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Pre-covid goverment communication of spanish-speaking presidents on Twitter

Comunicación gubernamental pre-COVID de los presidentes hispanohablantes en Twitter

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Abstract

This work analyzes the goverment communication and media competence of the presidents of spanishspeaking countries prior to the declaration of a coronavirus pandemic on March 11, 2020 by the WHO. A statement unprecedented in history, but that the media from the previous weeks were already reporting on their Twitter accounts. The general objective was to analyze the government communication and media competence that the presidents of the spanish-speaking countries had the week prior to the declaration of a COVID-19 pandemic, and for this we chose a quantitative research, since this allowed us to analyze data with a method flexible. By mining with advanced data search algorithms on Twitter, we analyzed 7650 tweets from the accounts of the 22 presidents and 21 media outlets, establishing six measurement parameters of the dimensions of media competence: Flesch-Kincaid index, engagement, audiovisual support, link-hashtag index, authenticity index and the building agenda. Despite the WHO and media indicators, we concluded that many of the presidents did not have acceptable political communication and media competence commensurate with the problem addressed.

Keywords

Government communication, media competence, Twitter, spanish-speakers, coronavirus, Covid-19.

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Resumen

El presente trabajo analiza la comunicación gubernamental y competencia mediática de los presidentes de los países hispanohablantes previa a la declaración de pandemia por coronavirus el 11 de marzo de 2020 por la OMS. Una declaración sin precedentes en la historia, pero que los medios de comunicación desde las semanas previas ya estaban informando en sus cuentas de Twitter. El objetivo general fue analizar la comunicación gubernamental y competencia mediática que tuvieron los presidentes de los países hispanohablantes la semana previa a la declaración de pandemia por Covid-19, y para ello elegimos una investigación cuantitativa, ya que esta nos permitió un análisis de datos con un método flexible. Mediante la minería con algoritmos de búsqueda avanzada de datos en Twitter analizamos 7650 tuits de las cuentas de los 22 presidentes y 21 medios de comunicación, estableciendo seis parámetros de medida de las dimensiones de la competencia mediática: índice Flesch-Kincaid, engagement, soporte audiovisual, índice link-hashtag, índice de autenticidad y la agenda building. A pesar de los indicadores de la OMS y los medios de comunicación, llegamos a la conclusión de que muchos de los presidentes no tuvieron una comunicación política y competencia mediática aceptable acorde con el problema abordado.

Palabras clave

Comunicación gubernamental, competencia mediática, Twitter, hispanohablantes, coronavirus, Covid-19.

Introduction

From government communication to communication in times of crisis

At a general level, political communication is that which studies the contradictory and complementary dimensions that are presented in politics, information, and communication in democratic systems (Reyes et al., 2011). Similarly, it studies the interaction and transmission of messages by political parties and citizens or between rulers and the ruled (Reyes et al., 2011). Political communication presents multiple nuances that sometimes tend to be confused with each other, thus it is essential to clarify that the main forms in which it can be presented are government, electoral, crisis, and risk commu-

nication (Riorda, 2011). For this investigative effort, we will focus on government communication and crisis communication.

Government communication, for Canel and Sanders (2011), refers to the objectives, role and communication practices implemented by politicians, executives, and officials of public institutions at the service of a political justification, which is constituted on direct or indirect consent on the part of the citizenship, among which are social groups, business groups, minorities, etc., that seek to influence the government to formulate and implement beneficial policies for society in general, relying on marketing, the mass media, the social networks and other instruments currently offered by the internet. In other words, it is the governmental communication process that seeks to guarantee cohesion, functioning, and diversification of information for political parties, citizens, and the global political system (Molina, 2004).

The most important purpose of government communication in a democratic society is, in theory, to show that the elected leader and his/her cabinet comply with the governance plans proposed in the candidacy, as well as the defense of government interests and the interests of the state above the individuals, under the premise of building an equitable society by making the processes of the public agenda transparent; above all, in moments of tension and crisis, whose definition for us is: an event or a set of these that disturb, hinder or endanger the normality and development of a certain process or state in the social sphere that directly affects the social body and everything that underlies it (public and private sector, interpersonal relations, economy, governance, etc.).

A crisis, in the first instance, generates a feeling of uncertainty, of ignorance regarding the direction that events will take; second, the need arises to intervene, select the correct measures and decide how to apply them as soon as possible (Bauman & Bordoni, 2016). The management of it needs a direction based on evidence for crisis communication (Coombs, 2007), which must be normative, as is its management (Heath, 2010).

