INFORMATION ABOUT COVID-19 IN THE ECUADORIAN DIGITAL PRESS

La información sobre la COVID-19 en la prensa digital ecuatoriana

Eliza Carolina Vayas Ruiz¹: Technical University of Ambato. Ecuador.
elizacvayasr@uta.edu.ec

Álvaro Jiménez Sánchez: University of Valladolid. Spain.
alvarojs@uva.es

marielagomezpila@gmail.com

How to cite this article:

https://doi.org/10.35669/rcys.2024.14.e341

Funding: This text is part of the project "Risk communication in public health and environmental emergencies".

Abstract

In the year 2020, the presence of a virus in China reconfigured in a different way the roles and interests of the media, which involved a challenge for the media to create clear and reliable information with reliable sources. This paper studies the information management of COVID-19 in the main Ecuadorian digital media: MetroEcuador, El Telégrafo and El Comercio. The objectives are: 1) To describe which journalistic genres were most relevant during the pandemic and their analysis with respect to the information provided; 2) To identify how the information was handled in these digital media; 3) To know the handling of sources and emotional valence of the information issued. The methodology used was the content analysis of 542 front pages, in which 14 variables were analyzed (gender, valence, theme, subject, lead story, protagonists, etc.). The results show the prevalence of the news journalism genre, followed by reportage. There is an interest in official sources. The most relevant topics are society and health, and appear on the front pages of the media with certain characteristics in headlines and body. There are significant

¹ Eliza Carolina Vayas Ruiz: PhD in Communication Sciences, Coordinator of the Operational Research Unit FCJS, Member of the Ibero-American Researchers Network, Coordinator of the Scientific Dissemination Program of the Research Unit of the UTA.
differences in the valences analyzed, since in MetroEcuador negative valences predominate, while in El Comercio and El Telégrafo they are rather positive. These data show that the media did not maintain an equitable management of sources with those important actors in the management of risk communication, such as doctors or experts, polarizing the sources in a certain way.

**Keywords:** Digital press, COVID-19, content analysis, emotional valence, Ecuador, agenda setting, framing.

**Resumen**

En el año 2020 la presencia de un virus en China reconfiguró de una manera diferente los roles e intereses mediáticos, lo que involucró un reto para los medios la creación de información clara, confiable y con fuentes fiables. El presente trabajo estudia el manejo informativo de la COVID-19 en los medios digitales principales ecuatorianos: MetroEcuador, El Telégrafo y El Comercio. Los objetivos planteados son: 1) Describir que géneros periodísticos tuvieron mayor relevancia durante la pandemia y su análisis con respecto a la información proporcionada; 2) Identificar cómo se manejó la información en estos medios digitales; 3) Conocer el manejo de fuentes y valencia emocional de la información emitida. La metodología empleada fue el análisis de contenido de 542 portadas, en las cuales se analizaron 14 variables (género, valencia, tema, entradilla, protagonistas, etc.). Los resultados evidencian la prevalencia del género periodístico noticioso, seguido del reportaje. Se advierte un interés por las fuentes oficiales. Los temas de mayor relevancia son el de sociedad y el de salud, y aparecen en las portadas de los medios con ciertas características en titulares y cuerpo. Existen diferencias significativas en las valencias analizadas, pues en MetroEcuador predomina la negativa, mientras que en El Comercio y en El Telégrafo son más bien positivas. Estos datos demuestran que los medios no mantuvieron un equitativo manejo de fuentes con aquellos actores importantes en el manejo de la comunicación de riesgos, como son médicos o expertos, polarizando de cierta manera las fuentes.

**Palabras clave:** Prensa digital, COVID-19, análisis de contenido, valencia emocional, Ecuador, agenda setting, framing.

**1. INTRODUCTION**

December 2019 in the history of humanity marked the beginning of something unknown, as the emergence of a new virus in a Chinese city (Wuhan) initiated a chain of worldwide events and gave rise to new questions that would influence the relevance of current digital media. Health emergencies faced a new challenge with what the World Health Organization (WHO) would later term COVID-19, ultimately categorizing it as a pandemic on March 11, 2020.

