (GAD) for the operation in the context of the pandemic.
5. Alternative strategies in the face of the pandemic for marketing their products, such as WhatsApp Business, Facebook FanPage, among others.

## Study of process management in tourism services with an economic, social and health approach following the Covid - 19

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### Summary

This research work is developed in the barbecue restaurant "El Buen Sabor" in the city of Bahía de Caráquez, Manabí-Ecuador, which has had negative impacts in the context of the pandemic as many in the productive sector, which has had global connotation, this micro business has been affected with a drastic reduction in sales and has impacted the stability of the business. Therefore, the objective was to design an organizational structure based on an analysis of the current situation in order to improve the service delivery processes with quality, health and good service measures in the restaurant after COVID-19. In this way, a qualitative and quantitative research was carried out with the use of the descriptive type of study and the application of survey and interview techniques. As a result, it was found that the establishment has had a high level of reduction in customer demand and consequently in its income, which has affected the stability of its operations; it was also found that they enjoy a high level of customer satisfaction in the facilities with 84% and in the home delivery service implemented with 82%. From the organizational design theory it is necessary that businesses facing changes (such as a social, economic and health crisis) should review their organizational structure to redesign or improve it, so this establishment with administrative tools can improve the current situation and make the crisis an opportunity to grow. In conclusion, it is evident and empirically verifiable the negative impact of the reduction in demand, for which a procedures manual, biosecurity measures and inventory control

elements were developed, which when implemented, help to overcome and obtain Organizational Learning.

**Key words:** Organizational structure, procedures manual, biosafety, organizational learning.

## Situational diagnosis culture of a tourist company in times of the Covid-19 syndemic.

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### Summary

This research deals with the impact of the COVID-19 pandemic on the Canoa Beach Hotel, both at the productivity and administrative levels, because of this, organizational reforms are proposed in which the hotel will operate with a functional organizational design (organization chart), on the other hand due to the restrictions imposed by the Ministry of Health to avoid crowding of people and the spread of Covid-19, the establishment follows a biosafety regime to protect the health of workers and visitors. The method used to collect information was a mixed research in which both qualitative and quantitative qualification was made, the materials used were interviews, surveys and observation sheets. As a result, the hotel is well accepted by its clients and has a good cleaning and disinfection regime. In view of the research conducted, it is concluded that although the establishment has not stopped its activities, it has a low income of customers due to the closure of airports and the cancellation of reservations it has suffered, so it planned to change its operating structure, in addition to using social

networks to reach potential customers who are interested in its services.

**Key words:** Organizational design, organization chart, biosafety, Covid-19, profitability.

## Organizational structure design: impact on productivity and business stability in the Covid-19 context.

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### Summary

This research is about the design of organizational structures and sales and distribution processes in the Luisito restaurant in Sucre canton, Leónidas Plaza parish in the province of Manabí-Ecuador after COVID - 19, this establishment has been affected by the considerable reduction in sales, from this situation, the objective was to design organizational structures, service delivery processes and alternative distribution channels through the use of technology and adoption of biosafety protocols for the safe and efficient operation of the restaurant. It is a research with a quantitative and qualitative approach for the description of the data obtained that determine the impact of the establishment. As a result, it was found that the restaurant has reduced its income and the demand from its customers; however, 82% of the customers who opt for home delivery services consider that the restaurant should serve the clientele on the premises because they trust in the implementation of all biosafety measures. In conclusion, the negative impact of the reduction in demand in the restaurant is evident, even though a procedures manual, specific biosecurity protocol and a budget

for the latter were developed, which, when implemented, help the establishment to obtain greater profitability.

**Keywords:** Organizational structures, biosafety protocols, budget, procedures manual.

## Situational diagnosis and organizational design for business management after Covid-19: Pizzas Claudia Case.

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## Summary

The present investigation is about the inconveniences generated in the low sales in Pizzas "Claudia" due to the impact of COVID and how it affected the productivity and profitability of the premises; therefore, an alternative sales process is proposed, through the respective biosafety protocols, complying with the measures to provide the customer with a quality service, as well as to propose an organizational structure adapted to the reality of the establishment, in addition to a procedures manual as an important administrative tool for business management. Using materials such as interviews and surveys, which provided the information to carry out the necessary research and to obtain data on the quality products offered, the needs that the customer has regarding the service. The method used was a mixed qualitative and quantitative research, resulting in good customer satisfaction, who mentioned that they receive attention with kindness and respect, that is, the Pizzeria is well accepted by customers, with the need to adapt to biosafety measures and processes that include them. Thus, a Procedure Manual, biosafety measures and digital tools for promotion and dissemination of services and current conditions were developed on a Web page. Organizational Design and Process Management made it possible to identify these administrative and marketing tools to improve business management and obtain profitability in the short and long term. In conclusion, the establishment is not generating the same income, because of the pandemic covid-19, such profits that were obtained months ago are not the same today, which is why the pandemic has negatively impacted the stability of the business and due to these contingencies has undergone an organizational change that requires a new structure.

**Keywords:** Productivity, profitability, biosafety protocols, procedures manual, organizational structure.

## Organizational structures in the sales processes of the H Bar Sport Café restaurant in the Sucre canton.

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https://www.journalbusinesses.com/index.php/revista/article/download/292/655

## Summary

The present investigation was elaborated with the purpose of improving the organizational structure and sales processes of the H Bar Sports Café Restaurant in the Sucre canton, province of Manabí - Ecuador after Covid-19, by means of the realization of a functional design, which implies the facility to know the organization and to relate the collaborators, assuming the operative role for each one given that the demand was reduced in the context of the pandemic by the Covid - 19. It aims to establish techniques of organizational structures and sales processes through sustainability methods. Likewise, the work elaborated is a descriptive research with a qualitative and quantitative approach to know the characteristics of the establishment and its organizational structure. The data were tabulated in an Excel calculation software for the elaboration of statistical graphs and presentation of quantitative information, which was used to analyze and socialize the information gathered through the application of an interview with one of the partners and a survey of the establishment's customers. As a result, it is considered that this is an establishment recognized by its consumers, because they are satisfied with the quality of service and the prices established for the food and beverages offered. In conclusion, the structure of the restaurant is not reflected in an organizational design, which is why it was difficult to identify the responsibility and capacity of each operator in their respective areas.

**Key words:** Organizational design, function manual, biosafety and Covid-19.

## Proposal for an administrative procedures manual with a biosafety approach following Covid - 19

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https://www.journalbusinesses.com/index.php/revista/article/view/264/599

## Summary

The present research seeks to create an organizational structure design for the Restaurant "Mi Galito", to implement sales and distribution strategies in order to contribute in the foundation of solid bases to be able to compete in the current market; due to the current conditions in which the business is found as a consequence of the pandemic by "Covid-19". Therefore, a descriptive, qualitative-quantitative research was developed with the use of methods in the theoretical order and techniques in the practical order such as interviews and surveys to the main actors involved. As a result, it was known that the business has a high acceptance with 90% for the taste of its dishes and with 100% satisfaction regarding the service, for which the variety of flavors and its low prices are the qualities valued by external customers; also, it was known that the restaurant was not operational during the second quarter of 2020 due to the pandemic that represented a reduction in demand even in the reopening process. Organizational change due to contingencies in the context makes it imperative to analyze the organizational structure of a business to adapt to current demands, make profits or survive in the market.

**Key words:** Organizational structure, sales strategies, Covid-19 and market.

## Analysis of the current situation and design of an organizational structure to improve business performance in the restaurant business in the context of Covi-19.

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https://www.journalbusinesses.com/index.php/revista/article/view/254

## Summary

The following article deals with the existing problem in the Restaurant and Cevicheria "Mi Pollazo", due to the decline in sales, the absence of effective strategies against competition and how it has been affected by the pandemic Covid-19, so it seeks to create a design of organizational structure for the establishment, in addition to implement sales and distribution strategies to compete in the current market. In this project, the descriptive and deductive research methods were implemented with the application of the survey technique, interview and observation, through which the shortcomings in the establishment after Covid-19 were evidenced. According to the results obtained, it is established that customer service attention is good in the establishment and, since there is public acceptance as the main value, it is considered that it has the possibility of keeping its doors open through the home delivery service in the sanitary emergency. In short, the restaurant has undoubtedly been considerably affected, so a Procedures Manual was prepared, supported by specific biosecurity measures for the place and with a reasonable budget for the survival of the business, which under the critical economic conditions of the country is the first step.

**Keywords:** Organizational structure, sales strategies, distribution, procedure manual, biosafety.

## Process management to improve the quality of tourism services in times of Covid-19.

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## Summary

This article exposes the economic and social affectation that service businesses are going through, especially the Coco Bongo Hostel-Restaurant located in Manabí-Ecuador, due to the declaration of pandemic worldwide due to the spread of the COVID-19 virus; therefore, it is proposed to solve the problem, with the provision of administrative, biosecurity and advertising tools, so that businesses are managed in a better way, communicate and promote their goods and services. The materials used during the research are: survey and interview, which allowed to know according to the research the great economic impact on sales during the first semester of the pandemic and that due to the implemented reforms has been increasing. The exploratory and descriptive research was applied, being the exploratory one the ideal one to know the development of the economic activities of the Coco Bongo Inn and Restaurant in the context of the Covid-19 pandemic. Among the methods used are: deductive method, because it is of general knowledge the reduction in the demand for the services of the businesses of the lodging and restoration sector, that is to say, it starts from the most general and the specific. Also the analytical-synthetic method, since the information gathered from the different sources was analyzed in an objective and interrelated manner to show the sequence of the problem. Being a quantitative research, the results show that the hostel meets the expectations of customers, has a favorable acceptance and their visits are recurrent, it is for these characteristics that the use of organizational tools, biosafety and marketing through online, very frequent in the current reality to continue with the business processes from a new perspective, keeping active the fan page Coco Bongo Hostel on Facebook, being the ideal channel to promote its home delivery service with the necessary biosafety measures, is presented to the interested party. It is concluded that the economic sustainability of the establishment has been affected and the pandemic showed its weaknesses, which motivated its owners to be more effective in their decisions, to maintain the existence of the business with new structures that have given benefits in the short term.

**Keywords:** Biosafety, organizational structures, economic impact, reactivation, influence,

# Communication and development as a cornerstone in university environments linked to sport

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## Introduction

Young people are the ones called to lead the great social transformations. This statement, which is rooted in the public agenda, is the focus of this research, whose experimental design is to place its protagonists in the sports and university environments and to carry out a process of observation and measurement to characterize them in terms of results aimed at building a culture of communication and development. To do this, we must start with two questions:

What impact do sports have on the social development of young university students?

How to build a culture of communication and development in the face of innovation models to improve the profile of the new professional?

To answer the first question it is necessary to quote the South African leader and former president, Nelson Mandela, who stated that "sport has the power to transform the world, it has the power to inspire, to unite people like few other things. It has more capacity than governments to break down racial barriers". Madiba (father), as he was also known, addressed these words to Brazilian soccer star Pelé, who received an award for his life's work. (Carlin, 2010).

In the legal term, in accordance with the provisions of the Constitution of Ecuador, in Article 39 (National Assembly, 2008):

The State shall guarantee the rights of young women and men, and shall promote their effective exercise through policies and programs, institutions and resources that ensure and permanently maintain their participation and inclusion in all spheres, particularly in the spheres of public power.

And it complements in its second paragraph that:

The State will recognize young women and men as strategic actors in the country's development, and will guarantee them education, health, housing, recreation, sports, free time, freedom of expression and association. The State shall encourage their incorporation into the labor market under fair and dignified conditions, with emphasis on training, guaranteeing access to their first job and promoting their entrepreneurial skills.

In countries such as Ecuador, Colombia, Venezuela, among others, the legal regulation of sport began to be addressed at the constitutional level since the middle of the last century, mainly from the recognition of public mandates to encourage, promote or develop it. In the 1970s, however, the right to sport began to be expressly and gradually recognized in constitutions as an emerging economic, social and cultural right. (Pachot, 2016).

If we focus on higher education and taking into consideration the research of (Pérez, Hernández, & López, 2014). it is important first to point out that "through the practice of sports many skills and competencies of relevance for personal development and for the socio-labor integration" of the student are enhanced.

In another research entitled "Social exclusion and sport", it is determined that:

From another point of view, sport is an antidote to the incorporation of young people in unproductive activities - undoubtedly magnified by unemployment or informality - or in criminal organizations that contribute poorly to the formation of human capital (...) Moreover, regular physical exercise is the best remedy to the perception of sporting incapacity that usually inhibits for life coordination skills, balance and strength in various human activities. (Dosal & Capdevila, 2016)..

The link between university and sport is essential nowadays. It helps to motivate young people to study in an environment not only of synchronous or asynchronous classes, but also to feel motivated to do a physical activity, share with others and thus learn to develop socially and at work and avoid bad habits.

With respect to the second question, it is important to review the main theoretical references and compare the validity of their arguments that -by the mid-twentieth century- already linked the term 'development' with 'change' from a traumatic context such as the post-war period, as stated in their publications by Daniel Lerner, Wilbur Schramm and Everett Rogers, considered the founders of communication for development. (Sierra, 2012, p. 28).

In the field of communication, Lerner suggested that it is possible to create a development experience in innovation through the new media, especially with the use of television, and linked this directly to modernization. In addition to education and urbanization, Lerner believed that developed nations could transmit knowledge to stimulate - through empathy - development in post-World War II depressed societies.

In his research on communication theories in America, Alfonso Gamucio Dagron interprets Lerner's argument that in order to "become part of the modern world, rural and suburban communities in Third World countries need to leave their traditions behind and adopt the mass media and the new Western technology". Thus arose the 'diffusionist' current, which according to Everett Rogers (1971) succeeded in producing manifest behavioral changes through the acceptance or rejection of ideas. (Rau de Almeida & de Sousa, 2008).

In view of this, Schramm already warned that beyond the mass media, development in the field of communication was closely linked to cultural nexus. In addition, he perceived mass communication as a watchdog, teacher and policy maker. (Hernández Rodríguez, 2019)

This last aspect becomes more relevant nowadays, when the influence of communication and development moves from the television screen to mobile devices, with the great challenge of directing open contents to the debate on problems of socio-cultural impact and the guidelines for their solution.

Therefore, in this work, communication for development is conceived as a way to disseminate knowledge directed to empathy points promoted by social media (media and micro-media) to achieve the participation of audiences, in this case, university students. That is, to achieve participatory communication with a focus on social development.

The general objective, then, is to lay the theoretical foundations to identify the incidence of sports activity in young people in a university environment, while the specific objectives include measuring the results of a sequential work with the student body through a comparative map of competencies, aimed at a culture of communication and development.

In this case, the evolution of the helix theory is proposed, in order to involve the social actors that can contribute. It is necessary to mention that -from the three helixes of the '90s: state-academia-private sector- the theory has transcended to a Quadruple Helix, which includes civil society with the user of innovation; and to a Fifth Helix to the present day, which incorporates the natural system or sustainability, according to research by Carayannis and Campbell (2009) (Jácome, Dosa, & Sarmiento, 2017).

Even after the Covid-19 pandemic, the analysis focuses on a theory of the "N helixes", which he details in his paper with strong (Castillo-Vergara, 2020) details in his paper with strong questions about the real results of the joint work between academia and private enterprise, due to obvious distant interests. For example, he says that universities focus on the construction of scientific research that does not lead to economic results or profitable innovation applicable to companies, due to their obligations related to compliance with accreditation issues, supervised by the government, which consume their time and the daily work of teachers. On the other hand, there are business initiatives that land in business incubators, but lack scientific input to ensure their sustainability.

It is clear that in three decades, environments have changed. Information and communication technologies (ICTs) have become democratized, starting with the worldwide boom of the Internet, and with it the characteristics of a culture of communication and development have been redefined.

## Education and sports as a social contribution

Talking about education is as broad as it is complex; however, the approach of this research will have as a common thread education as a social contribution, to connect children and youth in the processes of construction and transformation from sport. That is to say, this work seeks to connect sport more than as a distraction as a social phenomenon, which contributes to the solution of problems such as drug addiction, low self-esteem and low sense of resilience.

As previously stated, the South African leader and former president, Nelson Mandela, said that "sport has the power to transform the world, it has the power to inspire, to unite people like few other things". Sport becomes, then, a key instrument to encourage young people to participate in social projects that, in turn, allow them to develop their skills?

## Landing of the social problem

But social projects are broad, so it is landed on a problem: drug addiction and its consequences in the weakening of young people. Therefore, the need to achieve actions that allow their empowerment, hand in hand with sports beyond soccer, which is a discipline that moves passions in Ecuador, but also others of a group and individual nature.

In Ecuador, there is a perception of an increase in drug use among the Ecuadorian youth population in recent years. As a reference, the III Andean Epidemiological Study on Drug Use in the University Population of Ecuador of 2016 is cited, where the United Nations Office on Drugs and Crime already warned about this problem through comparative data from 4 years immediately prior. Among them, it revealed that "close to 30% of Ecuadorian university students have tried some illicit drug at some time in their lives. 12.7% of the surveyed university students consumed a controlled substance in 2016". (UNODC, 2016)

When analyzing products related to communication and development, and for the purpose of better visualizing what is sought as the final product of this type of research, it is appropriate to cite the case of the 'Listen First' campaign, which was successfully carried out in Central America and the Caribbean.

This is a science-based initiative to increase support for drug use prevention, and thus represents an effective investment in the well-being of children and youth, their families and communities. Through a cartoon storytelling, it depicts a father on his phone call that appears to be about a work issue, as shown in Figure 1, while his young and restless daughter does everything to get his attention, walking away and exposing herself to risks until finally her father focuses on her and they seal the moment with a smile and a hug.

The final message reads: "Listen first, listening to children and youth is the first step in helping them grow up healthy and safe". This campaign emerged "as an initiative to increase support for drug use prevention that is based on science, and thus represents an effective investment in the well-being of children and youth, their families and communities." (UNODC, 2016)

In its web portal, (UNODC, 2016) it shows a series of products that approach a transmedia proposal and includes from information about the programs developed by the UN, a list of social networks where people can find relevant informative data to join the campaign, as well as multimedia elements to messages from the Secretary General of the United Nations and the Executive Director of UNODC, respectively.

The work described above implies a series of investigations, adaptations, formulations that can be executed by competent people in the management of criteria of social environments, ethics, leadership, management of technological resources and others, which can be / are reinforced in the formative process of the student of Journalism, through a series of actions strategically delineated in diverse phases of study and under the concept of co-creation, which will be described later on.