To address a crisis, the aspects of its context must be considered: its strengths and weaknesses. There are three generic phases:

- The pre-crisis: Information on the risks that increase the problem is collected, in order to understand it, prepare for and face it (Coombs, 2010).
- Crisis: Based on the compilation, decisions will be made and messages will be created for people (Coombs, 2010), according to the problem. That is, the leaders seek to respond to the crisis effectively.

• The post-crisis: It involves dissecting the crisis management effort, communicating the precise changes to the public, and providing messages to monitor the crisis as necessary (Coombs, 2010), for the prevention of similar problems in the future.

For Coombs (2010), crisis communication is the search for information, its treatment, and transmission to successfully address a difficult situation, whose communicative response must be defined by the way those affected by it feel, what they need to know, what can or cannot be said or done and the possibilities for help (Bonilla et al., 2013).

Consequently, it is very important to have experts examining the data resulting from citizen interaction through social networks —it will not be the entire population, but an important proportion— look for common patterns, compile what is expressed negatively and positively; in some cases, as required by crisis management, segment by regions, taking into account their own needs and the climatic, social and cultural aspects of each one.

Therefore, crisis response strategies must be established to reduce the negative effect and prevent harmful behavioral intentions, and even to repair the reputation (Coombs, 2007) of the government sphere. Also, new communication channels must be opened to take in an orderly and coordinated manner the appropriate communication actions that the situation deserves.

However, responses to a crisis are variable because not all are addressed or have a uniform impact, despite having one element in common: destabilization. Crises produce the emergence of specific audiences and the primacy conceived in advance in each group in conventional communication programs varies (Bonilla et al., 2013).

Therefore, it is necessary to develop a plan that covers each of the categories, trying to minimize risks and negative responses from citizens. In communication in crisis, silence plays a negative role, denotes inexperience, insecurity, and lack of leadership, therefore, it will influence others. Foucault (2002), proposed that the communication itineraries are the support of a node and of centralism of knowledge, since the anchors of power are marked by the game of signs.

Luhmann (1995), synthesized it by referring to the fact that the differentiation of established systems stabilizes the possibilities of reproduction by restricting the conditions of understanding of communication and the suitability of the modes of behavior. Therefore, the way in which the discursive content is transmitted will be decisive in the behavior of the citizen, having a positive impact when they comply with recommendations in the immediacy of the case or negatively generating panic and lack of control.

It should be taken into account that the mass media and social networks disseminate the knowledge of experts and citizens tend to take over portions of the information, incorporating it into their own experiences (Berger & Luckmann, 1996). However, the prominence that social networks have gained as a tool for communication in crisis could make misinformation, during the public health challenge posed by Covid-19, an even more complex phenomenon to deal with (van der Meer et al., 2020), since although social networks act as central elements for the approach to information (Triviño, 2015), they also do the same when it comes to disinformation. The desire to go viral or be a trend, in malicious cases, leads many users to generate and replicate content without reliable and verifiable sources of truthful information. Let us remember that the user is a prosumer, produces and consumes information, occupying a leading role in the paradigm of participatory culture fostered by technological interactivity (Aguaded & Sánchez, 2013) and social networks allow active citizen participation in the construction of new realities present in the information age.

For the treatment of crises through social networks, graphic content is excellent, considering that a large part of the public does not read the texts, but only read the headlines (Catalan-Matamoros et al., 2020). An important aspect to bear in mind is that, in the face of a crisis, the communication strategy must focus on a non-specialized audience and must be explanatorypurposeful. In addition, it is necessary that it be able to provide citizens with a suitable media competence to adequately understand the messages since it is necessary to explain the terminologies and scientific findings that would help calm and assure the population regarding the relevant steps to reduce the virus (Mohamad & Azlan, 2020).

Media competence as an element of communication

A global definition of media competence is the set of skills necessary to live with the media and maintain a positive relationship with them (Gonzálvez-Pérez et al., 2015). The concept of media competence is being rampantly adopted and is in the process of absorbing all the skills in relation to the presence of new cultural environments, socio-political relationships, and communication and information components. All this brings changes in learning, reading, writing, and media expression skills (Garro-Rojas, 2019). In short, media competence is defined as a promoter of giving citizens the capacity and equipping them with the skills to know how to choose and recognize the information disseminated by social media. That is why changes in education are necessary that promote citizenship with more media skills (Delgado-Ponce & Pérez-Rodríguez, 2012).