COVID-19 presented an unprecedented challenge for modern communication because what was initially a problem in China rapidly spread worldwide, resulting in diverse opinions, reactions, and even rumors about this new disease.

Given the uncertainty and alarm generated in the community, communication through various media outlets became essential to understand and stay updated on the topic that dominated headlines in both traditional and digital media worldwide. The digitization of information further emphasized the importance of these media outlets during the pandemic, as the immediacy and availability of official sources often led people to turn to social media for information. A notable example was the Twitter page of the World Health Organization (WHO), where constant updates on COVID-19 were provided.
This work focuses on the information, sources, and news transmitted through digital media during the pandemic, as well as the analysis of how information and sources were handled by the analyzed media.

The "two cultures" model explains that science and mass media are disconnected fields. Medical knowledge follows a gradual and strict process, while the journalistic context focuses on speed and capturing public attention. In this sense, information transmission should follow a linear process because it is a crucial resource for guiding people through complex situations and reducing uncertainty (Casero-Ripollés, 2020).

However, in a scenario where a pandemic caused by an unknown virus alarmed state institutions, media outlets, and the public, waiting for definitive data (which implied a lengthy process) was not an option when people's health was at risk (Hallin et al., 2020).

Furthermore, digital technologies brought about changes in the media system. The proliferation of platforms, abundant information, and competition for public interest (Casero-Ripollés, 2018) made people in the midst of a health crisis turn to the media as the closest channel for information on public health. However, this also led to information overload (Focás and Zunino, 2020), which, according to the WHO (2020), weakens the response to health issues and undermines individuals' physical and mental well-being by promoting superficial interests.

Therefore, mediatization, understood as "long-term social and cultural changes related to the increasing presence of the media" (Hjarvard, 2016, p. 38), takes place. It means that processes of alteration in how people relate to each other occur because the media's introduction into public affairs has been increasing. Hence, the influence on society's response to specific information received has also increased because "media outlets position themselves as privileged interlocutors in shaping social reality by bringing topics that need to be informed about closer to their audiences" (Focás and Zunino, 2020, p. 45).

In situations of crisis and insecurity, the interest in seeking information intensifies (Farré, 2005), as was the case with COVID-19, which was labeled a pandemic in March 2020, causing the deaths of hundreds of thousands of people around the world (Tomás-Sábado, 2020). In such scenarios, citizens consider information seeking and news tracking as key activities (Casero-Ripollés, 2020, p. 10).

Consequently, these communicative actors (the media) become "important sources of social amplification (...) either due to their negativity, distortion, sensationalism, dramatization, or exaggeration of issues that, at first, they decontextualize and, later, recontextualize in their informative forms" (Farré, 2005, pp. 109-110).

As a result, the excessive display of data and information related to danger and death began to lead to an overestimation of pandemic risks among the population, causing alarm (Tomás-Sábado, 2020). In this scenario, where communication was limited, the media gained unusual significance, making them stimulating agents of fear (Focás and Zunino, 2020).

Therefore, it is evident that when this emotion spreads, the lack of control intensifies (Kessler and Focás, 2014), resulting in effects that undermine people's trust, turning them into victims at the same time (Farré, 2005).

Thus, the media tend to be responsible for generating unease with the exaggeration and sensationalism they employ in handling information because "individuals do not passively receive
negative discourses about their spaces; they confront them and produce their own reinterpretations" (Kessler and Focás, 2014, p. 142). Consequently, scenarios of crisis began to emerge in digital media, where information coverage's credibility was low (Casero-Ripollés, 2020), as it depended on the sensationalism used by these spokespersons in their reports, increasing distrust in their role (Focás and Zunino, 2020). "In general, Ecuadorian media have lost credibility among a large part of the population" (Mullo-López et al., 2021, p. 148). Therefore, it is necessary to affirm that the media must work to increase the positive estimation of their work, reduce panic, and reignite individuals' interest in public affairs (Casero-Ripollés, 2020).