## Youth competencies

We cannot continue with the paradigm of "young people are the ones called to lead the great social transformations" if we do not consider the challenges they inherit from previous generations, which for the purposes of this paper will focus on three approaches:

- According to the individual's competencies or aptitudes of young people
- According to the needs of the market or society
- According to teaching experience or contribution from the academy

In fact, in a previous scientific work, (Villanueva, Auz, & López, 2021). they propose the direction of competencies based on the design of classroom projects that allow enhancing the profile of the journalist in training, "having the student as the center of a triad that also includes companies, through the needs of the market; and teachers, through their expertise".

For each competency, the researchers attributed a group of tools and results, in a scheme that links each axis.

## Youth in the SDGs

From the Social Development Goals (SDGs) of the United Nations, the concept of young people should be grounded and within this scheme, who are young people? They are those between 15 and 24 years old and are included in four areas of the SDGs: youth employment, adolescents, education and sports for peace. According to the UN, "the well-being, participation and empowerment of young people are key drivers of sustainable development and peace around the world". (UN, 1985)

The present scientific-academic project seeks, in a next phase, to compile the results for the creation of a University Comprehensive Communication Consultancy with a Socioeconomic Approach, from which it is intended to address these scenarios. But what are the competencies of the journalist's profile most required in the market? The work of (Villanueva, Auz, & López, 2021). already identified nine, which are mentioned below:

1. research capacity,
2. ability to work as part of a team,
3. ability to work autonomously,
4. social responsibility and citizen commitment,
5. oral and written communication skills,
6. skills in the use of information and communication technologies,
7. skills to search, process and analyze information from diverse sources,
8. ability to identify, formulate and solve problems, and
9. ethical commitment.

For a better approach, it is necessary to make a selection according to market needs. Hence, a survey was designed and applied to companies that welcomed students of the Journalism career during their Pre-professional Internship stage, the results of which are shown below.

Before explaining the definition of competencies and delving into their importance and experiences in Latin America, it is necessary to conceptualize co-creation, which emerges as a term widely used at the beginning of the 21st century to measure consumer behavior and invite them to participate in the search for solutions to achieve a product or service tailored to their needs. This definition is adapted to the requirements of the academic world.

## Co-creation and experience

Co-creation of value in the university environment can be defined as the process of connecting and introducing students (as consumers of the service) into the value creation process. This implies a change of perspective in universities, from a value delivery approach -doing something "for" students-, to a co-creation approach -doing something "with" students-. Put another way by (Torres Carceller, 2020)In other words, "co-creation is based on managing creativity among diverse groups or individuals so that they can actively participate in the creative process, without having to be specialists or have knowledge of the subject".

According to Colina (2007), the social relevance of the academic offer of a university should be approached from a perspective that transcends the utilitarian character, focusing on contributing to the demands of the economy or the productive sector, since research constitutes a fundamental axis for the generation of knowledge in response to the questions posed by man to improve his condition of life.

To continue, it is worth returning to the point of competencies. Its construction in the field of teaching marks its antecedents in the twentieth century, at the end of the 1940s. Authors such as John Dewey already raised at the beginning of the last century, the relevance of "learning by doing". For him, experience constituted a matter "referring to the exchange of a living being with its physical and social environment and not only a matter of knowledge". (Ruíz, 2013)

As background, and to close the relevance of competencies, it is worth mentioning Noam Chomsky's criticism of Skinner and his evolution of the concept of competency. The second author focuses on his perception of language learning, where he proposes a process based only on the stimulus-response relationship, without taking into consideration the vital importance of the creative process.

## Employability and/or unemployability

As job losses intensify, the International Labor Organization estimates that nearly half of all workers worldwide are at risk of losing their livelihoods. Even before the outbreak of COVID-19, one in five countries (home to billions of people living in poverty) were likely to see their per capita incomes stagnate or decline by 2020. Today, economic and financial shocks stemming from COVID-19 (such as disruptions in industrial production, falling commodity prices, financial market volatility and rising insecurity) are disrupting already tepid economic growth and worsening the heightened social risks from other factors, making the issue to be investigated all the more topical.

In Ecuador, according to the National Institute of Statistics and Census (INEC), in the first quarter of this year, 476 202 people are unemployed in Ecuador; the index climbed from 5% in December 2020 to 5.8% in March 2021. Before the pandemic, in 2019, unemployment was already higher than in the last three years in Ecuador (4.9%). That rate was the highest since December 2016, when it stood at 5.2%; while adequate employment was 38.5% and underemployment stood at 19.7%.

The labor field for journalists in Ecuador, meanwhile, is in trouble. Historically, the largest employers of journalists have been private media, although between 2007 and 2017 there were efforts to democratize their area of action. According to the publication of the Official Information System El Ciudadano, in 2006 there were 1 404 private media, 117 public and not a single community media; but by 2014 the record varied to 1 324 private media, 344 public and 20 community media (El Ciudadano, 2014). At present: there are massive layoffs in the public sector in the areas of communication, dominated by journalists, under the concept of austerity in the face of the economic crisis announced by the Central Government; and of private media, for similar reasons.

## Selection of competencies

In order to select the main competencies on which this analysis will be conducted, within the context of communication and development in young university students, a survey was conducted with representatives of 19 organizations in the private and public sector that hosted journalism students in 2021 and the first semester of 2022. A list of nine competencies was provided for them to select the 3 most relevant ones according to their needs.

The three main competencies that stand out in this question are options 2, 5 and 6: oral and written communication skills, ability to use information and communication technologies and teamwork skills. For a direct relationship between what the companies need from the area of communication and what they perceived in the students who carried out their pre-professional internships.

In contrast to question 1, where the most relevant competencies were those listed as options 5, 6 and 2, in order; in question 2, the competencies observed with the greatest preponderance are 2, 6 and 3 in order: ability to work in a team, ability to use information and communication technologies, and ability to work autonomously, which replaces the Ability to communicate orally and in writing. Note that the competency of Social Responsibility and Citizen Commitment occupies fifth place among employers' needs, shared with the Ability to Work Autonomously, and the Ability to Identify, Propose and Solve Problems Autonomously. Among the students who completed their internships, the competency of Social Responsibility and Citizen Commitment was identified in 8th place out of a total of 9, which indicates the need to work on this last point.

Already with a vision of implementing strategies to implement areas of expertise in a future scenario, aimed at the creation of a communications consultancy with a social focus, employers were asked which are the communications skills they most need to cover externally, in the event of requiring the development of communications campaigns.

The areas to be explored are Creative Writing, Audiovisual Production, Public Relations and Community Manager as the four main areas most required in the labor market, which implies a closer look at the profile of communicators in training, when designing strategies focused on competencies for communication and development. This research has a mixed approach, with a descriptive and explanatory scope and its design is non-experimental. The sample is non-probabilistic by quotas and its application is justified as detailed in Figure 5, while the techniques used for this work were observation and survey. The first was used to monitor the academic evolution of students from second to eighth semester of Journalism, according to the classroom projects they presented in various formats and platforms, for this, the quota sample was applied, which will be detailed below. Meanwhile, the second was applied in companies that welcomed pre-professional Journalism interns to measure the competencies required in their organization in the area of communication, those found in the students and to identify the most demanded communication skills in the new employability, that is, from 2020 with the appearance of the Covid-19 pandemic, whose results were shown in Figures 2, 3 and 4; the survey will also be applied to the university students selected for this study under the quota sample, in order to validate and contrast the findings from the point of view of the employer who welcomes trainees.

To carry out both techniques, observation sheets and questionnaires with closed and open-ended questions were used.

The quotas will be set as follows: students who were in the second semester, in the second period of 2018 in the Journalism career (41), of which 21 were selected, representing half plus one of the population, which is considered representative by the researchers for the purposes outlined from this period and continue with the observation of this group that is in eighth semester to July 2022. That is to say, the follow-up carried out consists of six semesters.

A comparative map of competencies and the results shown, when involving them with sports coverage, will be made. Of the 21 students observed, it was decided to apply quotas by sex (50% men and 50% women) between 8 men and 13 women, for this work; by personality traits: introverted and extroverted; by affinity and non-affinity with sports; and by main competencies - from a list of 9 - identified by each student. The work will reveal the evolutionary result during the six semesters, when a series of actions were applied (talks with communication experts, social and sports training sessions, on-site and online open houses, contests and recognition of outstanding works, among others) to awaken in them the interest of achieving academic work that transcends the classroom with a social contribution and linking them in various ways with sports.

Descriptive and explanatory parameters will be deployed; for which studies related to the characterization of the sector under study will be reviewed and interpreted from a social approach; as well as two questionnaires were designed for two surveys: one, directed to the business vision on the needs they have in the area of communication; and another, to the students who are part of the quotas to compare the previous results.

Miles and Huberman (1994) point out that there are three types of codes: descriptive, requiring little or no interpretation; interpretive, involving further interpretation and knowledge of the data; and inferential, which are explanatory and refer to themes and causal links. (Schettini & Cortazzo, 2015).

The work will be structured with the following variables:

- Independent: Communication and Development.
- Dependent: University environments
- Speaker: Sport

This work has communication and development as the main variable, since the evolution of the students in their university environments is measured at the center of this scientific research. It is necessary to insist that a comparative map was made of the young people who were followed up from the second semester of Journalism, when they began to carry out classroom projects, until the eighth semester, when they began the process of graduation.

The university environments represent, on the other hand, the dependent variable because from their future profession, which is Journalism, they begin to develop their work according to their career. It should be noted that, during this period, the students under study received their classes in three scenarios: face-to-face, virtual and hybrid. As an intervening variable we have sports, which involves the university students to participate in some discipline, in order to exercise, socialize and get away from some potential vice.

With all the process detailed above, and from its results, we seek to build in a future article a model of selection, comparison, analysis, questioning and measurement of results to consolidate the information as a basis for the construction of the first university clinic in Ecuador, linked to business, civil society and government, in the ability to investigate social problems related to youth and to trace the route for the design, implementation and execution of communication campaigns that seek the empowerment of young people, through academia and sport.

After the observation made to the 21 Journalism students, the following was found:

- Both male and female students began to shape teamwork in the second semester, due to the various classroom projects in which they participated together with their classmates, one of the competencies addressed by teachers and directors for the development among students.

- Teamwork is one of the competencies most required by the 19 communications companies surveyed when evaluating students who enter to do their pre-professional internships (not precisely the group under study, but those in their last semester who do this as a requirement to complete their university studies). Other competencies most required by the organizations consulted in these six semesters of observation are: oral and written communication skills and the ability to use information and communication technologies.

- Already focused on the 3 aforementioned competencies, the Journalism career built an event to motivate and recognize works of transcendence and social importance, which is replicated year after year. The students under study participated in the first edition and presented a digital media called Gaceta Guayaca, which participated in the category reports and digital media. The students received a certificate for their participation, but that was the first step they took to develop in the journalistic field.

- After climbing their first rung in the second semester, in the third semester they developed their photographic skills in honor of Guayaquil and in the fourth semester these young people split and began to undertake two digital media. One group mutated Gaceta Guayaca and turned it into Gaceta Deportiva, while the other created a new one called Los jóvenes opinan, which leaned a little towards the interpretative genre of opinion, without leaving aside the informative. In both media, the students began to develop their writing and editing skills, but the construction of paragraphs needed to be strengthened. However, they began to approach sports topics, especially Gaceta Deportiva, and showed their fondness for this type of content, and not only soccer but other disciplines, such as martial arts.

- For this reason, students in the fifth and sixth semesters sought to become more empowered in the area of writing and voice-over with the help of their teachers. This led them to elaborate a radio magazine, where they began to develop informative scripts.

- By the sixth semester, the young people were more confident to combine two formats: written and radio, so as part of their classroom projects they created three manuals - audio books related to various types of coverage, especially in times of pandemic, for example, focused on sports reporting. In this project, the young people demonstrated their skills in online research and virtual interviews, writing and voice-over, that is to say, in this project they converged some of their skills and strengthened them.

- In the seventh semester, students combined the written with the audiovisual by practicing the interpretative genre of the chronicle to stage it on various platforms and generate a transmedia universe. The manuals developed in the previous semester were presented to the Gabriel García Márquez Foundation for the New Ibero-American Journalism, based in Cartagena, Colombia, selected and published in the 'Ethical Consulting' section of its web portal, with credits and a review highlighted by its administrators, as a social contribution.

- While in the eighth semester (which at the time of writing this article is the semester they are in), the young people were empowered by their research and had their manuals published as a book with their credits, that is to say, their scientific research bore fruit. This content inspired the beginning of their degree work and already this semester, a group of students is working on a proposal for the empowerment of young university students, linking academia with sports, to keep them away from problems such as drug addiction, lack of self-esteem and poor sense of resilience.

The results of the surveys, in agreement with those carried out with the communication companies, showed self-critical results from the students consulted. These are:

1. The students evaluated themselves during their second semester and the results shown in Figure 6 indicate that the main competency found among them was teamwork (31%), followed by the ability to search for, process and analyze information from different sources (23%) and skills in the use of information and communication technologies (15.4%). Social responsibility and citizen commitment, ethical commitment, research skills and the ability to identify, raise and analyze information from sources was imperceptible to them; when these are part of the list of competencies most valued by companies among human resources, so the following actions are framed to work on them.

2. The young people repeated this self-assessment, but from the eighth semester. On this occasion, other competencies and skills stand out, and there is even a tie among four of them, which were exposed in the closed multiple-choice question: skills to search for, process and analyze information; skills in the use of information and communication technologies; oral and written communication skills; and the ability to work in a team. All obtained a percentage of 15.4%. In second place and evenly are the capacity to identify, pose and solve problems; research capacity; teamwork capacity; social responsibility and citizen commitment , as shown in Figure 7. Ethical commitment continues to lag behind, so it is necessary to propose other actions and studies focused on promoting the importance of this competence.

3. In a self-assessment on what skills they lack to be part of the labor market, and from a list provided by the 19 companies surveyed where they cited as currently needed in their communication areas, students mentioned as main weaknesses journalistic writing, content marketing, voiceover and social media analytics; followed by SEO strategies and video editing.

4. Regarding the skills they consider their greatest strength when entering the labor ecosystem, the answers are varied and the students highlight as strengths the strategic management of social networks (community manager); photography, expression in front of the public; audiovisual production and the construction of journalistic narratives.

The results of the surveys, focused on the affinity with sport as a key instrument for the development of communication and development, show the following:

1. When asked if sport helps them to motivate students to get involved in university activities, 88.5% answered yes, while in the next question, when asked if they considered that sport allows young people to disengage from vices such as drugs, the majority, i.e. 88.5%, answered yes.

2. Likewise, the students self-evaluated themselves on a topic related to attraction to sports, both when they were in their second and eighth semesters. In this comparison, it could be seen that the percentage of attraction to sports increased from one semester to the other. In the second semester, 53.8% felt attracted, while in the eighth semester, 61.5%, that is, there was an increase of 7 percentage points.

3. To close this questionnaire, the students agreed, in an almost totalitarian way (96.2%), that learning in a co-creation environment, that is to say where teachers

work with students so that they participate directly in their learning process, helps the young person to develop their creativity and confidence.

The results obtained in this research allow to establish that the joint work and the continuous interaction between teachers, students and communication companies, help university students to develop, little by little, their abilities and skills in the communication field and to have self-confidence. Is it possible that the results obtained allow the construction of a learning model that derives in a communication office for a formative, educational and informative approach as a contribution to society? The follow-up of this work is key.

It can also be determined, as highlighted by the students of this research, and (Dosal & Capdevila, 2016)., who state that sport has become an antidote to prevent young people from getting involved in unproductive activities, such as drug use. The results show how in six semesters, through academic actions to work on the development of competencies and skills demanded in the labor market, students developed projects where the sports theme is persistent and, although a final product to address social problems such as drug addiction is not yet visualized, they do show approaches to social integration in general terms to achieve it. This process began in the eighth semester and they are in the process of searching for inter-institutional alliances.

The characteristics of a culture of communication and development have been redefined with the advent of the Internet and the use of ICTs. This is why students see them as the main axis when it comes to producing communicational products in university environments and of vital importance for companies seeking to select young people for internships.

This research also reveals a primary need on the part of the communications companies for the young people hired to learn about oral and written communication skills, which they see as a weakness in the students doing their internships. However, the ability to use information and communication technologies and the ability to work in a team are two points in favor of the young people, who highlight them since the second semester, but they still need to develop them with more valuable content.

Communication and development in university environments were of vital importance for the students, where the contents related to sports represented a hook for them to develop their informative and technological skills, which they have acquired since the second semester and which they consider fundamental to evolve in the field of communication.

In addition, sport helps young people identify skills. As determined by (Pérez, Hernández, & López, 2014).(Pérez, Hernández, & López, 2014), who point out that "through the practice of sports many skills and competencies of relevance for personal development and for the socio-labor integration" of the student are enhanced. And this was corroborated by the young people, the objects of study of this research, who emphasized that sports help them to motivate themselves and get involved in university activities. However, they still need to get more involved in it.

For academia and private enterprise to work together, their relationship must be further strengthened. According to (Castillo-Vergara, 2020) there are still distant interests. The former is focused on its accreditation process, while the latter has business initiatives, but they lack scientific input to ensure sustainability. It is, therefore, on both fronts that work must be done to achieve a balance where the student benefits.

It was also evident that communication companies require young people with oral and written communication skills, the ability to use information and communication technologies and the ability to work as part of a team. However, the companies did not highlight the former among the skills of the student interns. In the same way, the students under study see the ability to communicate orally and in writing as a weakness, so much more work needs to be done in this area.

## References


National Assembly (October 20, 2008). *Asamblea Nacional.* Retrieved from https://www.asambleanacional.gob.ec/sites/default/files/documents/old/constitucion_de_bolsillo.pdf

Carlin, J. (2010). *PDF Drive*. Retrieved from https://www.pdfdrive.com/el-factor-humano-john-carlinpdf-d34187940.html

Castillo-Vergara, M. (2020). N-helix theory in today's times. *Journal of Technology Management & Innovation*, 3-5. doi:https://bv.unir.net:2133/10.4067/S0718-27242020000300003

Dosal, R., & Capdevila, L. (2016). Social exclusion and sport. *Investigación Económica*, 155-168.

Hernández Rodríguez, Y. (2019). Communication for development. Reflections theory and praxis. *Revista Científica, Cultura, Comunicación y Desarrollo,* , 57-63. Retrieved from http:// rccd.ucf.edu.cu/index.php/rccd

HERNANDEZ-SAMPIERI, R., & MENDOZA. (2018). *METODOLOGIA DE LA INVESTIGACIÓN: LAS RUTAS CUANTITATIVAS, CUALITATIVAS Y MIXTA*. MEXICO: MC GRAW HILL.