According to López and Aguaded (2015), for citizens to be trained they must have the necessary skills to transform emotion into reflection and the reverse, therefore, they must be competent and understand the information to use critical reasoning on the communication that they analyze daily; in addition, being able to manufacture communicative elements that incite reflection, that are easily understood and communicatively effective, since it is not something new that the media can drastically influence the opinions and behaviors of young people (Mallia et al., 2020; Cho et al., 2020). For Austin et al. (2020), media competence can empower parents and improve young people, gradually making them perfect the use of the mass media to obtain better information.

It is to be considered that we are in a transitory time, learning to put aside the conditioning, despotism, and exclusivity of collective communication that habituated us to believe in everything we saw and heard without seeking veracity in what was perceived, positioning ourselves as passive citizens, timid at the time to express our responses, since there was no possibility of interaction with the media or other ways in which to express or protest (Orozco-Gómez et al., 2012).

However, despite the foregoing, it is necessary to reaffirm as a negative aspect the universality of disinformation, which endangers democracy and intimidates citizens, through strategic messages that pursue commercial gains and influence present and future proselytizing behaviors (Alcolea-Díaz et al., 2019), hence, new technologies have generated that the nature of traditional communication became involutional for the conglomerate, but effective in the very nature of communication as a collective interpersonal element. However, the new technological horizon has made it easier for citizens to obtain more tools to access information in different ways, causing the use of digital media to change the mode of news production drastically (Hernández-Serrano et al., 2017).

The exposure and prolonged use of the different social networks and communication services have changed our way of life, not only at the digital-media level but also with regard to our competitive skills (media competence), which serve as elements of our own communication. Under this approach, it is required a citizenry that has competencies that provide them with skills as a consumer and creator of audiovisual elements, who are aware of their actions and have the necessary skills to make constructive criticism of the information (Gonzálvez-Pérez et al., 2015; García-Ruiz et al., 2014), for the sake of appropriation of critical thinking by citizens.

Finally, media competence as an essential element in communication, especially in this time of crisis due to the Covid-19 pandemic, should be the challenge of all individuals susceptible to the constant influences of information, seeking to acquire critical thinking. That is to say, that leadership can be created and produced from the masses towards the information generators, which could be the beginning of an upward detonation of values, principles, morality, empowerment, and creativity (Pullaguari-Zaruma and Hernando-Gómez, 2019) from those who one day they were excluded for not being or belonging to a communication line.

The communication strategy on Twitter

The use of Twitter in communication strategies increases every day. There is no doubt that the diversity in convergence and accelerated technological processes, as well as social, cultural, communicative, environmental, political changes, among others, has burst into contemplating communication aggressively in social media; causing "great events" to be seen through the screens from a more critical perspective.

Social networks are already being exploited to learn, discover, search, store, and, above all, share knowledge, demonstrating that they are an efficient vehicle for social learning that could be added as a useful tool for formal learning (López-Goñi & Sánchez-Angulo, 2018, p. 1)

In the case of Twitter, for Alvídrez and Franco-Rodríguez, (2016), it allows to know the relationship of daily actions of the public biography, in addition, its immediacy makes it a frequent tool used among public personalities (political, bureaucratic, religious, sports, cultural exponents, among others) who seek to seduce their followers, create an affinity with them and mobilize them to carry out a specific action.

For Alonso-Muñoz and Casero-Ripollés (2018), social communication is decisive, because it maintains an immediate communication strategy that allows direct contact with citizens, who become the recipients of their announcements, and this contributes to circumventing the traditional media, as they are their adversaries. Twitter's strategy can be understood as a channel to articulate hegemony for those in power, since this conjuncture is based on intrapersonal relationships and political communication (García-Carretero & Pérez-Altable, 2017) as the angular strategy of every government before its supporters. Sometimes interested parties In this context, it is significant to observe how certain groups or individuals in power make use of Twitter as a mass communication strategy during times of crisis with the sole objective of communicating their interests. take leading roles in debates or topics of media interest that interest the public. In this context, it is significant to observe how certain groups or individuals in power make use of Twitter as a mass communication strategy during times of crisis with the sole objective of communicating their interests. According to Tikka (2019), communication on social media such as Twitter can generate crises in societies.