In this media ecosystem, "media agendas carry a series of attributes that shape information and, in a contradictory process of symbolic dispute, influence the social construction of problems" (Focás and Zunino, 2020, p. 45). This has sometimes even fostered social panic as media outlets construct their news stories with negative components (Mila-Maldonado et al., 2022). Information holds great value for the media, and losing it is not an option (Casado-Gutiérrez et al., 2020). This becomes even more critical in the context of a pandemic where people seek constant updates. However, with numerous media options available, these outlets compete to have their content preferred by audiences, often resorting to polarized news coverage (Masip et al., 2020a). This polarization is characterized by new ways of producing content that require more cognitive effort to discern the information (Barrios-Rubio and Gutiérrez-García, 2022).

In tense health situations, emotional perception increases while cognitive perception decreases, making media influence a significant factor in shaping knowledge in such scenarios. Therefore, it is crucial that responsible media practices are followed when disseminating relevant, well-treated, contextualized, fact-based information, without sensationalism, and that prioritizes the mental health of the population (Segura, 2020).

One of the key elements in media information production is sources, defined as "individuals or groups, organized or not, who have witnessed and have knowledge of the facts that the journalist will eventually turn into news" (Blanco-Castilla, 2004, p. 100). These authorities have the capacity to persuade due to their positions within a particular context (Salaverría et al., 2020). They are an essential tool for generating content from different perspectives that help prepare, guide, and build news stories. However, they can also become an obstacle if there isn't a good and close relationship between them and the media/journalist. This indicates that a media company's agenda also depends on information sources, the personal interests of the journalist, and the company they work for (Muñiz-Zúñiga and Fonseca-Valido, 2017). Government sources tend to dominate, as "in the professional realm, it is known that a journalist's worth is equal to the weight of their agenda, and the sources and their level of knowledge or proximity to the topic determine the value of the information" (Sánchez, 2018, p. 167).

Furthermore, in this extensive media ecosystem, misinformation has been on the rise. It is a term "used in a much broader and unspecific way to refer to a myriad of falsehoods of diverse kinds related to different functions of language, productive practices, intentionality, and scope" (Noain-Sánchez, 2021, p. 2). Misinformation affects people's perception of the media and the news they publish, generating distrust and hindering the reception of relevant information on public issues (Masip et al., 2020b). The phenomenon is driven by the sender's intention to influence and control the recipient, conditioning their actions. There is a clear link between this practice and the media, and misinformation cannot exist without the hidden agenda of the source (Rodríguez-Andrés, 2018).
This scenario requires responses and strategies not only to combat COVID-19 but also to counteract those who seek to intensify confusion and insecurity among people, undermining various social dimensions and destabilizing democracy (Pérez-Curiel and Velasco-Molpeceres, 2020). Therefore, this complex variable needs to be analyzed, much like a disease, from a scientific discipline (Casino, 2022). Since the beginning of the pandemic, distorted content has been presented as news stories and has increased as the COVID-19 health crisis progressed. This understanding highlights that the media inadvertently become vehicles for disseminating deceptive messages that disinformers intend to reach the public (Rodríguez-Andrés, 2018).

Hence, mitigating the effects and the rise of misinformation is necessary, and the media must leverage technological strategies that have been implemented, such as fact-checking, to cultivate quality journalism and provide valuable work to their audiences (Vázquez-Herrero et al., 2019).

2. OBJECTIVES

The general objective of this study is to analyze the news coverage of the COVID-19 pandemic in the digital journalistic media outlets El Comercio, El Metro, and El Telégrafo in Ecuador, which represent media outlets from the Sierra and Costa regions of Ecuador. The specific objectives were as follows: 1) Describe which journalistic genres were most relevant during the pandemic and analyze how they were used to convey information. 2) Identify the approach and management of information in these digital media outlets during the pandemic. 3) Understand how sources were handled and assess the tone and valence of the information disseminated.

3. METHODOLOGY

Content analysis was employed to investigate the front-page news of the Ecuadorian media outlets: El Comercio, El Telégrafo, and El Metro (Diario MetroEcuador). These media outlets were chosen for two reasons: first, they are among the most widely circulated nationally, and second, they represent a geographically heterogeneous sample, with two of them from the Sierra region and the other from the coast (El Telégrafo).