Jácome, A., Dosa, M., & Sarmiento, J. (November 17, 2017). *https://www.unam.mx/*. Retrieved from THE KNOWLEDGE NETWORK MODELS AND THE QUINTUPLE HELIX IN THE ANALYSIS OF THE STONE CRAFTING ACTIVITY IN DZITYÁ, YUCATÁN: http://ru.iiec.unam.mx/3848/

UN. (1985). Retrieved from https://www.un.org/es/global-issues/youth

Pachot, K. (2016). The constitutional right to sport in doctrine and comparative law. *Constitutional Issues* , 119-150.

Pérez, P., Hernández, A., & López, D. (2014). Analysis of the complex relationship between university studies and high performance sports practice. *RESU*, 69-87.

Rau de Almeida, M., & de Sousa, J. (2008). DE INSTRUMENTO A RACIONALIDAD: LAS TECNOLOGÍAS DE LA COMUNICACIÓN DEL DIFUSIONISMO A LA SOCIEDAD DE LA INFORMACIÓN*. *Razón y Palabra*. Retrieved from http://www.razonypalabra.org.mx/n62/varia/almeida_souza.html

Ruíz, G. (2013). John Dewey's theory of experience historical significance and validity in contemporary theoretical debate. *Foro de Educación*, 103-124. Retrieved from https://www.redalyc.org/articulo.oa?id=447544540006

Schettini, P., & Cortazzo, I. (2015). *Qualitative data analysis in social research : procedures and tools for the interpretation of qualitative information*. Buenos Aires: Edulp. Retrieved from https://libros.unlp.edu.ar/index.php/unlp/catalog/book/451

Sierra, F. (2012). *Communication and development: communicative practices and local empowerment*. Barcelona: Gedisa. Retrieved from https://bv.unir.net:2769/es/ereader/unir/61150?page=28.

Torres Carceller, A. (2020). Co-creation as a means of cooperative learning. A model of debate and creativity in the training of future teachers. 129-141.

UNODC. (JUNE 2016). *UNODC*. Retrieved from https://www.unodc.org/peruandecuador/es/noticias/2017/SETIEMBRE/estudio-consumo-de-drogas-en-la-poblacion-universitaria-de-ecuador-de-unodc-aportara-a-la-construccion-de-politicas-publicas-de-prevencion-de-drogas.html

Villanueva, J., Auz, D., & López, K. (2021). La educomunicación frente a los procesos de cocreación ¿cómo formar al periodista de hoy? *Universidad Y Sociedad*, 295 - 305. Retrieved from https://rus.ucf.edu.cu/index.php/rus/article/view/2394

## eWOM and its influence on online repurchase intention

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### Introduction

When we talk about eWOM it is described as any positive or negative statement made by potential, current or former customers about a product or company made available to a large number of people through the internet. (Hernández, Muñoz, & Sánchez, 2016). Since nowadays forums are digital spaces where users can share, create social links and give a sense of belonging to the virtual community, it is a more affective type of communication. (García, Mainegra, & Domínguez, 2020). The eWOM can appear in different ways on the Internet, through opinion platforms, discussion photos, websites, newsgroups or viral videos; it can also appear in platforms of its own in the Internet. (Hernanz & Hernanz, 2012).It can also appear in personal or corporate blog platforms and in social networks such as Facebook, Instagram or Twitter.

And this is due to the rapid growth of social networks, where the potential impact of virtual communities has turned this medium into an online shopping venue with customers seeking feedback from other customers before making decisions on purchasing products and services. (Bhandari & Rodgers, 2018). Therefore, it is essential for online store managers to pay attention to the interests and tastes of online shoppers, provide the brands most sought after by customers, and conduct more realistic analyses of customer behavior. (Rahehagh, Ameli, Saeednia, & Darvishi, 2022).

eWOM occurs when consumers seek (or provide) unbiased or informal information regarding products or services within such a network, as consumers are enabled to give their own consumer-related opinions through the eWOM network.

Therefore, the eWOM literature has focused on analyzing purchase intentions, assuming these as antecedents of purchase decisions. However, with digital media platforms, where empirical evidence has indicated that social networks are the most powerful source of eWOM, the eWOM literature has focused on the analysis of purchase intentions, assuming these as antecedents to purchase decisions. (Hennig, Gwinner, Walsh, & Gremler, 2004). . And it is possible to study such decisions in a realistic context, through how personal opinions about goods and services and consumer behavior affect consumer attitudes and purchase actions in cyberspace.

Additionally, regarding the eWOM characteristics that have the greatest influence on decision making, it was found that valence has a differential influence depending on whether the message is sent by an opinion leader, or by other consumers and depending on, whether it is about a product or a service (Rossell, 2020). A negative message has greater influence on purchase decisions for a service if the message is sent by other anonymous consumers, while a positive message has greater influence if it is sent by an opinion leader. (Zanfardini, Bigné, & Andreu, 2018).

It is worth noting that the effects of eWOM are quite difficult to control (like traditional WOM), although it provides opportunity for marketers to make effective product sales and leverage consumers accurately has the propensity to negatively portray the company's image on the Internet. (Tsao & Hsieh, 2015).

In this sense, eWOM is an influential marketing tool, as it has the propensity to reach a larger audience in a limited time, so companies have started to focus on eWOM, rather than spending large amounts of money on conventional ads. Not only is the reach of customers expanded, but companies can also ensure that the message has been seen by consumers. (Tsao & Hsieh, 2013).

And is that, countries such as Malaysia, where 83.8% of users, engage the internet through their smartphones to search online for travel reviews where electronic word-of-mouth facilitates the dissemination of information that consequently motivates consumers to repurchase tourism services. (Babić, Sotgiu, & Valk, 2017)

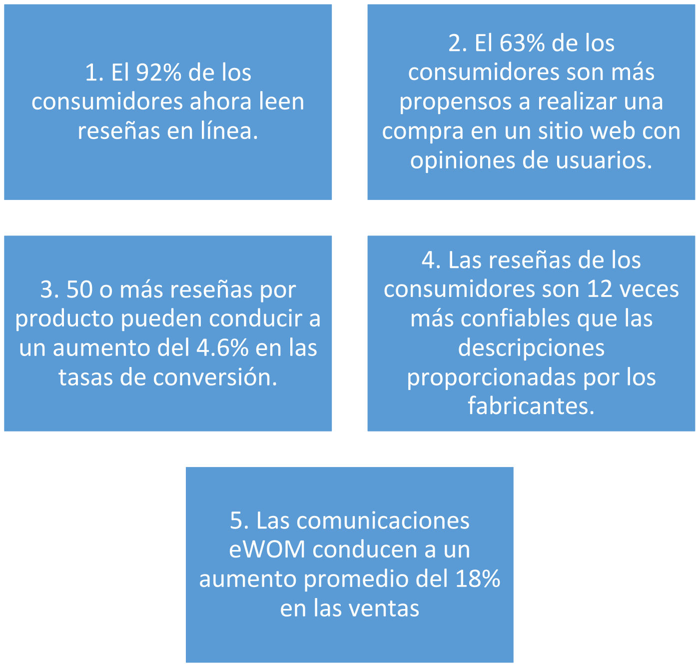
While, Otero and Giraldo, (2020) in Latin America it is unknown what is the result of this influence on consumer behavior since, on the one hand, there is the traditional form represented in oral communication and, on the other hand, there is the use of information and communication technologies. Therefore, there is a lack of information on electric word-of-mouth marketing and how it influences the online repurchase intention, where the aim is to understand the user's behavior around the information about the good or product they wish to purchase in online environments and how this can have a significant effect on the result. (Tonbón, 2019)

However, Belanche et al. (2013) indicates that word-of-mouth can also be categorized according to its positive or negative valence, i.e., messages can be linked to positive recommendations or negative aspects about a brand or product.

Meanwhile, Barros et al. (2020)in the city of Ambato highlights the influence that social media has on the purchase decision process where users are influenced by the comments and opinions generated in the networks and how important it is to create a link with the consumer, so that through it companies take advantage of it to attract the attention of their customers and generate eWOM.

Table 1, provides some interesting statistics regarding eWOM communications, showing the importance of eWOM for consumers and businesses (Charlton 2015).

***Table 1.*** *Importance of eWOM*




Taken from: Electronic Word of Mount (eWOM) in the Marketing Context; (Ismagilova, Dwivedi, Slade, & Williams, 2018)

For this reason, it is required to analyze and determine how the characteristics of the electronic mouth - ear influence the intention to repurchase online and those perceptions presented by consumers when acquiring a good or service in the virtual platforms that the company maintains to generate a good relationship with current and future consumers. As a result of documentary compilation as part of a research project, we proceeded with an analysis and a literature review regarding the methodology used, in order to evaluate the intention to repurchase of consumers of generation Y, in the city of Guayaquil. Knowing the criteria of several authors, such as Vallejo, Polo, & Utrillas (2016) and Mauri & Minazzi (2013) where studies have focused on knowing the purchase intention and how the amount of eWOM contributed to the reputation and trust towards the company.

And it is that the purchase intention is considered within marketing as a manifestation of customer loyalty to the brand / good / service, managing to have a real and economic effect. Based on the above, and coinciding with (Vallejo, Polo, & Utrillas, 2016). we proceeded with an analysis and collection of quantifiable data; where it will provide a descriptive scope of those attributes to be analyzed by those inverse factors that will be presented and interpreted in this research.

This data collection was given in a single time, with a quantitative approach as well as descriptive correlational, because the research aims to measure and associate how the variables are related, as well as describe the characteristics and important features of the study, was used in order to know the relationship between eWOM and purchase intent (Mauri & Minazzi, 2013).

While its non-experimental design was able to observe the phenomenon as it is shown in its natural context, through the results obtained in the surveys and tabulated using SPSS software and the use of the Spearman statistical test.

The location established for the study was the Guayaquil canton, which is located in the province of Guayas (Ecuador). Taking as a sample the population of generation Y or Millennials, a group of consumers ranging from 19 to 44 years old who are immersed in the constant use of the Internet, social networks, lovers of teleworking and the indispensable use of cell phones as they like to buy in online stores, post and share information about their experiences. (Gaspar, Ronquillo, Robles, & Paucar, 2021).The same that represented in Guayaquil with 23.5%, with the purpose of 250 samples as object of study. It should be noted that the sampling was random and simple.

For the data collection technique, the survey was applied, which contributes to the measurement of the indicators according to the data provided by the sample to know the cause of the characteristics of electronic word-of-mouth and its influence on the online repurchase intention. Regarding the design of the instrument, a questionnaire was developed with a set of questions that are related to the objective of the study.

As part of the data collection, the authorization of the participants was requested in order to proceed with the application of the survey. Data were collected through a questionnaire that lasted 10 minutes using a Google form, which was shared through the WhatsAppp App or email.

This study took into account the following ethical criteria:

According to (Krause, 2017)

- **Respect**: Considering that the data collected should only be used for the purposes of the research. They are only published with the person's permission, since the participants have the fundamental right to be protected and anonymous. Likewise, their authorization was obtained for the application of the instrument.
- **Beneficence:** The ethical principle of Do No Harm is included. Since this study seeks to generate academic knowledge, which will benefit students without harming those involved.

As an ethical criterion of respect, authorization was obtained from each individual for the application of the instrument, and subsequently they were informed about the process and the results obtained from the research through a document sent to their e-mail addresses. As a benefit, this research seeks to provide academic knowledge, which will benefit schoolchildren and university students, as well as technical knowledge that will be very beneficial for companies, without acting in any way that could harm those involved in the study.

The research analyzed the influence of eWOM acceptance with respect to online repurchase in digital media among millennials in the city of Guayaquil - 2022. The questionnaire was validated through the reliability coefficient - Cronbach's alpha, which is an index used to measure the internal consistency reliability of a scale, i.e., to evaluate the correlated items of an instrument. (Oviedo & Campo-Arias, 2016).

From what we can visualize in Table 2, the Cronbach's Alpha coefficient shows 0.866 of reliability according to the eWOM and Purchase Intention variables conformed by the twelve items of the study, which indicates that the closer the result is to 1, generating a greater reliability to the survey applied in the field.

**Table 2.** *Cronbach's Alpha Reliability*

Reliability statistics

| Cronbach's alpha | Cronbach's alpha based on standardized items | N of elements |
|---|---|---|
| 0,862 | 0,866 | |

Taken from: Own elaboration, using Spss 26.0 software.

Once the study met the criteria of scientificity with the previous validity of the instrument, we proceeded to collect data in order to measure how the eWOM influences the intention to repurchase online, through a sample of 250 people between the ages of 19 to 42 years taken randomly in the city of Guayaquil, whose data were obtained through surveys conducted and tabulated through the statistical program SPSS 26.0, those demographic data of the sample will be detailed below. In the collection of data according to the sex of the person, it was obtained in the survey that 70% corresponds to women and 30% to men, with a quite remarkable gap of 40% between them.

- Among the age ranges selected for the research process, it was observed that the largest number of the population that took the survey was in the 19 to 24 age group with 71.60%, followed by the 25 to 30 age group with 12.40%, the 31 to 35 age group with 6.80% and the 36 to 42 age group with 9.20%.
- The survey of Millennials showed that 80.80% are single and 12.4% are married, while 2.80% are divorced and 4% are in a common-law marriage.
- The surveyed population of the city of Guayaquil indicated that 63.6% live in the North, followed by 28% of people who live in the South, and finally 8.4% live in the Center.
- The surveyed population indicated that 67.6% receive an income of less than $425, followed by 18.4% who indicated that their income is $426 to $600 per month, while 3.20% indicated that they receive an income of $601 to $800 per

month, and finally 10.8% receive a monthly income of more than $800 per month.

- On the appreciation of the results on whether the comments provide clear information about the brand or product, respondents argue that they Agree with 39.20% because the comments were able to provide positive and negative information, which can influence their perception of the brand or product. Likewise, 1.20% totally disagree, as they do not perceive as an influence what is said on the Internet about the products or brands.
- Respondents indicate that 55.60% strongly agree that digital platforms have become a very useful means of communication between brands and customers to learn not only about their products but also news about it, which are relevant to the purchase decision, while 0.40% say they strongly disagree that these media serve as a means of communication.
- With respect to, when a good or service is totally new, 48% of the respondents argue that they Strongly Agree that they look for information and comments on social networks about the options that other consumers have about that new product. Meanwhile, 3.6% are indifferent to whether there is information on social networks about new products, and 0.4% indicate that they strongly disagree, as they do not consider seeking information on social networks to learn about a new product.
- According to the results, 46.80% strongly agree that reading the comments of other users helps their expectations when making a purchase, since the type of comment, whether positive or negative, brings them closer to the reality of what they will buy online. But also 0.80% of the analyzed data indicate that they Strongly Disagree.
- According to the results, 33.60% strongly agree that every comment they see in the digital media provides positive or negative information that influences and convinces them to buy a product, whether it is new or known in the market; while 9.6% of respondents are indifferent about what is said on the Internet about the products and finally 3.6% indicate that they disagree because the information on the Internet is not a factor that convinces them to buy a product.
- With respect to the data analyzed, it can be seen in the graph that 86.4% of respondents Strongly Agree, Strongly Agree and Agree that the experiences acquired and expressed through comments in digital media or social networks do

determine their decision to purchase a particular product or brand, while 10.80&% are Indifferent to know the experiences of others and 0.4% Strongly Disagree that the experiences of others determine their decision to purchase or repurchase.

- Likewise, 36.80% of respondents agree to make their purchases through digital platforms or applications as it is a way to facilitate the acquisition of products. 20.8% indicate that the means by which they make a purchase is indifferent, they can do it physically or by digital means; finally, 2% totally disagree with making a purchase online.
- According to the results on online shopping, 79.20% of respondents strongly agree, strongly agree and agree that shopping through digital media can be comfortable at any time and positive, as it creates a closer relationship with the brand; likewise, 16.40% indicate that they are indifferent and 4.4% disagree, strongly disagree and strongly disagree because they do not find it comfortable or positive to buy on the Internet.
- With respect to the data obtained, respondents indicate that they are aware of all the features, sizes, color, prices among others when they view a product in a digital media before making the purchase, this data is manifested in 92% to be Strongly Agree, Strongly Agree and Agree, while 2% is Strongly Disagree, as many media does not show all the necessary information, causing distrust.
- With respect to the data obtained, it was possible to analyze that 92% of respondents Strongly Agree, Strongly Agree and Agree that when acquiring or making a decision to purchase a product through digital media, they needed to know about the brand or product and many times this is due to comments or experiences about the product. Finally, 0.4% of Millennials indicated that they Strongly Disagree that they purchase products without brand knowledge.
- Of the total number of respondents, 68.40% indicated that they Strongly Agree, Strongly Agree and Agree that they have confidence when making an online purchase, this is also because they rely on comments, brand knowledge they have prior to the purchase; however, 16.8% of the analyzed data argue that there is distrust that the product does not meet the characteristics or scam, therefore, they are Strongly Disagree.
- Finally, it could be seen that 79.2% Strongly Agree, Strongly Agree and Agree that many brands offer not only

guarantees, when making a purchase through a digital medium, but also carry out promotions which motivates an online repurchase and subsequent brand loyalty, while 8% of respondents strongly disagree, strongly disagree and disagree because they are not aware of these guarantees.

## Correlation of Variables: eWOM and Online Repurchase Intention

In order to obtain an accurate quantitative measure of the correlation between the variables, the Spearman correlation coefficient was used, as detailed below:

The Spearman correlation analysis was performed (Table 3), where the following variables were studied to identify whether or not there is a relationship between the two, since it has a significance level of less than 0.089, which indicates that the correlations identified have a minimum margin of error and that they are highly significant at the statistical level.

**Table 3.** *Variables Correlation: Spearman*

**Correlaciones**

| | | | Edad | Me gusta comprar mediante aplicaciones digitales |
|---|---|---|---|---|
| Rho de Spearman | Edad | Coeficiente de correlación | 1,000 | -,108 |
| | | Sig. (bilateral) | . | ,089 |
| | | N | 250 | 250 |
| | Me gusta comprar mediante aplicaciones digitales | Coeficiente de correlación | -,108 | 1,000 |
| | | Sig. (bilateral) | ,089 | . |
| | | N | 250 | 250 |

Taken from: Own elaboration, using Spss 26.0 software.