On the other hand, the events on Twitter that became trends, debate, and high expectations, were the health information that has become the most influential trend for society, including young people and ethnic minorities who are less likely to access health information through formal news sources, among other more traditional resources (Massey et al., 2016) are the most affected. Communication in social networks can be sensitive and create anguish in vulnerable people, several studies are paying more attention to the younger generation (Burnap et al., 2017) since the influence of messages on Twitter are persuasive when it comes to health or political participation. Authors such as Wang et al. (2020), argue that in a globalized world, communication with consumers on social networks can be opportune and essential to raise awareness and proceed to act.

In summary, the communication strategy on Twitter is multifaceted; on the one hand, it can take care of the image and reputation of public, political, sporting personalities, etc. (Gomes-Franco, 2016); while on the other hand, trying to preserve the egalitarian life of people when we speak of global effects that affect health. On Twitter, the boundaries of communication dissolve as the news reaches peers and the general public, including opinion leaders such as journalists and politicians (Jünger & Fähnrich, 2020).

Spanish-speaking countries

Spanish is spoken by 400 million citizens spread over 21 countries (Argentina, Bolivia, Chile, Colombia, Costa Rica, Cuba, Ecuador, Spain, Guatemala, Equatorial Guinea, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Dominican Republic, Uruguay, and Venezuela). It is also spoken in Andorra, the United States, the Philippines, and Western Sahara, although they are not the official languages in those countries (Lyons, 2020).

Methodology

This research was developed according to the following objectives:

- Analyze government communication and media competence of Spanish-speaking presidents the week prior to the declaration of a pandemic.
- Design a template for the measurement of media competence on Twitter.
- Observe and compare the evolution of the outbreak until the declaration of a pandemic and its treatment by the presidents.

For the development of this research, a quantitative methodology was used. Using data mining in the social network Twitter, with a sample of 7,650 tweets, of which 884 tweets were published in 22 accounts of Spanish-speaking presidents and 6,766 tweets analyzed from the mass media of Spanish-speaking countries during the week prior to the declaration of the pandemic by WHO.

The study period is established from March 4 to 11, since the day before the WHO invited governments and the *Pandemic Supply Chain Network* to boost production and ensure supplies for countries at risk and those seriously affected by a possible pandemic.

After collecting the tweets through various advanced search algorithms and tools such as Metricool, TweetStats, Tweet Topic Explorer and Burrrd,

the data extracted from the sample was analyzed in order to establish the level of government communication and media competence during the days prior to the declaration of the pandemic.

Results

Observation of the media competence of Spanish-speaking presidents

To carry out the observation and study of the media competence of the presidents' Twitter accounts based on the dimensions developed by Ferrés and Piscitelli (2012), we designed a measurement model of media competence on Twitter using various calculation indices, in order to achieve objective data in the measurements of each of the dimensions. Table 1 shows the relationship between the dimensions established for media competence and the indices that we established in our study model.

Dimensions by Ferrer and Piscitelli	Dimensions measurement parameters
Languages	Flesch-Kincaid index
Interaction	Engagement
Technology	Audiovisual support
Production adn dissemination	Link-Hashtag index
Ideology and values	Authenticity index
Esthetics	Agenda building. Commitment

 Table 1

 Template for studying media competence on Twitter

Source: own elaboration.

Flesch-Kincaid index: ease of reading

We analyzed the accounts of the presidents of each of the Spanish-speaking countries to collect data that made it easier for us to carry out the analysis of their media competence. To do this, we used various tools to find out the number of tweets and retweets that the presidents made during the analyzed period, the electronic devices from which the publications were made, the average of words used, and the assessment of the complexity of the text using the Flesch-Kincaid readability test, which indicates the level of readability on a scale of 0-100. (Being 0-30 very difficult reading that only university graduates would understand until reaching 90-100 of easy reading that eleven-year-old students would understand without effort).

Four of the accounts had a Flesch index between 30-50, being considered difficult to read, the rest of the accounts presented a Flesch index lower than 30, being considered very difficult to read, that is, practically all present difficulties in their reading among their followers (Chart 1). Taking an average across all accounts, ten of them would be even below the average of all accounts, making them the most difficult to read accounts of all.