The methodology used was based on Zunino's (2021) study titled "Digital Media and COVID-19: Overinformation, Polarization, and Misinformation." This study involved quantitative analysis of various variables related to the thematic composition of news agendas, the use of information sources, and the differential credibility level that actors received in news coverage. The technique used involved reviewing texts, identifying structures, investigating their composition, form, and how their symbolic functions interact (Zunino, 2021). Additionally, the analysis included the assessment of positive and negative valence in the information (Zunino, 2016). The variables and their investigated categories in this case were as follows:

- Journalistic genre: news, report, editorial, interview, column, report, opinion piece, other.
- Present theme: politics, economy, society, sports, etc.
- Appearance on the front page: yes or no.
- Accompaniment of graphic elements: yes or no.
- Accompaniment of visual elements: yes or no.
- Article size: number of paragraphs.
- Headline size: less than one-quarter of the page width / between one-quarter and half of the page width / more than half and up to three-quarters of the page width / full page width.
Information about COVID-19 in the Ecuadorian digital press

- Headline characteristics: expressive titles (do not provide information about the event) / appealing titles (reference the most striking aspect, sensationalist) / thematic titles (simply announce the topic, do not provide any information).
- Presence of a subheading or lead: yes or no.
- Location: upper half of the page or site / lower half of the page or site.
- Content according to its purpose: inform, entertain, inspire, educate, or action-participation.
- Gender of the byline: male, female, or unknown.
- Protagonists: politicians, testimonials, activists, medical entities, etc.
- Valence: positive, negative, neutral-undefined.

The collection of news was conducted daily, from March 1, 2020, to August 31, 2020, as these 24 weeks provided a broad and, above all, representative sample of the most critical months of the pandemic.

The final sample consisted of 542 news pieces, with the first one presented on the front page distributed as follows:

- **MetroEcuador**: 153 (28.2%).
- **El Comercio**: 224 (41.3%).
- **El Telégrafo**: 165 (30.4%).

Subsequently, the data obtained underwent statistical analysis using SPSS software (version 23 for Windows) to describe and infer relationships between variables and determine possible behaviors. Pearson's Chi-squared test (p < 0.05) was primarily used, and in other cases, one-way ANOVA (post hoc tests of Scheffe or T3 Dunnett based on variance equality) was also employed, with a significance level of 0.05.

4. RESULTS

Below are the descriptive results for the total media sample, followed by the inferential results to determine if there are differences between the three media outlets (chi-square or ANOVA).

4.1. Descriptives

The most frequent journalistic genre is news (63%), followed by reports (23%), and subsequently, the rest of the genres with a percentage of less than 7% each (report, opinion piece, interview, editorial, etc.). Next, we can observe the dominant theme:
Figure 1. *Dominant themes*

![Dominant themes diagram](image)

**Source:** Own elaboration.

Related to all of this, the main purpose of the content is to inform (83% of cases), while the remaining 17% corresponds to other purposes such as entertaining, inspiring, educating, etc.

Regarding the format, in 75% of cases, the most relevant topics appear on the front page, while 25% do not. Additionally, 65% of them are accompanied by graphic elements (35% are not), and 58% by visual elements (42% are not). Another interesting piece of data is that the average number of paragraphs is 7.7 (standard deviation = 4.8).

The following figure shows the characteristics of the headlines:

Figure 2. *Typology of holders.*

![Typology of holders diagram](image)

**Source:** Own elaboration.

Furthermore, 89% of these headlines are located in the upper half of the page or site, and the remaining 11% in the lower half. The size varies between a quarter and half the width of the page (32%), followed by less than a quarter of the page width (25%), and the remaining less than 20% with more than half to three-quarters or the full page width.