With respect to the case of the variables on their preference to purchase through digital applications, Table 3 shows a negative impact on the age of Millennials. Statistically, the coefficient of - 1.08 confirms a negative linear correlation because the variables are inversely correlated, since the greater the increase of one of the variables is the loyalty to buy in digital media, the lower the value of the other variable, which is age, or vice versa.

**Table 4.** *Correlation of Variables: Spearman*

**Correlaciones**

| | | | Género | Comprar online en medios digitales me parece cómodo y positivo |
|---|---|---|---|---|
| Rho de Spearman | Género | Coeficiente de correlación | 1,000 | -,004 |
| | | Sig. (bilateral) | . | ,947 |
| | | N | 250 | 250 |
| | Comprar online en medios digitales me parece cómodo y positivo | Coeficiente de correlación | -,004 | 1,000 |
| | | Sig. (bilateral) | ,947 | . |
| | | N | 250 | 250 |

Taken from: Own elaboration, using Spss 26.0 software.

Through Spearman correlation in Table 4, the following variables were analyzed, where we identified that there is a very low relationship between the two, which seeks to determine that the gender of the person who still plans to continue shopping in digital media, such as virtual platforms, social networks and websites to acquire their goods and / or services, which said correlation of variables showed a significance between the variables studied, because it presents a significance level of less than 0.04.

The result of the analysis of the variables, statistically, the coefficient of 0.947 confirmed a direct relationship between the variables due to their high correlation between both, which identified that gender in the Millennials population does influence the continuous use of virtual platforms, social networks and websites.

**Table 5.** Correlation of Variables: Spearman

**Correlaciones**

| | | | Los comentarios de otros usuarios sobre sus experiencias, determinan si realizo o no mis compras de dicho producto o marca | Para comprar un producto por un medio digital, necesito tener conocimiento de la marca |
|---|---|---|---|---|
| Rho de Spearman | Los comentarios de otros usuarios sobre sus experiencias, determinan si realizo o no mis compras de dicho producto o marca | Coeficiente de correlación | 1,000 | ,458$^{**}$ |
| | | Sig. (bilateral) | . | <,001 |
| | | N | 250 | 250 |
| | Para comprar un producto por un medio digital, necesito tener conocimiento de la marca | Coeficiente de correlación | ,458$^{**}$ | 1,000 |
| | | Sig. (bilateral) | <,001 | . |
| | | N | 250 | 250 |

**. La correlación es significativa en el nivel 0,01 (bilateral).

Taken from: Own elaboration, using Spss 26.0 software.

In Table 5, where we sought to identify how the comments of other users about their experiences acquired in the purchase of a product are related to the need to have knowledge of the brand for the intention to purchase through digital media is significant given that Sig.<0.01. Likewise, said relationship is direct and of moderate degree by the coefficient of 0.458.

**Table 6.** Correlation of Variables: Spearman

**Correlaciones**

| | | | Considero que los comentarios que percibo en internet, proporcionan información que me convence a comprar dicho producto | Tengo confianza al momento de realizar una compra online |
|---|---|---|---|---|
| Rho de Spearman | Considero que los comentarios que percibo en internet, proporcionan información que me convence a comprar dicho producto | Coeficiente de correlación | 1,000 | ,359$^{**}$ |
| | | Sig. (bilateral) | . | <,001 |
| | | N | 250 | 250 |
| | Tengo confianza al momento de realizar una compra online | Coeficiente de correlación | ,359$^{**}$ | 1,000 |
| | | Sig. (bilateral) | <,001 | . |
| | | N | 250 | 250 |

**. La correlación es significativa en el nivel 0,01 (bilateral).

Taken from: Own elaboration, using Spss 26.0 software.

In Table 6, where we sought to identify how comments on the Internet are perceived to convince the purchase of a product is related to confidence at the time of decision making, with respect to an online purchase is significant given that Sig. $<0.01$. Likewise, this relationship is direct and of moderate degree by the coefficient of 0.359.

This study analyzed the influence of eWOM acceptance with respect to online repurchase among Millennials in the city of Guayaquil, which demonstrated a positive influence (rho=0.359) where comments in digital media about goods and services are useful and positive with the relationship with the brand and this reinforces the intention to repurchase in consumers.

These results are aligned with those granted by Otero-Gómez & Giraldo-Pérez, (2020), where they evaluated that the effect of eWOM communications on repurchase intentions in a population between the ages of 16 to 24 years, they tend to buy again when they pay attention to recommendations in digital media or comments from acquaintances, friends or family about the brand; even so, Rodríguez ( 2019) argues in his study that the effectiveness of eWOM on purchase intention is positive because of the comments that influence the consumer.

With respect to the relationship between gender and the continuous use of digital media such as digital platforms, social networks and websites, a positive influence was found with a moderate degree (rho=0.947), this finding coincides with Balcázar & Suquilanda (2020) where when investigating whether the factors that influence online consumer behavior in users aged 18 to 45 years in the city of Guayaquil, indicates that the gender and age of that population is associated with the continuous use of digital media in order to have a purchase intention.

Now, although Cornejo & Oscanoa (2018) also determined relationship between Electronic Word of Mouth (eWOM) experience and trust for the purchase decision of customers from Peru, such correlation was of low degree (0.247), which contrasts what was found in this study with a (rho=0.458) as the results indicated a high influence. It can be said that trust and experiences are related to each other and are conditioned by the information and comments of the eWOM.

## Variable eWOM

After analyzing the items corresponding to the eWOM variable, having used a sample of 250 people corresponding to the Millennials population between the ages of 19 to 42 years in the city of Guayaquil, being a variable divided into three categories (information quality, valuation, credibility of information). By obtaining the results that the virtual platforms, social networks and web site allowed the consumer to make a positive or negative eWOM that is reflected through comments, criticisms, complaints or recommendations about the good or service acquired through a digital medium, these effects help other users to establish a relationship of trust, an attitude towards the brand and finally an intention to repurchase. Therefore, it allows the company to create a direct connection with the online consumer, by offering necessary information in the purchase decision process.

After the study conducted to 250 people of the Millennials population, it was determined that the results obtained in this research work were favorable, allowing to analyze that Millennials do have the intention to repurchase through digital media their goods and services, since it was shown that the needs of online consumers are changing in conjunction with the environment to different variables such as trust, experience, brand awareness, loyalty. Within the analysis of the survey, the online repurchase variable was used in the categories (attitude towards the brand and purchase intention), all this allowed the online consumer to have information about what companies offer on digital platforms and apps.

However, the survey allowed us to determine that a certain percentage of respondents, being minimal, do not have much confidence in virtual platforms because they are insecure about trying new technologies and buying online, it should be noted that this could be due to lack of knowledge, complicated formats for the purchase, little information about the product and little adaptation to the changes of the digital era. Even so, a large percentage of respondents consider important the use of these digital media for the acquisition of a product, since it gives them the ease of being able to buy anywhere and at any time.

## References

Babić, A., Sotgiu, F., & Valk, K. d. (2017). The Effect of Electronic Word of Mouth on Sales: A Meta-Analytic Review of Platform, Product, and Metric Factors. . *Journal of Marketing Research*, 53.

Balcázar, D., & Suquilanda, M. (2020). Factors influencing the purchase behavior of delivery app users in the city of Guayaquil [Undergraduate thesis]. *Guayaquil: Repositorio Universidad Católica de Santiago de Guayaquil.*

Barros Miranda, E. E., Landa-Criollo, S. C., & Villalba-Miranda, F. R. (2020). Social media and its influence on the purchase decision of the millennial generation. *Digital Publisher, 5*, 80-84. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=7897662

Belanche, D., Casaló, L. V., & Guinalíu, M. (2013). Marketing communications and electronic word-of-mouth on corporative websites: An approach from a relationship marketing perspective. *European Research in Management and Business Economics, 19*, 31 - 41. doi:https://doi.org/10.1016/j.iedee.2012.10.002

Bhandari, M., & Rodgers, S. (2018). What does the brand say ? Effects of brand feedback to negative eWOM on. *International Journal of Advertising*, 125-141.

Cornejo, K., & Oscanoa, A. (2018). Relationship between Electronic Word of Mouth (eWOM) and the purchase decision of customers of the travel agency Aventura sin límites in the district of Chaclacayo, through social networks, year 2017. *Lima: Repositorio Universidad Peruana Unión.*

García, M., Mainegra, D., & Domínguez, I. (2020). The Construction of written texts in online forums by Spanish-literature teachers . *Revista Conrado, 16(77)*, 32-41.

Gaspar, E., Ronquillo, O., Robles, G., & Paucar, C. (2021). Lifelong learning in Millenials to renew legal praxis in the digital generation. *Revista Conrado, 17(80)*, 99-106.

Hennig, Gwinner, K., Walsh, G., & Gremler (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing, 18*(1), 38-52.

Hernández, J., Muñoz, F., & Sánchez, M. (2016). The influence of eWOM on travel decision making consumer profiles. Current issues in tourism in press. *Gestion 2000*, 23-34.

Hernanz, F. P., & Hernanz, J. (2012). Socialholic: Everything you need to know about social media marketing. *Gestión 2000*.

Ismagilova, E., Dwivedi, Y., Slade, E., & Williams, M. (2018). *Electronic Word of Mount (eWOM) in the Marketing Context* . Springer .

Krause, U. (2017). Researching forced migration: critical reflections on research ethics during fieldwork. *The Refugee Studies Centre (123)* , 1-36.

Mauri, A. G., & Minazzi, R. (2013). Web reviews influence on expectations and purchasing intentions of hotel potential customers. *International Journal of Hospitality Management*, 99-107.

Otero, M. C., & Giraldo, W. (2020). Effect of word of mouth and electronic word of mouth communications on repurchase intentions of a Colombian brand. *KEPES, 17*(22), 229 - 255. doi: 10.17151/kepes.2020.17.22.9.

Oviedo, H., & Campo-Arias, A. (2016). Approach to the use of Cronbach's alpha coefficient. *Colombian Journal of Psychiatry. Vol XXXIV/Nº4/*, 575 - 577.

Rahehagh, A., Ameli, A., Saeednia, H., & Darvishi, Z. A. (2022). *Educating the concepts of a grounded theory with the case of brand attachment in online shopping behavior*. Teran, Iran : Conrado Magazine. University of Science and Fire.

Rodriguez, Z. (2019). Methodology for analyzing the effectiveness of visual eWom on purchase intention in social shopping communities. Case: Polyvore. *Comunicación y Metodos*, 57-75.

Rossell, D. (2020). The influence of EWOM on purchase intention in delivery apps in Metropolitan Lima. *Peruvian University of Applied Sciences (UPC).*

Tonbon, S. (2019). The influence of electronic word-of-mouth (eWOM) on online consumption decisions. *Dialnet* .

Tsao, W., & Hsieh, M. T. (2013). Exploring how relationship quality influences positive eWOM: the importance of customer commitment. *Total Quality Management and Business Excellence*, 821 - 835.

Tsao, W.-C., & Hsieh, M.-T. (2015). eWOM persuasiveness: do eWOM platforms and product type matter? *SCOPUS*.

Vallejo, Y., Polo, Y., & Utrillas, A. (2016). Electronic word-of-mouth characteristics and their influence on online repurchase intention. *European Journal of Management and Business Economics*, 61 - 75.

Zanfardini, M., Bigné, E., & Andreu, L. (2018). Valencia analysis and creative strategy of eWOM in tourist destinations. *XXIX AEMARK MARKETING CONGRESS*.

# Importance of room service quality management systems in a hotel

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## Introduction

The main activity of a hotel company is the rental of rooms, and for it to progress it is necessary that the facilities are pleasant, comfortable and convenient for customers, and thus make them come back again. The objective of this paper is to inform about the great importance of the quality of service in hotel rooms and to be of great help to the hotel industry.

However, quality is becoming more and more demanding in hotels, so they must adapt to new needs, especially in the place where they decide to rest when they travel away from home, whether for work, vacation, tourism, etc.

The purpose of this article is to highlight the great benefits of having excellent quality of service in hotel rooms. It is important and fundamental the role of the housekeeper, since she is in charge of keeping the rooms always in good conditions, that the service of this area is intact because it is the place where the guests will rest.

According to (Monsalve Castro & Hernández Rueda, 2015).The quality of service is a concept embraced by organizations in recent years, given the need to be competitive in the face of the expansion of the supply of different services in the market. For the traveler, this concept is global, that is to say, that all the experiences generated in a visit lead to the definition of a quality service and therefore to the satisfaction generated by it. When talking about satisfaction, we must necessarily address the issue of quality, which is linked to the results perceived by a traveler when using a hotel". The housekeeping department is one of the most important operational-administrative hotel areas in the field of service and customer contact, it is perhaps also the most important link in the service chain, therefore it is of utmost importance to use instruments and tools necessary to obtain an excellent image but always taking into account the quality management, organizational structure and training of human talent, in order to obtain the satisfaction of the needs and expectations of customers, who feel a set of sensations and personal experiences.

In the room it is of great importance the style of decoration, the basic components, lighting, colors, smells, the distribution of the plant, adaptability, air conditioning, decoration, tonalities, the good condition of the infrastructure and all the properties that the room has, not to mention that it must be spacious and even if it is a small space, it must be well used and distributed correctly.

The cleanliness and preparation of a room to be used by the guest is especially important, since it will be ready for a pleasant experience, customers form immediate ideas from the moment they enter the facility. These impressions are accentuated until they arrive at their room, the objective is that when they enter their room they feel comfortable and confident that they have the feeling that it is the perfect facility.

The following should be taken into account as indicated by Lujun, Yue, & Xiaohong, (2017) according to their hypothesis that: "Customer satisfaction positively affects loyalty intentions and that customer satisfaction positively affects word of mouth, (p. 240, 247) For companies related to the tourism sector, quality becomes more crucial in these times in which we live immersed in massive validation in social networks, where a personal reference made by any person is more valuable than advertising in any medium.

This indicates that the best service must be provided at all costs, taking into account style and comfort, so that the company itself can be its own advertising reference.

The definition of quality has taken a big turn, the customer is the one who defines what their needs are, you must know how to recognize those needs and how the hotel servers can get to meet them and thus be present in the minds of people and be their first choice when choosing where to stay.

According to Xinglong, (2011) states that "Service quality as perceived by customers plays a key role in the success of the management of a tourism destination, where it acts as a determinant for visitor satisfaction, royalty and review in the tourism market", (p. 337, 343).

Service quality can be defined as the difference between the actual perception and the expectation obtained by the customer.

There are entities that have determined parameters to guide them and follow a standardized line in terms of quality.

After two decades in which quality management has been incorporated into the vocabulary of managers, this subject continues to be of significant importance in research on business organization. Specifically, Total Quality Management (TQM) and ISO 9000 are the two areas that have been most studied. (Martinez Costa & Martinez Lorente, 2008).

ISO quality standards: these standards manage to standardize the management of processes regarding the services offered, achieving greater control over them, allowing the implementation of the circle of improvement within companies and complying with current legislation.

In section 6.2, the standard dictates a series of requirements regarding personnel training and, although it does not directly require a documented procedure for these processes, it does require evidence of compliance through a series of records, so the company opted to include the way to comply with these requirements in a documented procedure called training.

ISO 9001 is one of the most established quality management standards for companies worldwide.

This certification specifies the necessary requirements in the implementation and maintenance of a quality management system, likewise, it allows organizations in any sector to demonstrate customer satisfaction and ensure that they work to maintain and improve the quality of the products or services they offer companies are interested in obtaining this certification in order to guarantee their customers the improvement of their products or services and in turn require companies committed to quality. Therefore, ISO 9001 standards become a competitive advantage for the organizations. (ISO, 2018).

In other words, the hotel company commits itself through a document to provide the highest possible quality standards to its customers in order to keep them satisfied.

For any company, whether large, medium or small, achieving excellence in quality (on the road to customer satisfaction) is essential to position itself in front of the competition. Offering quality in both products and services translates into a greater guarantee and security for the customer.

For this reason, more and more hoteliers are willing to implement a quality management system, which helps them to follow the appropriate procedures for continuous improvement within the companies.

This refers to the importance that these quality systems must be implemented and taken into account when making decisions, since it is no use having them and not implementing them in the establishment is like not having them at all.

This must be done because international clients increasingly demand higher quality tourism services and the lodging process as a key macro process within the hotel industry must take into account and ensure the quality of all elements of the tourism product.

Including the areas of reception, housekeeping, maintenance, technical services, among others.

"Quality costs are part of the cost of production and are present in the organization's results. However, generally, they are not quantified separately, which prevents their adequate control and analysis and hinders possible corrective actions and the decision-making process"

(Zambrano Zambrano, Véliz Briones, Armada Trabas, & López Rodríguez, 2018)..

## Prevention Costs

Within quality, prevention costs should not be excluded because this allows us to consider the items to be invested in any flaws or defects in the design of the hotel areas, in the acquisition of materials, furniture, purchases of supplies, amenities, souvenirs, linens, decoration, skilled labor, among other details that arise at the time of implementing the design of the hotel rooms until the marketing and sale of its products and services. In the prevention of the rooms area, the following is considered:

- Design review.
- Product qualification.
- Review of plans.
- Quality-oriented engineering.
- Quality assurance programs and plans.
- Supplier evaluation.
- Quality training for suppliers.
- Review of specifications.
- Studies on the capacity and potential of the processes.
- Training for the operation.
- General quality training.
- Preventive maintenance quality audits.

## Evaluation Costs

There are also evaluation costs, these are costs of inspection or supervision to ensure that the products, and verify if they meet the quality requirements. The details to consider are as follows:

- Costs related to the inspection of hotel room equipment and furnishings.
- Costs related to the inspection of intermediate and final product testing processes, inspection of rooms, including the costs of compiling quality records.

- Salaries of inspection and quality control personnel in relation to customer service.

### Internal Failure Costs

Sometimes internal faults are found in the hotel product before being sold to customers, for this it is necessary to perform activities to eliminate those imperfections found in the rooms, this includes both materials, labor and construction costs, as well as tools or adequacy of machines. Some examples of these costs are:

- Individual cost elements of defective production.
- The application of tools and room maintenance times.
- Supervision and control of room operations.
- Additional costs of handling documentation and room inventories.

### External failure costs

These failures occur after the rooms have been sold to customers, this is detected through the information issued by the guest, that some of them do not meet the specifications, among could be:

- The product offered by the hotel does not correspond to what was indicated.
- Fulfillment of guarantees offered.
- Reimbursement for noncompliance.
- Aspects related to the possibility of loss of future sales.

### Quality Certifications Applicable in the Hospitality Industry:

Quality certifications are a determining factor in the longed-for success of any hotel business.

The return of that guest to the hotel's facilities is the result of the correct process used to provide an excellent service, this being its main objective.