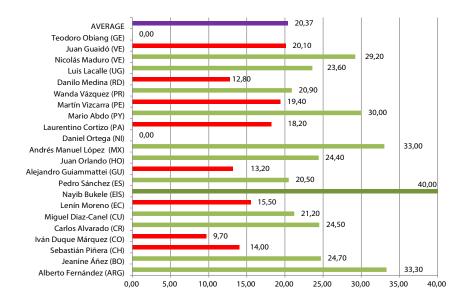
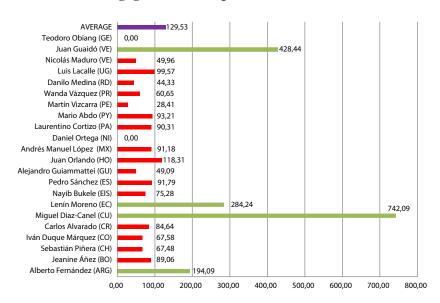
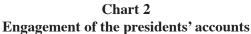


Chart 1 Flesch-Kincaid index of ease of reading of tweets

Engagement: interaction and engagement

On the other hand, we have measured the engagement and interaction of the accounts with their followers, which is called Twitter user engagement, and for this, a standard formula was used: the sum of the number of mentions, retweets, and likes divided by the number of followers in total, and finally multiplied by 100. As we can see in Chart 2, the average engagement stood at 129.53, where only the four accounts of the presidents of Argentina, Cuba, Ecuador, and one of the presidents of Venezuela had values well above the average. The rest of the accounts could indicate that they have a very low engagement with respect to the average of all, so it is understood that they have little interaction with the members of their community of followers.





Audiovisual support: technology

For the analysis of technological competence, which is quite broad, we have taken into account, for the measurement in the publications on Twitter, those that present audiovisual content in their messages, be they photographs, videos, or infographics, scoring those that do have that content and not considering score in those tweets that only present plain text without audiovisual complements. In graph 3 we can see how of the 22 presidents, eight of them present audiovisual material in all their publications, another three present audiovisual material in most of their publications, six of them did not include any audiovisual material and five did not make any publication about Covid-19, so they could not be evaluated. The average presented by the accounts is 47.22 publications with audiovisual content.

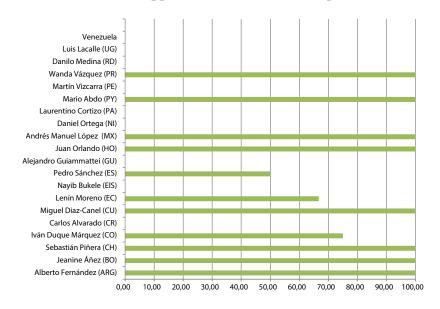


Chart 3 Audiovisual support of the accounts of the presidents

Link-Hashtag index: production and dissemination

To analyze the correct use of the publication, we took into account two factors: the index of links in publications and the index of the use of hashtags. The average of the links per tweet published indicates the probability that the user is a source of information for others, and the average inclusion of hashtags indicates the probability that the user's tweets are found in a search (Chart 4). As we can see in the following Chart, the production and dissemination levels were very low for all the accounts, none of them reached an average of one link per tweet, and on average, fifteen accounts were below it that stood at 0.14 links. Regarding the hashtag level, only one of the accounts exceeded more than two per tweet, the average being 0.46, of which thirteen accounts were below it despite being a very low average.

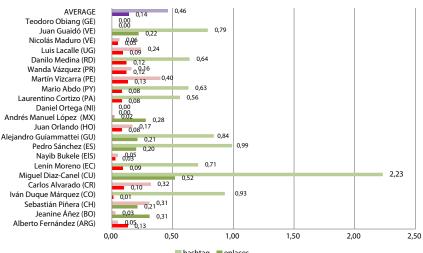


Chart 4 Presidents' production and dissemination indexes

hashtag enlaces

Authenticity index: values

To analyze authenticity on Twitter, that is, the value that refers to the percentage of messages that are issued by the user himself from his electronic device. It was one of the most complex measures, but taking into account the users we were measuring, we determined as an index the mobile device they had and from which the largest number of publications were made. Of the 19 presidents analyzed, 16 used an iPhone, two used an Android smartphone, and one used an iPad. Ten of the accounts show that tweet programming software was used, and seven of them show that they used a mobile device belonging to another user (Chart 5).

Only six of the 19 analyzed accounts indicate that the messages are from the user who owns the account, while it is found that in five of the accounts most of the tweets published do not come from their devices and therefore not from their own creativity.

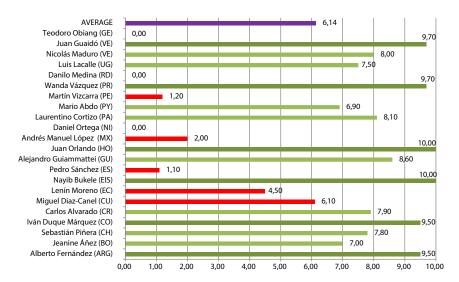


Chart 5 Authenticity indices in the publication of the presidents

Agenda Building and Agenda Setting: level of commitment during Covid-19

These calculations were made taking into account the total number of tweets published and those that were related only to Covid-19. For these conjectures, we took into account two factors: the social pressure emitted from the mass media and the communications made by the presidents, because Agenda Building focuses on the foundation of the news and the components that support it (Aruguete, 2017).