Regarding the gender of the byline, 72% are undefined, 17% are women, and the rest are men. Additionally, the main protagonists are often Government Entities (16%) and Social Entities (15%), followed by Testimonies (12%) and Politicians (11%), with smaller percentages for Medical Entities, Activists, Expert-Scientific-Technical, accused, etc. Finally, the following figure shows the percentage of emotional valence types:
4.2. Inferential

The data reveals significant differences between the different media in terms of journalistic genre (p <0.000). While in MetroEcuador, 93% corresponds to News, it is 67% in El Comercio and 30% in El Telégrafo. However, the genre Reportage is 4% in MetroEcuador, 15% in El Comercio, and 50% in El Telégrafo.

The following percentages show the topics addressed and the main purpose of each analyzed medium (p <0.000).

**Table 1. Themes and main purpose of each medium.**

<table>
<thead>
<tr>
<th>Medium</th>
<th>Subject Treated</th>
<th>Main purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Society</td>
<td>Health</td>
</tr>
<tr>
<td>El Telégrafo</td>
<td>51%</td>
<td>10%</td>
</tr>
<tr>
<td>El Comercio</td>
<td>19%</td>
<td>29%</td>
</tr>
<tr>
<td>MetroEcuador</td>
<td>17%</td>
<td>25%</td>
</tr>
</tbody>
</table>

**Source: Own elaboration.**

Regarding the use of various elements, MetroEcuador features on the cover in 100% of cases, while it’s 48% for El Comercio and 89% for El Telégrafo (p <0.000). Furthermore, MetroEcuador employs the highest percentage of graphic and visual elements (92% and 63%, respectively), while El Comercio uses them in 76% and 73%, respectively, and in El Telégrafo, graphic elements appear in 24% and visual elements in 32% (p <0.000). Concerning the number of paragraphs, El Telégrafo has an average of 11, MetroEcuador has 6, and El Comercio has 5, also with significant differences (p <0.000).

Regarding the characteristics of the headlines, MetroEcuador uses expressive titles the most (27% of its cases), while El Comercio tends to use appealing titles more often (46%), and El Telégrafo leans towards thematic titles (47%), with a significance level in the chi-square of 0.006. El Comercio also makes more use of subheadings (60%), as the headlines in El Telégrafo include them in 32% of cases and MetroEcuador in 22% (p <0.000). Concerning the position, El Telégrafo and MetroEcuador have headlines in the upper half of the page or site in over 95% of cases, while El Comercio has them in 77%, with 23% appearing in the lower half (p <0.000). Regarding size,
MetroEcuador's headlines are predominantly full-page width (52% of cases). However, most of the time in El Comercio, headlines are between a quarter and half the width of the page (53%), and in El Telégrafo, they span between more than half and up to three-quarters of the width (43%), also with significance below 0.000.

Regarding the gender of the byline, MetroEcuador and El Telégrafo have an unidentified byline in over 82% of cases, followed by women in 12% of cases. However, El Comercio reduces the unidentified gender byline to 56%, increases women to 24%, and men to 20% (p <0.000). Concerning the protagonists, in MetroEcuador, Social Entities (8%) and Politicians (5%) predominate, while in El Comercio, Government Entities are the main protagonists (18%), followed by Politicians (16%), Social Entities (16%), and Medical Entities (15%). In El Telégrafo, Government Entities are also the main protagonists (27%), followed by Testimonies (24%) and Social Entities (21%), also with statistically significant differences (p <0.000). Finally, the following table shows the distribution of emotional valences (p <0.000).

Table 2. Themes and main purpose of each medium.

<table>
<thead>
<tr>
<th>Medium</th>
<th>Emotional valences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>El Telégrafo</td>
<td>50.3%</td>
</tr>
<tr>
<td>El Comercio</td>
<td>43%</td>
</tr>
<tr>
<td>MetroEcuador</td>
<td>21.6%</td>
</tr>
</tbody>
</table>

Source: Own elaboration.

5. DISCUSSION

This study aimed to analyze the relevance of information regarding COVID-19 in Ecuador's online digital newspapers. Similar studies were conducted in countries like Argentina to investigate the role played by digital media in a health emergency scenario. It was found that in Ecuador, the reality was not significantly different. The thematic agenda was almost homogeneous when it came to writing about the pandemic (Pereyra, 2021).