Success in the hotel business is assured when investing in staff training based on international service standards, as well as quality standards.

It contributes to the increase of the company's resources, benefiting the conglomerate that integrates it, including promoting the sector where it is located.

The value chain of service businesses is on the rise in these times of great competition among establishments.

The value added to products and services depends a lot on quality, that is why it is indisputable to seek international quality certification.

### Quality Policy

The hotel should lay the groundwork for establishing and reviewing quality objectives, which represent the milestones that the organization should set on its journey towards quality management.

It is totally valid, that the main responsible of each area of the organization establish objectives in their sections or better yet, that all together define common objectives according to the processes that their departments go through.

Continuous improvement, the effectiveness of the quality management system provides a framework for setting and reviewing quality objectives.

### Customer Requirements

Each customer has different requirements which must be expressed in the order or contract.

The facility is responsible for meeting the customer's expectations.

## Implied Hotel Requirements

The organization should review the requirements related to the customer. This review should take place before the hotel commits to providing a product to the customer, e.g. sending quotations, acceptance of the order, acceptance of changes should always ensure that the requirements that the customer has requested are defined.

## Legal Requirements:

Each hotel establishment also displays legal requirements which must be complied with by customers before requesting services and the establishment must always keep a record of effects derived from the origin of the same.

**Table 1.** *Customer requirements.*

| REQUIREMENT | DESCRIPTION |
|---|---|
| **ADEQUATE FACILITIES** | COMFORTABLE, CLEAN, SPACIOUS, SAFE, WITH FRIENDLY STAFF. |
| **QUALITY OF SERVICE AND ATTENTION** | FAST, SAFE AND EFFICIENT. |
| **FOOD AND BEVERAGE QUALITY** | VARIETY OF DISHES AND DRINKS, WELL PRESENTED. |
| **GOOD CARE** | FRIENDLY, POLITE, HOSPITABLE AND WELL PRESENTED PERSON. |

Note: This table presents the minimum requirements for a host.

## Hotel Process Map

Once the necessary requirements have been determined, the process map is drawn up and the processes must be duly classified according to the satisfaction and profitability objectives pursued by each hotel.

**Table 2** *Processes.*

| | | | |
|---|---|---|---|
| ***STRATEGIC PROCESSES*** | | | |
| QUALITY MANAGEMENT | CUSTOMER MANAGEMENT | STRATEGIC PLANNING | MARKETING AND ADVERTISING |
| ***OPERATIONAL PROCESSES*** | | | |

| | | | |
|---|---|---|---|
| HOSTING | ROOM | ROOM CLEANING | |
| ***SUPPORT PROCESSES*** | | | |
| FINANCIAL MANAGEMENT | MANAGEMENT OF MATERIAL RESOURCES | PARTNER MANAGEMENT | SUPPLIER MANAGEMENT |

Note: This table specifies the different components of each process.

## Map of Each Process

Once the processes of a hotel have been determined, a map of each process in which the quality system will be implemented is developed, in which the purpose of the process is noted, the arrival and departure of the clients, this is done for the realization of the activities and controls of the same. The purpose of each process is broken down into its implicit objectives in order to be able to control its progress and compliance. Each of these objectives must be evaluated through the application of the pertinent indicators. When choosing an indicator, it must be measurable, understandable and controlled.

**Table 3** *Room and board process.*

| **ROOM** | **HOSTING** |
|---|---|
| INITIAL REVIEW | GREET THE CUSTOMER |
| OCCUPANCY REPORT | REQUEST YOUR DOCUMENTS |
| GUEST DEPARTURE FROM THE ROOM | REQUEST PAYMENT |
| CLEANLINESS AND CLEANLINESS OF THE ROOM | REGISTER THE CUSTOMER AS A GUEST |
| REPLACEMENT OF LINGERIE | BILLING |
| FINAL REVIEW | GIVE YOU THE KEY TO YOUR ROOM |

Note: In this table, you will find the indicators for the purpose of the rooming process and the indicators for the purpose of the lodging process.

**Table 4** *Room cleaning process.*

| | | | | |
|---|---|---|---|---|
| 1<br>KNOCK ON THE DOOR BEFORE ENTERING | LEAVE THE DOOR OPEN | POST NOTICES OF CLEANLINESS | OPEN WINDOWS FOR VENTILATION | 5<br>DUSTING THE ROOM |
| | | | | |

| MATERIALS FOR CLEANING THE BATHROOM | CLEANING FLOORS | CLEANING GLASS AND WINDOWS | CLEAN CLOSETS | CLEANING THE BEDSIDE TABLES |
|---|---|---|---|---|
| SPONGES<br>DISINFECTANTS<br>SODIUM HYPOCHLORITE<br>GLASS CLEANER<br>LIQUID DETERGENT<br>BATH BRUSH<br>CLEANING CLOTHS<br>GLOVES | CLEANING THE BATHROOM | TENDING THE BED | TAKE OUT THE GARBAGE | CHECK LIGHTS |
| | DISMANTLE<br>REMOVING PAPER BAGS<br>REMOVE TOWELS<br>CLEAN THE BATHTUB<br>CLEANING THE SINK<br>HANDLES AND KEYS<br>CLEAN THE TOILET LID, THE TOILET BASE, THE TOILET TANK, THE INSIDE OF THE TOILET, AND THE INSIDE OF THE TOILET.<br>CLEANING THE BATHROOM FLOOR | REMOVE THE SHEETS<br>MOVE THE MATTRESS<br>CHANGE THE SHEETS<br>PLACEMENT OF LINGERIE ON THE BED<br>PLACE THE PROTECTOR<br>THE BED MUST BE WELL CARVED<br>THE BOTTOM SHEET MUST BE WELL IN THE EDGE<br>LAY THE BLANKET<br>ARRANGE THE PILLOWS | | TAKE OUT CLEANING NOTICES<br>CLOSING DOORS AND WINDOWS |

Note: In this table you will find the indicators for the purpose of the room cleaning process.

This research applied the analytical and descriptive methods taking into account that according to (Pérez P & Lopera A, 2016) the analytical method is a way to reach a result by decomposing a phenomenon into its constituent elements, and as they indicate. (Azucena P, Zarco C, Ramasco G, & Palmar S, 2014) "observation, from the Latin observatio, refers to the action and effect of looking at something or someone, considered as an object, and examining it with attention. Observing consists of using the senses to contemplate directly, carefully and systematically the surrounding reality and the events as they occur in social life. It is a daily human activity that allows us to detect and assimilate information and acquire knowledge.

This means that information is not only linked to verbal communication, but also to non-verbal forms such as inspection, and in this way data is gathered on what may already be explicit or general or on more particular or specific aspects.

For this reason, observation sheets were used to gather information from different establishments to determine whether they complied with the required quality of service, as well as surveys of customers of different hotel establishments.

These methods are used to determine if they comply with the service quality indicators of a hotel's rooms, thus it was possible to verify the importance of service quality in a hotel establishment.

A non-probabilistic random survey was carried out among 50 people who have had the experience of having stayed one or more times in some type of hotel establishments.

Among the questions asked in the survey were the frequency with which they use the hotel service, what is their expectation when staying in a hotel and if they return to the same establishment.

In each survey a detailed check list was adhered to verify if the room service meets the minimum expected by the guest, the attention received from the staff of the establishment, as well as the total cost in relation to the services received.

**Table 5** *Room observation sheet*

| **Alternatives** | **Frequency** |
|---|---|
| Nice and fresh room | |
| Room cleaning and maintenance | |
| Internet service | |
| Technological equipment for communication | |
| All of the above | |
| None of the above | |
| **Total** | |

**Table 6** *Human Talent Observation Sheet*

| **The hotel partner** |
|---|
| It is ready to serve |
| He is kind |
| Clear your doubts |
| Meets your needs |
| Is a communicator |

| |
|---|
| Detail oriented |
| Presentable image |
| Total |

**Table** 7 *Prices in relation to service.*

| | Excellent service |
|---|---|
| Low price | |
| Median price | |
| High price | |
| Total | |

Table 8 shows that, of the 50 people surveyed, 86% of them have stayed in a hotel establishment and 14% have never stayed in a hotel, which reflects a lack of knowledge of hotel service, the quality of service is important for 86% of respondents, 4% expect only a nice and fresh room, 10% expect at least a clean room and constant maintenance, another 10% expect the internet service to be operational, 2% expect to find equipment and services that are not available in the hotel, 2% expect to be able to use the internet service, and 2% expect to find a good service, 2% expect to find technological equipment in the room, 60% of the respondents indicated that they yearn for total comfort and 14% are not interested in anything, 86% of the respondents expect hotel employees to be efficient so that their experience in the establishment is truly pleasant and to be able to return, 14% of those surveyed responded that they would stay at the same hotel again, 36% would not stay at the same establishment again because they did not receive good service, 14% do not make use of these types of services.

Regarding the relationship between the service or product and the price to be paid, in question six we find table 13 in which the respondents indicated the following: 8% are willing to pay a low rate for an excellent service this would be for their economy, 36% are willing to pay a medium rate for that same type of service, however, 42% if they are willing to pay high prices to receive an excellent service thus demonstrating that the expectations are high in terms of the experiences they wish to perceive, to end this point 14% responded that they are not willing to pay for that type of service since when they make their transfers and need to stay overnight they try as much as possible to make a contact with a family member or friend.

Through this research, information was obtained that corroborates the need to provide quality services in hotel rooms, although not all establishments provide a high level of attention.

In this work it is clear that users prefer not to return to an establishment that has not served them well, which automatically leads to the hotel establishment gaining a bad reputation. As a result, they lose prestige and their sales drop, which triggers a series of uncomfortable situations for owners and collaborators.

Another author talks about quality service and the best way to follow up to satisfy the establishment's customers:

Due to the importance of customer satisfaction for companies and organizations in general, tools were developed to measure the quality of service and therefore, to know the level of customer satisfaction, such as the SERVQUAL tool developed by Zeithaml, Parasuraman and Berry (1993), which evaluates the key factors for measuring the quality of the service offered.

This model establishes that the customer expects a service (expectation) and assumes that he/she will receive it; consciously or unconsciously evaluates certain characteristics (service dimension) while receiving the service, which allows them to have an idea about it (perception) and evaluates it once it is finished. For this reason, SERVQUAL is one of the main information resources for companies to know the level of customer satisfaction, establish areas of opportunity and propose and implement improvements to have satisfied customers. Customer satisfaction is very important for all companies, so they have begun to look for ways to improve in that aspect, offering a quality service to be at the forefront with other companies and keep their customers, (Ibarra , Casas, & Partida, 2014)..

By following up with the customer and fulfilling the offerings, expectations will be exceeded, once we are aware of the satisfaction levels of the guests in this case.

A very important fact is that guests who do not like their experience in an establishment, do not usually complain in the same facilities, but directly to other people telling their dissatisfaction, which causes the information to multiply rapidly.

With this type of inconvenience, it is preferable to integrate into the hotel business service, a quality system that manages international service standards to improve the establishment. A quality plan issues a way to link the specific requirements of the process, product or service with the working methods and practices that benefit the elaboration of the product or service offered.

At the moment of obtaining a quality plan, the following benefits are generated**:**

- Confidence in the facility rises.
- Processes are better controlled.
- Employees are motivated.
- Increased opportunities for continuous improvement.

One of the details to take into account when providing room service, in addition to cordiality and efficiency, is to comply with the following points:

- Dusted room
- Clean glass and windows
- Clean floors
- Clean bathrooms
- Beds laid out

- Decoration in order
- Ventilated room
- Equipment in good condition
- Clean bedside table
- Water on the bedside table
- Lights in good condition
- Network and technological equipment for communication.

Nowadays it is not enough to have a luxurious, nice, big, well located establishment in a good place, everything has given a great turn towards the quality of the service where the hotel companies have focused, it is extremely necessary to apply the quality systems.

To achieve success in the hotel business and especially in room service, it is important to follow up with users in order to meet and exceed their expectations during their next visits.

A certain segment of people return to the hotel establishments where they have previously stayed because they have been satisfied with the service provided; however, there is another segment that must be reached by promoting better offers to attract them.

In some establishments, hotel employees are not constantly trained, causing a bad image of the hotel. The preparation of personnel should be a constant in order to add to the value chain of the service area business.

Quality service in hotel establishments is very important if you want to be the first and the best, competitiveness is aggressive and the means are there ready to be applied, it is only a matter of decision to submit and apply quality systems and processes.

## References


Azucena P, M., Zarco C, J., Ramasco G, M., & Palmar S, A. (2014). Participant observation. In M. Azucena P, , J. Zarco C , M. Ramasco G, & A. Palmar S (Edits.), *Qualitative observation* (pp. 45, 57). Elsevier. doi:https://doi.org/10.1016/B978-84-9022-445-8.00004-4

Cadena-Iñiguez, P. R.-M.-M.-Á.-C.-M.-M.-J. (2017). *Quantitative methods, qualitative methods or their combination in research*.

Ibarra , L., Casas, E., & Partida, A. (2014). Servqual Method Applied to Agencia Fiscal Del Estado De Sonora: An Analysis about Service Quality,. *Procedia - Social and Behavioral Sciences, 148*, 87, 93. doi:https://doi.org/10.1016/j.sbspro.2014.07.021.

ISO (October 3, 2018). *The Quality Policy in the ISO 9001 2015 standard*. Retrieved from ISO Win: https://isowin.org/blog/politica-calidad-ISO-9001/

López P, A., Benitez H , X., Leóm R, M., Maji J, P., Dominguez M, D., & Baez Q, D. (2019). Observation. First link of the clinical method. *Revista cubana , 21*(2), 94. Retrieved November 23, 2021, from http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1817-59962019000200014&lng=es

Lujun, S., Yue, P., & Xiaohong, C. (2017). Corporate social responsibility: Findings from the Chinese hospitality industry,. *Journal of Retailing and Consumer Services, 34*, 240, 247. doi:https://doi.org/10.1016/j.jretconser.2016.10.013.

Martínez Costa, M., & Martínez Lorente, Á. (2008). Quality management systems and business performance: a rationale from institutional and resource and capabilities theories. *Cuadernos de Economía y Dirección de la Empresa,,, 11*, 7, 30. doi:https://doi.org/10.1016/S1138-5758(08)70051-3

Monsalve Castro , C., & Hernández Rueda, S. (2015 January 2015). Service quality management in hospitality as a key element in the development of sustainable tourism destinations: Bucaramanga case. *EAN*, 78, 160, 173. Retrieved from http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-81602015000100011

Pérez P., J., & Lopera A, I. (2016). ANALYTICALLY ORIENTED HUMAN MANAGEMENT: A PATH TO ACCOUNTABILITY. *Revista de Administração de Empresas, 56*(1), 101. 113. doi:https://doi.org/10.1590/S0034-759020160109

Taylor, S. J. (1987). *Introduction to qualitative research methods* (Vol. 1). Barcelona: Paidós.

Xinglong, X. (2011). Measuring service quality from customer perception based on service science, management and engineering. *Systems Engineering Procedia, 1*, 337, 343. doi:https://doi.org/10.1016/j.sepro.2011.08.051.

Zambrano Zambrano, M., Véliz Briones, V., Armada Trabas, E., & López Rodríguez, M. (2018). Quality costs: their relationship with the ABC costing system. *Cofin Habana, 12*(2), 179,189. Retrieved November 22, 2021, from http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2073-60612018000200012&lng=es&tlng=es.

## Corporate Social Responsibility for economic and social development

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### Introduction

According to (Salgado & Hernández, 2007)according to Carroll (1999), research on corporate social responsibility has been conducted since the 1950s.

Such is the case the UN Secretary General, during the World Economic Forum in Davos, discussed how to bring participants together to support a global effort to highlight corporate social responsibility. (World Economic Forum, 1999) discussed how to bring together participants to support a global effort to highlight corporate social responsibility. Given the conditions that have prevailed since the 1990s, the concept of CSR has evolved, even more so with the advent of globalization, the acceleration of economic activity, ecological awareness and the development of new technologies.

At the same time the concept has been developing as it states (Kolb, 2018) organizations around the world, and their stakeholders, are increasingly aware of the need for and benefits of socially responsible behavior.

Within this framework, the challenge for society and the economy is to foster the growth and development of social and economic structures at the local level. As he points out (Feldman & Reficco, 2015). that his study is useful for the better understanding and development of CSR, as it provides evidence that helps to integrate the economic objective of companies with the ethical and social obligations inherent to CSR.

Based on the above considerations, local development is associated with state decentralization, citizen participation, democratic governance and citizen security. This is possible if the business sector assumes a high level of social responsibility.

As he states (Capron, 2016) an organization's level of social responsibility influences everything from its reputation to its ability to attract highly qualified employees, and its relationships with suppliers, customers and the communities in which it operates.

It is necessary to emphasize that private companies can contribute to achieving the Sustainable Development Goals of the 2030 Agenda, with the practice of CSR programs or actions that would be aligned with the objectives and the National Development Plan, such is the case in (Ecuador, 2021) Guillermo Lasso's government was called "Plan de Creación de Oportunidades 2021 - 2025" (Plan for the Creation of Opportunities 2021 - 2025).

Another way to contribute at the local level are the Decentralized Autonomous Governments (GADs) that have among their mechanisms the planning of local development plans. Meanwhile, companies and business associations should be aware of the development plans and should also be active participants in their design, implementation, evaluation and contribution with a socially responsible behavior.

As noted in their hypothesis (Gallardo-Vázquez et al., 2013). the orientation of companies to social responsibility, formed by 3 theoretical dimensions of analysis: economic dimension, social dimension and environmental dimension.

It means then that the activities of a company have an economic, environmental and social impact, in this sense it is important that they consider the Stakeholders at the time of making any decision, but what is the benefit of listening to them? In this purpose, the dialogue that a company can generate with other actors will be enhanced with learning and an exchange of experiences, with which it can generate an integral relationship with its environment and develop a strategy to become a sustainable organization.

Such is the case (De Oliveira Filho & Abadía, 2013). argues that various interest groups are increasingly incisive in demanding information.

On the other hand, it is necessary to know what consumers or workers want, it is much easier to look for formulas that favor them. It should be emphasized that considering the needs of the community should be a value of the company to want the best for its environment because it is what shows that it is really socially responsible.

It should be emphasized that Corporate Social Responsibility is, therefore, a business management model that is replicated worldwide in response to the new global trend of sustainable development, based on three pillars: economic, social and environmental responsibility. After the above considerations, implementing and practicing CSR can generate the following benefits: creating solid business structures, motivating employees, loyal customers, improving working conditions, making social investments, good relations with the community, in short, sustainable local development.

While it is true that not all companies in the national and local territory, specifically in Esmeraldas, have a high level of social responsibility, we refer specifically to the case of C&S SEPRIV CIA LTDA, with shortcomings that limit in the entity an adequate attitude towards society and as a consequence affects local development. As a complement, it expresses (Salazar et al., 2022). Esmeraldas, a border province with Colombia, marks elements of analysis from the insecurity, terrorism and absence of public policies that protect its development. After the above mentioned, it justifies the study of Corporate Social Responsibility in the selected entity.

Consequently, it is necessary to raise the problem of the limited Corporate Social Responsibility of C&S SEPRIV CIA LTDA that affects the local development of Esmeraldas. In this purpose, we formulate the question: How does the insufficient Corporate Social Responsibility affect the elements that limit the Local Development of Esmeraldas, with the objective of

"To study the Corporate Social Responsibility of C&S SEPRIV CIA LTDA to contribute to the local development of Esmeraldas". To achieve in this same order and direction analyze the theory of CSR and its influence on local development, identify the elements that limit CSR in C&S SEPRIV CIA LTDA, its impact on the Local Development of Esmeraldas and develop an action plan to raise the CSR of C&S SEPRIV CIA LTDA.

Based on the above assumptions, in theoretical terms the research topic of CSR related to local development is a challenge for all companies that wish to position themselves in the market with a high level of competitiveness.

Given the situation presented, the hypothesis is presented: it is possible that the study of CSR in C&S SEPRIV CIA LTDA will contribute to identify the elements that limit CSR in C&S SEPRIV CIA LTDA and develop an action plan to raise its level and contribute to the Local Development of Esmeraldas.

From the methodological point of view, it is highlighted as a basis the (ISO 26000, 2010)The guide to know the state of CSR in C&S SEPRIV CIA LTDA. From the practical point of view, the proposal of an action plan to improve CSR in SEPRIV is an important step to contribute to the local development of Esmeraldas.

For all these reasons, it is feasible and justifies the importance of this research for the company, the locality and the study of the elements that limit the Local

Development of Esmeraldas and how it affects the insufficient CSR.

Corporate Social Responsibility; its relationship with economic and social development.

Based on (Camacho Solís, 2015) the commercial dynamics that characterize the current era, the opening of international markets, full globalization, the entry of large-scale piracy, smuggling, the informal economy, money laundering in the financial or productive sectors, environmental damage and unfair practices are phenomena that are at the center of the interest of corporate social responsibility.

On the other hand, from the point of view of (González Molina, 2016) believes that this economic duality (elementary agrarian economies and cities or enclaves with greater technological development), seemed more a structural issue of backwardness that characterized Latin American underdevelopment; beyond a process that was destroying the elementary economy to incorporate it into modern growth.

Citing (Gasca and Olvera, 2011) cited in (Olarte-Mejía & Ríos-Osorio, 2015). highlights that CSR as a commitment that companies have to contribute to sustainable economic development in partnership with employees, their families, the local community and society in general, thereby seeking to achieve better standards of living.

As points out, one of the key factors in achieving a good corporate image and reputation is precisely to be socially responsible. (Alvarado Herrera & Schlesinger Díaz, 2008). one of the key factors in achieving a good corporate image and reputation is, precisely, being socially responsible, since the perception of the economic, ethical and discretionary aspects of CSR.

On the other hand, it mentions the Constitution of the Republic of Ecuador:

Art. 278.- In order to achieve good living, it is incumbent upon individuals and collectivities, and their diverse organizational forms:

1. Participate in all phases and areas of public management and national and local development planning, and in the execution and control of the fulfillment of development plans at all levels.

2. Produce, exchange and consume goods and services with social and environmental responsibility. (National Assembly, 2021).

In the words of (Benito Hernández & Esteban Sánchez, 2012). a good social responsibility policy can generate innovation dynamics in technological and product processes, even generating changes in the organizational culture that encourage spaces for greater participation and collaboration, fostering creativity and a greater culture of innovation.

Deduces (Saldarriaga Ríos, 2013). that the company thinks that social responsibility is an effective instrument to position its name in the social scenario, to increase its visibility, as well as productivity and competitiveness, but not to achieve internal change processes and to insert itself in the human management strategy.

From the position of (López Salazar et al., 2017). corporate social responsibility (CSR) is observed by governments, researchers and organizations in relation to their commitment to environmental care, support for society and its economic development.

Corporate Social Responsibility business management strategy for local development; ISO 26000.

Citing (Herrera Madueño et al., 2015). in terms of "ethics and decision making", all those contributions were considered that expressed special emphasis towards the principles and values that affect the development of business management from a socially responsible perspective.

Using the words of (Lennan et al., 2015) identify opportunities for practices aimed at strategic CSR, mainly those linked to the expansion of transparency in their relationship with stakeholders. It emphasizes, consequently, of the growing importance of governance and ethics in companies.

Citing (Camacho Solís, 2015) it is important to mention that the international standard ISO 26000:2010, a guide to social responsibility, provides harmonized, globally relevant guidance for public and private sector organizations of all types based on an international consensus among experts representing key stakeholders, and thus encourages the implementation of best practices in social responsibility in developed and developing countries, as well as in economies in transition.

Taking into account (Mendizábal Bermúdez, 2013). it can be concluded that social responsibility means that a company complies with its legal obligations inherent to its activities and that it is aware of the needs of society and, therefore, using ethical values, gives back to society in core points that allow its members a better quality of life, for example by raising awareness of the problems of their environment; environmental improvement; dignified treatment of employees, which may include protection in terms of social security, promotion of the right to training, among others.

As the research results show (Amato et al., 2016) among the pillars that obtained better positioning based on the 3 measures of central tendency as a whole are the improvement of community well-being and minimization of ecological impact (associated with sustainability) and employee satisfaction and motivation (associated with CSR).

Based on (ISO 26000, 2010) the guidance on core social responsibility issues, to define the scope, identify relevant issues and establish its priorities, an organization should address the following core issues (see figure 1): 6.2 organizational governance; 6.3 human rights; 6.4 labor practices; 6.5 environment; 6.6 fair operating practices; 6.7 consumer issues; and 6.8 active participation and community development.

***Graph 1.*** Fundamental Subjects (ISO 26000, 2010)


Source: Taken from ISO (ISO 26000, 2010)

The analysis carried out ensures the visualization of the lines of action, hence the importance of making it the starting point. (ISO 26000, 2010).

The research went through the following levels: theoretical, empirical, and systemic; phenomena are described as elements that limit the Local Development of Esmeraldas, through the study of its main characteristics and the procedure for the design of an action plan has been explained, as well as the fundamental elements that compose it.

Related to the type of research, considering that it is classified according to the context and the purpose of the research, we can say that related to the first criterion it is field research, since it was carried out in C&S SEPRIV CIA. LTDA. Esmeraldas and applied, because once the elements that limit CSR in C&S SEPRIV CIA. LTDA., the proposal of an action plan for the Local Development of Esmeraldas was designed.

Considering that the research focuses on CSR in C&S SEPRIV CIA. LTDA. For the Local Development of Esmeraldas, the research population is constituted by: workers and administrative staff of C&S SEPRIV CIA. LTDA. Northwestern District of Esmeraldas, specifically administrative area, supervisors and guards.

**Table 1.** *Personnel C&S SEPRIV CIA. LTDA. Northwestern District Esmeraldas*

| **Staff Esmeraldas** | **Population** |
| --- | --- |
| Administrative | |
| Supervisors | |
| Guards | |
| **TOTAL** | |

Source: Own elaboration

C&S SEPRIV CIA LTDA's clients in the province include the Esmeraldas Refinery, the National Council of the Judiciary (CNJ) and the National Electoral Council (CNE).

Considering that the population is not large, sample and population will coincide. For the realization of the investigation I apply a survey with the objective of investigating the knowledge and perception that they have about CSR in C&S SEPRIV CIA. LTDA.

Considering that the research work studies the CSR of the company C&S SEPRIV CIA. LTDA. and its influence on the local development of Esmeraldas, we have selected the areas that, in addition to the statistical information available, allow us to analyze these variables: contribution to the social development of the locality; good labor practices, including Human Talent Management, (valuing the criteria of the employees). The results are presented as follows:

**Table 2.** *Variables analyzed in the CSR study of the company C&S SEPRIV CIA. LTDA.*

| Contribution to the social development of the locality | Good labor practices |
|---|---|
| Stakeholders have not been fully identified, including other companies, local governments, the community, suppliers, customers, employees, etc., since only employees and customers are registered in this condition. | The company maintains a personnel selection process, with equal conditions for all those who apply. But the greatest difficulty is in the suitability, since not all employees meet the requirements for their job, but they are hired in spite of this. |
| There are limited dialogue mechanisms to interact with the company's social environment. Because the community has not been identified as a stakeholder of the company. | In the promotion process, the result of the selection process is not guaranteed to promote the most suitable people, and this affects the company's performance and its relationship with the environment, limiting CSR. |

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| Cooperation with social activities has been insufficient; in recent years, it has only sponsored the athlete Alex Quiñones Martínez, Olympic sprinter, demonstrating that the company has the potential to contribute more to this important area of CSR. | Gender equality, due to the nature of the services provided by this company, the female staff is minimal, but they have equal opportunities for the deployment of all their potential, which is a strength. |
| Considering the two groups of interest identified by the company, in the case of employees, all complaints and suggestions are addressed and channeled. In the case of customers, complaints and suggestions related to the quality and safety of the service are addressed. | There is a system of sanctions and disciplinary measures known to all staff and it is properly applied, which is alarming the number of sanctions in the last three years: as of 2011 number of sanctions 233; as of 2012 number of sanctions 241; as of 2013 number of sanctions 258, the trend has been increasing. |
| The company established a special program to hire personnel with disabilities, in order to comply with the National Plan, in C&S SEPRIV CIA. LTDA. Northwestern Esmeraldas District 3% of the company's personnel are classified as disabled. Of course, these limitations are very low in percentage terms, which means that these workers can carry out their activities normally. | The company does not have a system for evaluating employee satisfaction, which limits the availability of the necessary information on their problems, needs, expectations and aspirations for decision making in favor of seeking optimal solutions. This limits the company's high level of social responsibility. |
| | Only safety is included in the company's training program |

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| | because it is indispensable for the service provided. The need to offer knowledge to the personnel on how the company's relations with its natural and social environment should be. |
| | The company C&S SEPRIV CIA. LTDA has not certified any of the three Management Systems (Quality/ISO 9001, Environment/ISO 14001, Risk Prevention/OHSAS 18001). Environment/ISO 14001, Risk Prevention/OHSAS 18001). This means that in terms of quality, environmental conservation, and minimizing occupational risks, the company must work hard to raise its CSR level. |

Source: Own elaboration

*Results of the survey applied to all the personnel of C&S SEPRIV CIA LTDA.*

| Ask | Quantitative data | Qualitative analysis |
|---|---|---|
| **1. Composition of respondents according to sex.** | 96% men<br>4% women | The male gender is predominant, and this responds to the characteristics of the service |

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| | | provided by this company. |
| **2. Composition of respondents according to age range.** | 32.37% 20 to 30 years<br>64.43% 31 to 40 years old<br>3.20% 41 to 60 years | The company's staff is relatively young, as 96.90% of the total is between 20 and 40 years old. |
| **3. Educational level of respondents.** | 3.53% primary<br>93.91% secondary<br>1.92% technical<br>0.64% third level<br>No fourth level | Most of them have a high school level, which indicates that the level of education of the employees is low. |
| **4. What elements does Corporate Social Responsibility include?** | 4.9% responded<br>95.1% did not respond | The lack of knowledge on the subject is unquestionable. |
| **5. Have you received training on CSR in the company?** | 100% answered NO | This means that there is no training action on the subject. The company's training program only includes the topic of safety. |
| **6. Importance given to CSR by employees** | 10% is important<br>4% is not important<br>86% did not respond | The fact that there is almost total ignorance of CSR in the company means that there are no training activities in this area. |
| **7. Evaluation of your company's CSR level** | 9.94% evaluated it (out of 31 6.46% (2) High;22.58% (7) | The majority of those who evaluated the process consider |

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|---|---|---|
| | Medium;70.96(22) Low. 90.06% did not evaluate it | the level of CSR in the selected entity to be low. |
| **a. Factors that influence the low level of CSR in the company.** | Of the 29 who evaluated medium and low, 79.32% consider: 79.32% Insufficient knowledge 20.68% Low level of education of employees | Both are factors that limit this process in the company. |
| **b. Suggestion to improve Social Responsibility in your company.** | Of the 29 who evaluated suggest: 91% training courses 9% improve the selection process | Evidently, the two proposals are recommendations that are in line with the problems detected. |

Source: Own elaboration

As a result of the quantitative and qualitative analysis it is possible to identify the problems that negatively affect the social responsibility of the company C&S SEPRIV CIA. LTDA, the company must consider its current situation and evaluate not only the negative aspects recognized, but also the positive aspects to enhance it.

The logic of the methodology to be followed to draw up the action plan is based on what is established by the standards as a guide for companies to act in a socially responsible manner. (ISO 26000, 2010) as a guide for companies to act in a socially responsible manner.

By virtue of what was studied, strictly following the methodology described above, the Action Plan was prepared, following step by step what was described above.

STEP 1: Define the company's CSR objectives.

STEP 2: Identify the actions associated with meeting the objectives.

STEP 3: Prioritization of actions.

STEP 4: Define responsibility and compliance deadlines in the actions.

**Table 4.** Step 1: Specific objectives associated with the weaknesses of the company C&S SEPRIV CIA. LTDA.

| PROBLEMS | SPECIFIC OBJECTIVES |
|---|---|
| **-The company's stakeholders have not been fully identified.** | - Identify all stakeholders within the company's sphere of action. |
| **- Dialogue mechanisms for interacting with the social environment are limited.** | - Design dialogue mechanisms to interact with the social environment. |
| **- The company's cooperation with local social activities is insufficient.** | - Improve the company's cooperation with local social activities. |
| **- There is limited registration and attention to complaints and suggestions from local stakeholders regarding the company's social performance.** | - Expand and strengthen the registration and attention to complaints and suggestions from local stakeholders regarding the company's social performance. |
| **- The personnel selection process does not always guarantee compliance with the suitability requirement.** | - Ensure that the personnel selection process always complies with the suitability requirement. |

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| **- The personnel promotion process does not always guarantee compliance with the suitability requirement.** | -Ensure that the personnel promotion process always complies with the suitability requirement. |
| **- The level of employee satisfaction is not evaluated.** | -Evaluate the level of employee satisfaction. |
| **- The company's training program does not include topics as important for CSR as occupational risk prevention, good environmental practices and quality management.** | - Include CSR issues in the company's training program. |
| **-The company is not certified in any of the three Business Management Systems: Quality, Environment and Occupational Risk Prevention.** | Create conditions to certify the Quality Management Systems (QMS), Environmental Management Systems (EMS), and the Occupational Risk Prevention System (OHS). |
| **- Low level of education of the employees of C&S SEPRIV CIA LTDA.** | -To raise the educational level of the employees of C&S SEPRIV CIA LTDA. |
| **- Limited employee knowledge of CSR as a process.** | - Raise the level of employee awareness of CSR as a process. |
| **- There are no information mechanisms for the client to compare the characteristics of the service offered by the** | -To design information mechanisms so that the customer can compare the characteristics of the service |

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| **company with those available in the market.** | offered by the company and those found in the market. |
| **- The company's technology is not advanced.** | -Make investments to change technology. |
| **- The scope of the system for evaluating and monitoring the level of customer satisfaction is insufficient.** | - Expand the scope of the system for evaluating and monitoring the level of customer satisfaction. |
| **- The scope of attention to customer complaints is limited.** | - Expand the scope of attention to customer complaints. |
| **- There is no system in place to collect and evaluate customer feedback.** | - Design a system to collect and evaluate customer feedback. |
| **- There is limited advertising of the services provided by the company.** | - Improve publicity about the services provided by the company to the customer. |
| **- The quality of customer service is average.** | - Improve the quality of customer service. |

Source: Own elaboration

**Table 5.** *Step 2: Actions associated with the achievement of objectives*

| PROBLEMS | SCOPE OF WORK | SPECIFIC OBJECTIVES | ACTIONS |
|---|---|---|---|

| | | | |
|---|---|---|---|
| **-The company's stakeholders have not been fully identified.** | Social environment. | - Identify all stakeholders within the company's sphere of action. | -Conduct a study on the stakeholders within the company's sphere of action.<br><br>- Prioritize the most important groups for the company. |
| **- Dialogue mechanisms for interacting with the social environment are limited.** | Social environment. | -Design dialogue mechanisms to interact with the social environment. | -To know and incorporate the expectations and needs of the identified stakeholders in the management of the company. |
| **- The company's cooperation with local social activities is insufficient.** | Social environment. | - Improve the company's cooperation with local social activities. | -Design an annual cooperation program, which includes the local social activities to be carried out by the company. |
| **- There is limited registration and attention to complaints and suggestions from local stakeholders regarding the company's social performance.** | Social environment. | - Expand and strengthen the registration and attention to complaints and suggestions from local stakeholders regarding the company's social performance. | -Establish simple and accessible communication channels for the entire local population to address their complaints and suggestions. |

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| **- The personnel selection process does not always guarantee compliance with the suitability requirement.** | Human Talent Management. | - Ensure that the personnel selection process always complies with the suitability requirement. | -Formalize the personnel selection process by explicitly introducing suitability criteria. |
| **- The personnel promotion process does not always guarantee compliance with the suitability requirement.** | Human Talent Management. | -Ensure that the personnel promotion process always complies with the suitability requirement. | -Formalize the personnel selection process by explicitly introducing suitability criteria. |
| **- The level of employee satisfaction is not evaluated.** | Human Talent Management. | -Evaluate the level of employee satisfaction. | - Develop surveys to assess the level of employee satisfaction.<br><br>-Systematically apply surveys to evaluate the level of employee satisfaction. |
| **-The company's training program does not include topics as important for CSR as occupational risk prevention,** | Human Talent Management. | - Include CSR issues in the company's training program. | -Design CSR training courses.<br><br>Hire specialized personnel to teach courses on CSR-related topics. |