It was observed that the most demanded journalistic genre was news reporting. This behavior can be explained by the significance of the pandemic topic and the need for information. There was a significant increase in demand for information by the audience about various aspects such as society, health, political involvement, and changes in the economic reality as society adjusted its social routines. It is noted that the news agenda focused on topics that connected with society and the current event, which in this case was the presence of a global-context virus. "Since the beginning of 2020, the media changed their front pages and headlines to cover what is so far the most important news of the 21st century" (Manrique-Grisales, 2020).

It's important to note that in the crafting of headlines, the studied media primarily used thematic or simplifying headlines, as these quickly summarized the news. "They are usually used to headline journalistic texts of little relevance or opinion articles, editorials, generic reports, and, in general, news that only requires indicating the subject they are about" (Zorrilla-Barroso, 1996, p. 160).

The strong emphasis on information sources shows government entities as the main protagonists. This polarization in the media highlights the crisis in the inclusion of scientific communication's social commitment, demonstrating the breakdown in dialogue between the public administration,
the media, and other significant sources of information crucial for combating the pandemic in Ecuador. As Schechter (2004) points out,

We live in an age of media politics ruled not only by politicians but by what turns out to be a mediocracy, a mutual dependency between the media and politicians, a nexus of power in which politicians use media diffusion to shape opinion (p. 38).

In this context, the information disseminated by the media (the newsworthiness product) was largely based on criteria from government entities that represented the bulk of information sources. In this case, the media appeared to offer "a hegemonic interpretation of events considered of interest to society" (Fontana, 2023, p. 18).

The presence of emotional valence regarding positive benefits for the population in the information provided by digital media emphasizes the development of universal values such as freedom, equality, and humanism. It was determined that both El Comercio and El Telégrafo considered news with affirmative emotional aspects to be an important factor in newsworthiness, with a significant prevalence of emotional components. However, there was a notable variation in the case of MetroEcuador, which might seem contradictory at first glance, as the information presented by the outlet depicted harmful effects on the population.

6. CONCLUSIONS

Firstly, it was observed that digital media in Ecuador maintained a homogeneous agenda during the analyzed period. The predominant journalistic genre was news reporting, with a particular focus on topics related to society, and over the course of the pandemic, there was an increasing emphasis on health-related issues as significant aspects of the news. The media focused their reports on what was happening at the moment and its harmful effects on society. This behavior can be justified by the audience's demand for information during times of crisis (Duc-Huynh, 2020; Muñiz y Corduneanu, 2020; Casero-Ripollés, 2020). However, there should be a strengthening of the production of investigative reporting and risk communication to support timely actions.

Secondly, the hegemony of government sources as primary sources (16%) was evident. However, it is essential to understand that the level of importance attributed to these sources has a distinct meaning due to agenda-setting, demonstrating the news coverage that appeared on the front pages. This constitutes a clear example of prioritizing information directed towards hegemonic powers. It should be considered that, in times of crisis like the pandemic, the media, as a social responsibility, should focus their attention on sources of expertise, which in this case would include research institutions, scientists, and medical professionals, with the aim of providing accurate practices and informed actions, which were often lacking in journalistic reports.

Finally, it is worth clarifying, to explain part of the obtained results, that the theme of emotional valence in the news was present in affirmative actions by the media when discussing measures taken regarding the threat and certain hopeful content during moments of crisis. However, negative aspects were also highlighted, such as the excessive reporting of deaths, illnesses, hospital overcrowding, which had adverse effects on the audience, and inconsistencies in government actions related to the procurement and distribution of supplies and medications to combat the pandemic.

Thus, it is hoped that this research has contributed to understanding how some of Ecuador's most prominent media outlets approached one of the most significant events in history.
7. REFERENCES


Vayas-Ruiz, E. C., Jiménez-Sánchez, Á., & Gómez-Pila, M.