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| **good environmental practices and quality management.** | | | |
| **-The company is not certified in any of the three Business Management Systems: Quality, Environment and Occupational Risk Prevention.** | MA/Quality/Occupational Health and Safety. | Create conditions to certify the Quality Management Systems (QMS), Environmental Management Systems (EMS), and the Occupational Risk Prevention System (OHS). | -Hire a specialist for the design and implementation of the QMS, EMS, SPRL. |
| **- Low level of education of the employees of C&S SEPRIV CIA LTDA.** | Human Talent Management. | -To raise the educational level of the employees of C&S SEPRIV CIA LTDA. | To design a leveling course for the employees of C&S SEPRIV CIA LTDA. |
| **- Limited employee knowledge of CSR as a process.** | Human Talent Management. | - Raise the level of employee awareness of CSR as a process. | - Design CSR training courses.<br><br>Hire specialized personnel to teach courses on CSR-related topics. |
| **- The company's technology is not advanced.** | Administrative. | -Make investments to change technology. | - Allocate, from the budget, an item for the change of technology.<br><br>Establish a schedule for the |

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| | | | execution of activities to ensure that the planned investments are carried out.<br><br>-Quarterly monitoring of the execution of planned investments. |
| **- There are no information mechanisms for the client to compare the characteristics of the service offered by the company with those available in the market.** | Clients. | -To design information mechanisms so that the customer can compare the characteristics of the service offered by the company and those found in the market. | -Conduct studies on the characteristics of the service provided by the company and found in the market.<br><br>-Prepare materials to disseminate this information. |
| **- The scope of the system for evaluating and monitoring the level of customer satisfaction is insufficient.** | Clients. | -Expand the scope of the system for evaluating and monitoring the level of customer satisfaction. | - Incorporate permanently to the evaluation and follow-up system of the level of customer satisfaction: safety in use, post-service, environmental and social aspects. |
| **- The scope of attention to customer complaints is limited.** | Clients. | - Expand the scope of attention to customer complaints. | - Permanently incorporate post-service to the customer's complaints. |

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| **- There is no system in place to collect and evaluate customer feedback.** | Clients. | - Design a system to collect and evaluate customer feedback. | - Establish communication channels to collect customer suggestions.<br><br>-Establish a mechanism to evaluate customer suggestions. |
| **- There is limited advertising about the services provided by the company to the client.** | Clients. | - Improve publicity about the services provided by the company to the client. | -Develop a marketing strategy to improve advertising. |
| **- The quality of customer service is average.** | Clients. | Improve the quality of customer service. | The seven customer-related actions will make it possible to achieve this objective. |

Source: Own elaboration

**Table 6.** *Step 3: Prioritization of actions for C&S SEPRIV CIA LTDA.*

| ACTIONS | EVALUATION CRITERIA | | | VALUE |
|---|---|---|---|---|
| | COST | FEASIBILITY | IMPORTANCE | |
| **-Conduct a study on the stakeholders within the company's** | 5 | 5 | 5 | |

| | | | | |
|---|---|---|---|---|
| **sphere of action.** | | | | |
| **- Prioritize the most important stakeholders for the company.** | 5 | 5 | 5 | |
| **-To know and incorporate the expectations and needs of the identified stakeholders in the management of the company.** | 5 | 5 | 5 | |
| **-Design and implement an annual cooperation program, which includes the local social activities to be carried out by the company.** | | | 5 | |
| **-Establish simple and accessible communication channels for the entire local population to address their complaints** | | | 5 | |

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|---|---|---|---|
| **and suggestions.** | | | |
| **-Formalize the personnel selection process by explicitly introducing suitability criteria.** | 5 | 5 | 5 |
| **-Formalize the personnel selection process by explicitly introducing suitability criteria.** | 5 | 5 | 5 |
| **- Develop surveys to assess the level of employee satisfaction.** | 5 | 5 | 5 |
| **- Systematically apply surveys to evaluate the level of employee satisfaction.** | 5 | 5 | 5 |
| **-Design CSR training courses.** | 5 | 5 | 5 |

| | | | |
|---|---|---|---|
| **Hire specialized personnel to teach courses on CSR-related topics.** | | | 5 |
| **-Hire a specialist for the design and implementation of the QMS, EMS, SPRL.** | 1 | | 5 |
| **To design a leveling course for the employees of C&S SEPRIV CIA LTDA.** | 5 | 5 | 5 |
| **- Design CSR training courses.** | 5 | 5 | 5 |
| **Hire specialized personnel to teach courses on CSR-related topics.** | | | 5 |
| **- Allocate, from the budget, an item for the change of technology.** | 1 | 1 | 5 |
| **-Establish a schedule for the execution of activities to ensure that the planned** | 1 | 1 | 5 |

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|---|---|---|---|
| **investments are made.** | | | |
| **-Quarterly monitoring of the execution of planned investments.** | 1 | 1 | 5 |
| **-Conduct studies on the characteristics of the service provided by the company and found in the market.** | | | 5 |
| **-Prepare materials to disseminate this information.** | | | 5 |
| **- Incorporate permanently to the evaluation and follow-up system of the customer** | 5 | 5 | 5 |

| | | | | |
|---|---|---|---|---|
| **satisfaction level: safety in use, post-service, environmental and social aspects.** | | | | |
| **- Permanently incorporate post-service to the customer's complaints.** | 5 | 5 | 5 | |
| **- Establish communication channels to collect customer suggestions.** | | | 5 | |
| **-Establish a mechanism to evaluate customer suggestions.** | 5 | 5 | 5 | |
| **-Develop a marketing strategy to improve advertising.** | 1 | | 5 | |

Source: Own elaboration.

The actions were identified and prioritized, and then the action plan was drawn up.

*Step 4: Action plan for C&S SEPRIV CIA LTDA.*

| ACTIONS | COMPLIANCE DATE | RESPONSIBLE | INDICATORS |
|---|---|---|---|
| **-Conduct a study on the stakeholders within the company's sphere of action.** | April/2014. | General Manager. | Study conducted. |
| **-Prioritizing the most important stakeholders for the company.** | May/2014. | General Manager. | Documents of activities carried out with these groups. |
| **-To know and incorporate the expectations and needs of the identified stakeholders in the management of the company.** | Permanent. | General Manager. | -Registration of needs and expectations.<br><br>-Activities carried out to meet the needs and expectations of these groups. |
| **-Formalize the personnel selection process by explicitly introducing suitability criteria.** | Permanent. | Director of the Human Resources Department. | -Practical verification of the worker's qualifications.<br><br>- Curriculum analysis. |

| | | | |
|---|---|---|---|
| **-Formalize the personnel selection process by explicitly introducing suitability criteria.** | Permanent. | Director of the Human Resources Department. | Practical verification of the worker's qualifications.<br><br>- Curriculum analysis |
| **- Develop surveys to assess the level of employee satisfaction.** | April/2014. | Director of the Human Resources Department. | Surveys designed |
| **-Systematically apply surveys to evaluate the level of employee satisfaction.** | Quarterly. | Director of the Human Resources Department. | Surveys applied and results reported. |
| **-Design CSR training courses.** | May/2014. | Director of the Human Resources Department. | Course programs. |
| **- Incorporate permanently to the evaluation and follow-up system of the customer satisfaction level: safety in use, post-service, environmental and social aspects.** | Permanent. | Responsible for the Quality Department. | Record of evaluation and follow-up of the level of customer satisfaction. |
| **- Incorporate permanently to the evaluation and follow-up system of the customer satisfaction level: safety in use, post-service,** | Permanent. | Responsible for the Quality Department. | Record of evaluation and follow-up of the level of customer satisfaction. |

| | | | |
|---|---|---|---|
| **environmental and social aspects.** | | | |
| **- Permanently incorporate post-service to the customer's complaints.** | Permanent. | Quality Department Manager | Record of post-service customer complaints. |
| **-Establish a mechanism to evaluate customer suggestions.** | April/2014. | Quality Department Manager | Record of evaluation of customer suggestions. |

Source: Own elaboration.

The General Management of the company C&S SEPRIV CIA LTDA had to create conditions to carry out all the actions of the proposed Plan in the foreseen time and to manage the economic resources to execute, in the short term, those actions that, due to lack of financing, could not be considered as prioritized.

As mentioned above, stakeholders have not been fully identified, and include other companies, local governments, the community, suppliers, customers and employees.

Consequently, on October 26, 2013, during the term of the President of Ecuador Eco. Rafael Correa Delgado during the (Enlace Ciudadano 345, 2013) demanded an explanation regarding the contract signed in October 2003 until October 8, 2013, between the companies CHEVRON-TEXACO (U.S. multinational company) and SEPRIV, a company of the Institute, with the purpose of providing armed surveillance services to the Ecuadorian Armed Forces. (ISSFA - Instituto de Seguridad Social de Las Fuerzas Armadas Del Ecuador - Empresas En Liquidación, 2014).SEPRIV is also committed to adapt and furnish two villas inside the camp of the Special

Forces Group N°24 "Rayo", to accommodate TEXACO personnel.

With reference to the above, it is necessary to consider that in accordance with the Constitution of the Republic of Ecuador, it states:

Art. 5.- Ecuador is a territory of peace. The establishment of foreign military bases or foreign installations for military purposes shall not be allowed. It is prohibited to cede national military bases to foreign armed or security forces. (National Assembly, 2021).

Within this framework the company C&S SEPRIV CIA LTDA was forced to start its liquidation process as it manifested to its clients "With official letter 0257-SEPRIV-GG of December 27, 2013 signed by the General Manager, Eng. Oscar Paredes, states: "...the operating permit (operation) that was in the process of updating has not been renewed, in accordance with the provisions of Ministerial Agreement No. 3775, of November 8, 2013 signed by Diana Espinoza V., First Delegate Mr. Minister of the Interior, therefore we cannot continue providing private security and surveillance services."

It is possible that the study of Corporate Social Responsibility in C&S SEPRIV CIA LTDA identified the elements that limit CSR and in the implementation of the action plan would have managed to raise its level of CSR and contribute to the local development of Esmeraldas.

Similarly, perhaps having fulfilled its "Vision 2014 to be among the three most profitable integrated security companies in the country, through; trained and committed human capital; meeting high standards of quality, service and competitiveness; providing customers with innovative solutions for security risk management, and promoting Corporate Social Responsibility".

Such is the case (Pacahuala & Medina Gamero, 2022). states that social responsibility (from now on SR) becomes the capacity of institutions and individuals to interact with the community, providing them with opportunities for their development and enabling them to improve their quality of life.

Thus, considering that at the national level (Company C&S-SEPRIV CIA. LTDA. | Ekosnegocios, 2014). generated revenues of $13'674,556, a gross profit of $997,356, taxes caused by $363,679 with a profit of 7%; perhaps its contribution to economic and social development would be important specifically in the local development of Esmeraldas.

To illustrate, it is likely that of the security companies that have provided services at the Esmeraldas Refinery, from the point of view of the analysis of socially responsible labor practices C&S SEPRIV CIA LTDA is the best, even more so with the proposed action plan to raise the level of Social Responsibility.

In conclusion, Corporate Social Responsibility constitutes an alternative to improve the efficient performance of the company, to minimize the negative impact on the environment, to reduce labor risks and to contribute to local social development.

It follows from the above that a company with socially responsible conduct ensures that the company's interests are reconciled with the social and environmental surroundings where it carries out its activities, thus contributing to local development.

It has been possible to establish the fundamental problems that limit the social responsibility of the company C&S SEPRIV CIA LTDA are: its limited contribution to the local social development, the labor relations are not totally adequate, evidencing insufficiencies in the management of the company.

To a certain extent (Herrera et al., 2011) relates that if a company in question sees CSR fundamentally as a strategic response capable of generating a competitive advantage, it is likely that the underlying rationality that predominates among its managers is economic-strategic, and that their ideas about the role of their organization in society are limited to the narrow conception of profit maximization.

From the above, it can be deduced that the implementation of the proposed Action Plan for the company C&S SEPRIV CIA LTDA would allow to raise its level of social responsibility, and therefore put in equal order of priority the economic objectives of the organization with the social development of Esmeraldas.

The study contributes the methodology of the steps to elaborate the action plan and raise the level of Corporate Social Responsibility, also this publication contributes for the scientific research of students and teachers as a text to be commented. As it mentions (Oca; et al., 2022). that the use of bibliographic databases are inevitable in the university processes of research and innovation transformation.

## References

Alvarado Herrera, A., & Schlesinger Díaz, M. W. (2008). Dimensionality of Perceived Corporate Social Responsibility and Its Effects on Image and Reputation: An Approach from the Carroll Model. *Estudios Gerenciales*, *24*(108), 37-59. https://doi.org/10.1016/s0123-5923(08)70043-3

Amato, C. N., Buraschi, M., & Peretti, M. F. (2016). Orientation of entrepreneurs in Córdoba-Argentina towards sustainability and corporate social responsibility: Identification of variables associated with each construct. *Contaduria y Administracion*, *61*(1), 84-105. https://doi.org/10.1016/j.cya.2015.10.001

National Assembly (2021). Constitution of the Republic of Ecuador. *Iusrectusecart*, *449*, 1-219. https://bde.fin.ec/wp-content/uploads/2021/02/Constitucionultimodif25enero2021.pdf

Benito Hernández, S., & Esteban Sánchez, P. (2012). The influence of social responsibility policies and membership in cooperative networks on the relational and structural capital of microenterprises. *European Research in Management and Business Economics*, *18*(2), 166-176. https://doi.org/10.1016/S1135-2523(12)70007-2.

C&S SEPRIV CIA. LTDA. (2012). *(172) SEPRIV - YouTube*. https://www.youtube.com/watch?v=M-4Xd3ZPYjI&t=305s

Camacho Solís, J. I. (2015). Las Normas De Responsabilidad Social. Su Dimensión En El Ámbito Laboral De Las Empresas. *Revista Latinoamericana de Derecho Social*, *20*, 3-29. https://doi.org/10.1016/j.rlds.2015.06.001.

https://doi.org/10.1016/j.rlds.2015.06.001

Capron, M. (2016). Iso 26000. *Dictionnaire Critique de La RSE*, 262-266. https://doi.org/10.4000/books.septentrion.6571.

De Oliveira Filho, M. L., & Abadía, J. M. M. M. (2013). Petrobras versus Repsol financial economic performance and corporate social responsibility. *Accounting and Management*, *58*(1), 131-167. https://doi.org/10.1016/s0186-1042(13)71201-4.

Ecuador, S. N. de P. (2021). *Plan de Creación de Oportunidades 2021-2025*.

*Company C&S- SEPRIV CIA. LTDA. | Ekosnegocios*. (2014). https://www.ekosnegocios.com/empresa/cs-sepriv-cia-ltda

*Enlace Ciudadano 345*. (2013). https://www.youtube.com/watch?v=evZYe9feRhw

Feldman, P. M., & Reficco, E. (2015). Impact of Corporate Social Responsibility on purchasing behavior and willingness to pay by Bogotá consumers. *Estudios Gerenciales*, *31*(137), 373-382. https://doi.org/10.1016/j.estger.2015.10.001

Gallardo-Vázquez, D., Sánchez-Hernández, M. I., & Corchuelo-Martínez-Azúa, M. B. (2013). Validation of a measurement scale for the relationship between the orientation to corporate social responsibility and other business strategic variables. *Revista de Contabilidad-Spanish Accounting Review*, *16*(1), 11-23. https://doi.org/10.1016/S1138-4891(13)70002-5.

González Molina, R. I. (2016). Review "History or Ideology, a transcendental without a subject." In *Economía Informa* (Vol. 399, pp. 88-123). https://doi.org/10.1016/j.ecin.2016.08.007

Herrera, A. A., Bignéalcañiz, E., & Pérez, R. C. (2011). Theoretical perspectives for studying corporate social responsibility: A rationality-based classification. *Estudios Gerenciales*, *27*(118), 115-137.

https://doi.org/10.1016/S0123-5923(11)70149-8.

Herrera Madueño, J., Larrán Jorge, M., Lechuga Sancho, M. P., & Martínez-Martínez, D. (2015). The evolution of corporate social responsibility in small and medium enterprises literature as a research discipline. *European Journal of Management and Business Economics*, *24*(2), 117-128. https://doi.org/10.1016/j.redee.2014.06.001. https://doi.org/10.1016/j.redee.2014.06.001

ISO 26000 (2010). ISO 26000. Guide to social responsibility. *ISO Central Secretariat In Geneva, Switzerland, As Official Translation In Spanish*, *2010,* 121. www.iso.org. www.iso.org

*ISSFA - Instituto de Seguridad Social de las Fuerzas Armadas del Ecuador - Empresas en liquidación*. (2014). https://www.issfa.mil.ec/conozcanos/empresas/empresas-en-desinversión-y-liquidación/empresas-en-liquidación.html

Kolb, R. W. (2018). Iso 26000. *The SAGE Encyclopedia of Business Ethics and Society*. https://doi.org/10.4135/9781483381503.n648

Lennan, M. L. F. Mac, Semensato, B. I., & Oliva, F. L. (2015). Responsabilidade Social Empresarial: Classificação Das Instituições De Ensino Superior Em Reativas Ou Estratégicas Sob a Ótica Da Governança Corporativa. *Revista de Gestão*, *22*(4), 457-472. https://doi.org/10.5700/rege572. https://doi.org/10.5700/rege572

López Salazar, A., Ojeda Hidalgo, J. F., & Ríos Manríquez, M. (2017). The corporate social responsibility from the perception of human capital. A case study. *Revista de Contabilidad-Spanish Accounting Review*, *20*(1), 36-46. https://doi.org/10.1016/j.rcsar.2016.01.001

Mendizábal Bermúdez, G. (2013). Analysis of corporate liability in Mexico vis-à-vis workers. *Revista Latinoamericana de Derecho Social*, *16*, 123-145. https://doi.org/10.1016/s1870-4670(13)71965-1.

Oca;, M. de, Barros, C., & Castillo, S. (2022). Research methodology in entrepreneurship: A strategy for the scientific production of university teachers. *Revista de Ciencias Sociales*, *XXVIII*(2). https://doi.org/10.31876/rcs.v28i2.37945. https://doi.org/10.31876/rcs.v28i2.37945.

Olarte-Mejía, D. V., & Ríos-Osorio, L. A. (2015). Social responsibility approaches and strategies implemented in Higher Education Institutions. A systematic review of the scientific literature of the last 10 years. *Revista de La Educacion Superior*, *44*(175), 19-40. https://doi.org/10.1016/j.resu.2015.10.001. https://doi.org/10.1016/j.resu.2015.10.001

Pacahuala, E. R., & Medina Gamero, A. (2022). COVID-19 and social responsibility: Is it a health issue? In *Atencion Primaria* (Vol. 54, Issue 1, p. 102168). The Author(s). https://doi.org/10.1016/j.aprim.2021.102168

Salazar, E., Castillo, M., Santander, E., & Alcivar, J. (2022). Socioeconomic context of underemployment in the Esmeraldas-Ecuador canton. *Revista de Ciencias Sociales*, *Esp. issue*. *https://doi*.org/10.31876/rcs.v28i.38158

Saldarriaga Ríos, J. G. (2013). Social responsibility and knowledge management as strategies of human management. *Estudios Gerenciales*, *29*(126), 110-117. https://doi.org/10.1016/S0123-5923(13)70026-3.

Salgado, P. M., & Hernández, P. G. (2007). Social responsibility in companies in the toluca valley (mexico). an exploratory study. *Estudios Gerenciales*, *23*(102), 119-135. https://doi.org/10.1016/s0123-5923(07)70005-0.

World Economic Forum (1999). *1999 - The UN Global Compact - Building an International Organization for Public-Private Cooperation*. https://widgets.weforum.org/history/1999.html

# Perceptions of writing and academic performance in incoming university students

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## Introduction

Upon entering higher education, young university students are faced with a new educational scenario in which it is essential to insert themselves as soon as possible into the discursive community of which they seek to be a part. This entails recognizing genres specific to their disciplinary area, managing the vocabulary of their field of study and producing authentic texts based on the development of the knowledge acquired throughout their education (Lu et al., 2021). The complex writing process is new for many of them; however, adaptation to this new discursive community must be rapid, since writing academic texts will be part of their professional future, regardless of the area in which they develop.

In addition to the above, the perceptions about writing held by students entering university are usually quite superficial, as they are often unaware of or leave in the background the epistemic nature of writing (Vine-Jara, 2020; Gaeta et al., 2020). This can be explained by the fact that the writing challenges offered by their university education are conceived as a quasi-school and normative activity, which does not contribute to the development they need to become professionals (Cervantes, 2016).

One of the reasons for this phenomenon is that the vast majority of young university students still do not recognize themselves as writers: they do not understand, evaluate, synthesize or compose information. In addition to the above, the revision stage usually focuses on spelling and writing problems, when the most important thing is to recognize whether they are conveying the ideas with which they really feel identified (Castelló et al., 2011). This explains why many scholars, mainly from educational psychology, have highlighted the importance of knowing the conceptions that students have about the phenomenon of writing (Carlino, 2006; Vine-Jara, 2020). And the premise seems quite clear: it is necessary to know how they conceive it in order to make pedagogical decisions that will help them develop their communicative competencies.

In addition to the above, the specialized literature has identified several obstacles that students face when writing at university: lack of pedagogical and institutional support, lack of tools to deal with blockages or procrastination, and lack of knowledge that would allow them to systematize the writing process (Gülay and Ungan, 2021).

Being in front of a blank page is a situation that causes nervousness in the writer, especially in those who are inexperienced. The blocking or procrastination at the moment of writing is a problem that arises, among other aspects, because it is not clear which is the approach with which the topic of the text will be approached or with which subtopic could be started, which causes the search for information to extend too much and that, at the moment of the delivery of the text, the students do nothing more than replicate the ideas of the authors of their research. This paralyzing anguish, which shows insecurity, could be worked on from the planning of the writing, where the research is categorized from the objectives of the text (Carlino, 2006).

Despite the problems that constantly arise at the moment of writing, it is necessary to recognize the functionality of writing in all stages of a university student. This is key if we consider that, when writing an academic text, the student can integrate information acquired in different situations, he/she needs to adapt to the rhetorical situation demanded and to opt for a mixed position between reader and writer (Castelló et al., 2011), constantly nourishing him/herself with new ideas and learning, which allows him/her to validate him/herself not only in his/her environment but also as a professional (Marín, 2015).

Clerici et al. (2015) state that the abrupt change, in many cases, from the identity as thinkers and analyzers of a text, has a negative impact on the predisposition that students have towards the writing of academic texts. This is due to the fact that, from this point on, they not only have to acquire new linguistic skills, but also, on many occasions, they face the new educational scenario unaccompanied, questioning the importance of not having acquired this prior knowledge beforehand. This context, which presents cognitive challenges different from those offered in secondary education, is not characterized by special or specific valuing of the student's effort, since for this case the most important thing is that the skill is developed, this being a key to success (Clerici et al., 2015).

From the pedagogical point of view, a systematic accompaniment, which allows the development of metacognitive strategies in students, becomes fundamental. As Georghiades (cited in Campo et al., 2016) points out, these reflections are based on a constant self-regulation that is characterized by being unstable, modifiable and dependent on the maturation of the individual, so it is understood that, regardless of the predisposition, age or content of the process, the student can always be molded to develop a writing, based on his or her formative needs (Campo et al., 2016).

The conception of writing as a process and the permanent development of writing challenges that promote the execution of each of these stages through metacognitive strategies should be the starting point of university education. Therefore, it is necessary to promote writing challenges that address each of the three basic stages of the writing process: planning, when the visualization of the macrostructure is key; writing strategies, when efforts are focused on the microstructure; and finally, revision strategies, a stage of comparison and evaluation of the initial objectives with the final product (Caldera & Bermúdez, 2007).

Among the research that has been carried out in Latin America in relation to writing in the university is the work of Martínez and Astudillo (2021) who, through the design and implementation of a didactic sequence, seek to strengthen disciplinary content on 'communication', while contributing to the reading and writing of their students, with emphasis on the epistemic value of writing (Martínez and Astudillo, 2021). Another successful experience carried out in Latin American classrooms has been that of Morales and Perdomo (2020), an experience that is situated in a more specialized field of training, since it aims at developing scientific writing in dental students. To this end, through systematic monitoring during an annual course, teachers worked on skills related to critical reading, methodological aspects and the conventions of academic genres, which allowed them to strengthen their academic skills and increase their interest in the scientific world.

Although much has been written in recent years in the field of academic literacy, the need to contribute to the training of future professionals who are faced with the challenge of joining academic communities remains. In this sense, the present research seeks to contribute through an analysis of the relationship between conceptions about writing of incoming college students and their academic performance in a communicative skills course Kempenaar and Murray, (2019). With this, and on the basis of the widely studied relationship between literacy and academic performance, we seek to deepen in those subaspects of language teaching that may have a greater impact on academic success and, thanks to this, to promote instances of teacher accompaniment that manage to positively impact the development of the communicative skills of new university students. The present research is described as quantitative, cross-sectional and non-experimental, and its objective is to analyze the relationship between the conceptions about writing of new university students and their academic performance in a communicative skills course.

A total of 154 university students belonging to 4 sections of the Communication Skills (CS) course taught at a private Chilean university were invited to participate in the research. Of the total, the participation of 53 students who did not complete the questionnaire, who were taking the course for the second time, or who dropped out of their academic semester, was discarded. Thus, the sample consisted of 101 students between 17 and 22 years of age, studying in different fields of knowledge: Law, Chemistry and Pharmacy, Astronomy, Advertising, Architecture, Costume Design and Engineering Physics.

In order to know the perceptions about the writing process, the questionnaire designed by Vine-Jara (2020) was applied, which considers five dimensions: planning, textualization, revision, postponement of the beginning of writing and attitudes towards writing. In general terms, the test is made up of 36 questions whose answers are organized on a 5-point Likert scale (from "strongly disagree" to "strongly agree"). This questionnaire has been chosen because it allows us to know the students' practices from the processual point of view of writing, it has been applied to groups of university students and, in addition, we have worked with participants from Chilean institutions.

First, the questionnaire was adapted to a digital format to be applied through Google Forms ®, considering that, due to the health crisis, the Communication Skills courses continue to be taught virtually. Then, once the responses and the respective informed consent were available, the data were processed using the SPSS statistical program. Subsequently, once the course was completed, the average grades of each participant were taken and the relationship between these variables was investigated.

As an exclusion criterion, we chose not to consider the data of those students who a) did not adequately complete the questionnaire, b) were not new students entering the university, and c) did not complete the course.

This section is organized as follows: first, descriptive statistics on both variables analyzed are presented, followed by the correlation between conceptions about writing of incoming college students and their academic performance in the course Communicative Skills.

The average performance of the course was quite high (5.9 out of 7), with a very low standard deviation (SD). This can be explained by the fact that the transversal courses oriented towards the development of communicative skills in the university usually have a theoretical-practical character, characterized by a series of reading and writing challenges that have permanent accompaniment and that allow the student to build his/her grade in a processual way (Oyarzún and Valdés-León, 2019).

With regard to the dimensions of the questionnaire - planning, textualization, revision, procrastination and attitudes - there is a tendency towards very centralized means (close to 3) and a fairly contained SD, with two exceptions: 'procrastination' and 'attitudes' (Table 2). This difference can be attributed to external phenomena, such as low student motivation in the face of transversal courses or the incidence of the health crisis in the formative development of the students.The processes of academic literacy and the problems faced by university students when inserting themselves into a new discursive culture have been widely studied during the last decades (Valenzuela, 2018; Oyarzún et al., 2022; Valdés-León et al., 2022). However, the challenge of accompanying students throughout their formative process is a permanent task, which has taken on new edges in the healthcare scenario in which we still find ourselves.

In this sense, and considering that the context in which academic literacy practices have developed in recent years has had to adapt to a new educational scenario, it seems interesting to contrast the results obtained in this work with what has been found in other research. Thus, for example, Vine-Jara (2020) carried out an investigation in which she compared the perceptions of the writing process of university students in the areas of Engineering and Translation. In this sense, the results offered by the researcher on Translation students are close to those we found in our informants, which is perhaps due to the predominance of students from the Humanities area (+75% correspond to Law students).

What was mentioned in the previous paragraph has a pedagogical implication that we find interesting when designing cross-cutting communication skills courses, which is related to the profile of the students. Indeed, the most common scenario in Chilean universities is that these courses are offered for students from different areas of study, so it may be the case that in one section there is a predominance of science students and, in another, humanities students, to give an example. Thus, if it is observed in the specialized literature that conceptions of writing differ from one discipline to the other, it seems necessary to question the staticity of the curricula. From our perspective, it becomes imperative that the designs have a certain flexibility that allows teachers, based on an adequate diagnosis (e.g., Muñoz and Pérez, 2021), to make pedagogical decisions oriented to their particular audiences.

Regarding the relationship between academic performance and writing, Clerici et al. (2015) conducted a research in which they investigated this from the results of university students who entered the Faculty of Bromatology of the National University of Entre Ríos, to whom they applied a reading and writing test, and related them to their performance in midterm and final exams. In their work, the authors identified that students "who scored high in reading and writing skills also scored high in academic performance; those who showed a low level in reading and writing skills also scored low in academic performance" (p.60). Along the same lines, our research reports a similar trend, as favorable scores on the conceptions questionnaire tend to be related to good academic performance. Other works that present similar conclusions are those of Uribe-Enciso and Carrillo-García (2014), Cuéllar (2019), Urzúa et al. (2020) and Valdés-León (2021).

However, it is worth noting that our work allowed us to identify that the dimension of writing that seems to have a greater impact on academic performance is planning. Indeed, as expected, 'planning', 'textualization', 'revision' and 'conceptions' are positively linked to the final course grade, while procrastination is negatively linked. However, it is interesting to note that there is a significant correlation between 'planning' and 'final grade', as this justifies the importance of promoting this stage in the writing process. In this regard, the literature indicates that this stage of the process favors content over structure (Figueroa & Simón, 2011), that it is a phase that has a greater impact on the success of writing tasks (Rodríguez, 2009), and that the use of planning strategies allows writing argumentative texts that are better schematized, longer and qualitatively better (Tsiriotakis, 2021).

Finally, it seems necessary to reflect on the postponement of writing. A review of the results in Table 2 shows that this dimension correlates with the year of entry: the more recent the entry, the more the time of writing is postponed. Although this requires further investigation, it seems to us that one of the possible causes may be due to the health crisis that still afflicts us. Indeed, Ramírez-Gil et al. (2021) identified high levels of procrastination in university students during the period of confinement due to the pandemic, which they associate with confinement and excessive use of social networks. Méndez (2021), on the other hand, highlights that not only the postponement of academic responsibilities, but also the stress of a period full of uncertainty at the academic, personal and social levels, have affected the performance of students and professors.

The aim of the work presented here was to analyze the relationship between the conceptions about writing of incoming university students and their academic performance in a communication skills course. For this purpose, a questionnaire was applied to learn about the participants' conceptions of writing and then contrasted with the performance obtained in the course.

Thanks to the above, it was possible to corroborate a widely studied idea, namely, the direct relationship between writing performance and academic achievement. However, the results obtained allowed us to go deeper into this relationship and identify which of the sub-aspects of the writing process had the greatest impact on the course grade: planning. Although the results of this study are not generalizable due to the small size of the sample, the finding allows us to open the debate on the importance of promoting writing instances from a processual perspective, on the one hand, and strengthening the strategies specifically used at the time of planning, on the other.

Finally, the results related to writing procrastination highlight the importance of developing strategies in students that allow them to confront obstacles such as blocking or procrastination, strategies that can improve not only the development of communicative competencies, but also academic performance.

## References

Caldera, R., & Bermúdez, A. (2007). Academic literacy: text comprehension and production. Educere, 11(37), 247-255. https://www.redalyc.org/articulo.oa?id=35603710

Campo, K., Escorcia, D., Moreno, M., & Palacio, J. (2016). Metacognition, writing and academic performance in Colombian and French university students. Avances en Psicología Latinoamericana, 34 (2), 233-255. http://dx.doi.org/10.12804/apl34.2.2016.03.

Carlino, P. (2006). Conceptions and ways of teaching academic writing. A contrastive study. Signo & Seña, 16, 71-117.

Castelló, M., Bañales, G., & Vega, N. A. (2011). Reading multiple documents to write academic texts at university: or how to learn to read and write in the language of disciplines. Pro-Posições, 22, 97-114.

Cervantes, M. R. (2015). Academic writing processes. An approach with university students. Mexico: Universidad Autónoma de Aguascalientes.

Clerici, C., Monteverde, A. C., & Fernández, A. (2015). Reading, writing and academic performance in university entrants. Ciencia, Docencia y Tecnología, 26(50), 35-70. https://www.redalyc.org/pdf/145/14538571002.pdf. https://www.redalyc.org/pdf/145/14538571002.pdf

Cuellar, E. Q. (2019). Relationship between academic performance and literacy in college students. Advances in scientific research, 1(1), 38-40.

Figueroa, R. A., & Simón, J. R. (2011). Planning, writing and revising, a methodology for written composition: an experience with students of the Instituto Pedagógico de Caracas (IPC). Revista de investigación, 35(73), 119-148.

Gaeta, M., Zanotto, M., & González-Ocampo, G. (2020). Conceptions of academic writing in medical students. IE Revista de Investigación Educativa de la REDIECH, 11, 1-17.

Gülay, E., & Ungan, S. (2021). Development of Academic Writing Block Scale (AWBS): A Validity and Reliability Study. Participatory Educational Research, 9(2), 178-198. https://doi.org/10.17275/per.22.35.9.2. https://doi.org/10.17275/per.22.35.9.2

Kempenaar, L., & Murray, R. (2019). Widening access to writing support: beliefs about the writing process are key. Journal of Further and Higher Education, 43(8), 1109-1119. https://doi.org/10.1080/0309877X.2018.1450964

Lu, X., Casal, J. E., & Liu, Y. (2021). Towards the synergy of genre-and corpus-based approaches to academic writing research and pedagogy. International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT), 11(1), 59-71.

Marín, M. (2015). Writing scientific and academic texts (1st ed.). Fondo de Cultura Económica.

Martínez, F., & Astudillo, J.. (2021). Undergraduate academic literacy through a didactic sequence based on the Numerical Content Scheme. CPU-e, Revista de Investigación Educativa, (32), 7-32. https://doi.org/10.25009/cpue.v0i32.2732. https://doi.org/10.25009/cpue.v0i32.2732

Morales, O. A., & de Flores, B. P. (2020). Writing for publication at university: an academic literacy experience with dental students. Educere, 24(78), 267-280.

Muñoz Rodríguez, C. E., & Pérez Álvarez, B. E. (2021). Development of a diagnostic test to measure academic writing skills. Educatio Siglo XXI, 39(1), 131-146. https://doi.org/10.6018/educatio.451751.

Oyarzún, R. & Valdés, G. (2019). Didactic proposal for the development of communicative skills in the university context: an approach to discursive culture in higher education. Aularia 8(1), 1-8. http://hdl.handle.net/10553/114974. http://hdl.handle.net/10553/114974

Ramírez-Gil, Esmeralda, Cuaya-Itzcoatl, Irma Guadalupe, Guzmán-Pimentel, Mayte, & Rojas-Solís, José Luis (2021). Social network addiction and academic procrastination in university students during COVID-19 confinement. Contemporary dilemmas: education, politics, and values, 8(4), 1-19. . https://doi.org/10.46377/dilemas.v8i.2771

Rodríguez, C. (2009). The importance of planning discursive genres in primary and secondary students and the design of writing tasks. Textos de didáctica de la lengua y la literatura, 52, 97-107.

Tsiriotakis, I. K., Spiliotopoulos, V., Grünke, M., & Kokolakis, C. (2021). The Effects of a Cognitive Apprenticeship Model on the Argumentative Texts of EFL Learners. Journal of Education and Learning, 10(5), 63-75.

Uribe-Enciso, O. L., & Carrillo-García, S. (2014). Relationship between literacy, academic performance and student dropout. Entramado, 10(2), 272-285.

Yáñez, R. O., Valdés-León, G., & Gonzalez, P. I. (2022). Genre-based writing in virtual context: a didactic proposal from neuroeducation. Universidad y Sociedad, 14(S3), 666-675. http://hdl.handle.net/10553/115438. http://hdl.handle.net/10553/115438

Valdés-León, G. (2022). Lexical competence and academic writing: learning analytics in a university writing course. Texto Livre, 14. http://hdl.handle.net/10553/111119

Valdés-Léon, G., González Riffo, J., & Molina Olivares, M.(2022). Communicative competence in higher education: towards a comprehensive diagnostic assessment. Logos: Revista De Lingüística, Filosofía Y Literatura, 32(1), 106-119. https://doi.org/10.15443/RL3207

Valenzuela, Á. (2018). Metacognition in academic reading and writing processes: what does the literature tell us? Lenguaje, 46(1), 69-93.

Vine-Jara, A. E. (2020). Academic writing: perceptions of Human Sciences and Engineering Sciences students at a Chilean university. Íkala, Revista de Lenguaje y Cultura, 25(2), 475-491. http://www.doi.org/10.17533/udea.ikala.v25n02a02

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