**AUTHOR CONTRIBUTIONS, FUNDING AND ACKNOWLEDGEMENTS**

**Conceptualization:** Eliza Carolina Vayas Ruiz and Mariela Gómez Pila. **Methodology:** Eliza Carolina Vayas Ruiz and Mariela Gómez Pila. **Software:** Álvaro Jiménez Sánchez. **Validation:** Eliza Carolina Vayas Ruiz and Álvaro Jiménez Sánchez. **Formal Analysis:** Eliza Carolina Vayas Ruiz and Álvaro Jiménez Sánchez. **Data Curation:** Eliza Carolina Vayas Ruiz and Álvaro Jiménez Sánchez. **Original Draft Preparation:** Eliza Carolina Vayas Ruiz. **Writing - Review and Editing:** Eliza Carolina Vayas Ruiz, Álvaro Jiménez Sánchez, and Mariela Gómez Pila. **Visualization:** Eliza Carolina Vayas Ruiz, Álvaro Jiménez Sánchez, and Mariela Gómez Pila. **Supervision:** Eliza Carolina Vayas Ruiz, Álvaro Jiménez Sánchez, and Mariela Gómez Pila. **Project Administration:** Eliza Carolina Vayas Ruiz. **All authors have read and accepted the published version of the manuscript:** Eliza Carolina Vayas Ruiz, Álvaro Jiménez Sánchez, and Mariela Gómez Pila.

**Funding:** This research is part of the Research and Development Projects 2022 Call from the Research and Development Directorate of UTA. It belongs to the project “Risk Communication in...”

**Acknowledgments:** This text was developed as part of the "RISK COMMUNICATION IN PUBLIC HEALTH AND ENVIRONMENTAL EMERGENCIES" project at the Technical University of Ambato. The authors express their gratitude to the Research and Development Directorate for their technical support in conducting this study.

**AUTHORS**

**Eliza Carolina Vayas Ruiz**
Ph.D. in Communication Sciences, Coordinator of the Research Operational Unit at FCJS, Member of the Iberoamerican Researchers Network, Coordinator of the Scientific Outreach Program at the UTA Research Unit. She has led research projects both with and without funding. She has served as a speaker, both virtually and in-person, in countries such as Spain, Mexico, Colombia, and Cuba. She has coordinated research projects funded in the areas of Communication for Development, Gender-Based Violence, and Health. She has authored publications in prestigious publishers like McGraw Hill and Tecnos, as well as several publications indexed in databases like Latindex and Scopus.

Índice H: 4
Orcid ID: [https://orcid.org/0000-0002-3012-144X](https://orcid.org/0000-0002-3012-144X)
ResearchGate: [https://www.researchgate.net/profile/Vayas-Ruiz](https://www.researchgate.net/profile/Vayas-Ruiz)

**Álvaro Jiménez Sánchez**
He holds a Bachelor's degree in Psychology and a Ph.D. in Communication from the University of Salamanca. Currently, he is a Teaching Researcher at the Department of Audiovisual Communication and Advertising at the University of Valladolid (Spain). He worked for five years at the Technical University of Ambato (Ecuador) in the Communication and Social Work programs. During his time there, he directed several edu-entertainment projects and taught classes in various master's programs related to the film industry and citizenship for social change. Later, he became a lecturer at the University of Salamanca in the Psychology program. His research interests encompass social psychology, cultural studies, entertainment, communication and new technologies, gender studies, and sociology.

Índice H: 6
Orcid ID: [https://orcid.org/0000-0002-4249-8949](https://orcid.org/0000-0002-4249-8949)
Scopus ID: [https://scopus.com/authid/detail.uri?authorId=57217392391](https://scopus.com/authid/detail.uri?authorId=57217392391)
Google Scholar: [https://scholar.google.com/citations?hl=es&user=aaAT6AwAAAAAJ](https://scholar.google.com/citations?hl=es&user=aaAT6AwAAAAJ)
ResearchGate: [www.researchgate.net/profile/Alvaro-Jimenez-Sanchez](www.researchgate.net/profile/Alvaro-Jimenez-Sanchez)

**Mariela Elizabeth Gómez Pila**
Licenciada en Comunicación Social, ha trabajado como asistente de cátedra y como asistente de investigación en varios estudios relacionados con la Comunicación para el Desarrollo y la Educomunicación.

Orcid ID: [https://orcid.org/0009-0007-4685-4465](https://orcid.org/0009-0007-4685-4465)