At the end of 2019, the mass media began to publish news about the coronavirus, intensifying these publications as of January 2020, at the time of declaring a massification of cases by the Chinese government in Wuhan and with the greater frequency of reports of the virus spreading beyond the Chinese borders. After the first major sign of a possible pandemic on March 3, until its official statement by the WHO on March 11, the media stepped up the volume of news related to Covid-19 for a total of 1887 posts compared to 6766 of various topics, which represented a 27.89% of the total impact.

We understand that the mass media act with great influence on all citizens, and the presidents of Spanish-speaking countries are influenced by them in the same way. However, the level of presence of government communication in its publications through Twitter was not observed to be in the same line as the media. The total number of publications by the presidents, during the study period, was a total of 884 tweets of which only 92 were related to Covid-19, which represented an impact level of 10.41%, which as we can observe, was far below the level of impact of the mass media, which created a mismatch in the Agenda Building of Spanish-speaking presidents. Chart 6 shows the differences between the level of impact of the press and the presidents, in detail, for each Spanish-speaking country.

As can be seen, only two presidents presented data above the press of their country and the average of all the studied profiles, and four of them had a good balance with Agenda Building. Fourteen accounts presented data below Agenda Building and four of them did not even have data related to it. Manuel Antonio Conde, Oscar A. Prada-Espinel, Kevin P. Pullaguari-Zaruma. Pre-covid government communication

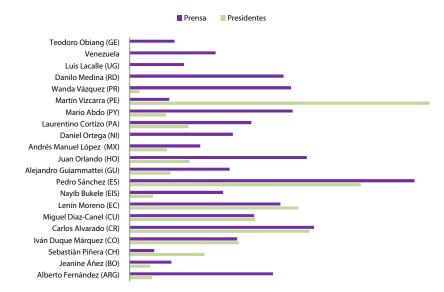


Chart 6 Impacts of media publications and presidents

Source: own elaboration.

Discussion

After the emergence of the Internet and social networks, new components of digital literacy are added to media and information literacy. This is because the mass media are digitizing their communication, thus it is necessary to have better digital skills (Delgado-Ponce & Pérez-Rodríguez, 2012).

The messages have content based on the subjective interpretation of it in different contexts, as well as an explanation of them when possible (Conde et al., 2019). Twitter is a means of pressure in both ways, on the one hand, we have citizens dissatisfied with certain incongruous actions or discourses on the part of the governance and on the other, the government that tries to expose and strengthen support for its processes both in normal situations and crisis situations.

With the study model of media competence designed in this research, the parameters we measured were: Flesch-Kincaid index, to analyze the language dimension; engagement, for the interaction dimension; audiovisual support, for technology; the link-hashtag index, for the production and dissemination index; the authenticity index, for the ideology and values; and finally, building agenda, for that of ethics.

The engagement of the analyzed accounts: only four of them exceeded the average, the rest were with levels well below the average. This leads us to conclude that the dimension of interaction with its community is deficient and must be worked to improve the indexes. Possibly the low rate of interaction is related to the use of a fairly complex language for the majority of citizens.

Regarding the audiovisual support used by the accounts, subtracting those accounts that did not publish during the analyzed period, we conclude that it remains above the average. The technology dimension presents some quite positive data for the most part.

The link-hashtag index: it was quite low for all the accounts analyzed, we concluded that the dimension of production and dissemination is quite deficient in general, which would make these accounts unreliable sources of information for other users, nor that they appear in a majority in Twitter searches.

The index of authenticity or veracity: the content of the publications coming from the owner of the account was, as a general rule, very high, except for a few accounts that we sense that the content did not come from the owner of the account. In summary, indicating that the ideological dimension and values, that most accounts approve it with very good indices.

The content of the presidents' publications was not in line with Agenda Building; In other words, the level of commitment and ethics of the accounts during the Covid-19 was not correct. Only five of the twenty-two accounts analyzed had media competencies in the ethical dimension.

We found that during the chosen period, the analyzed accounts did not present adequate media skills in five of the six dimensions. We suggest that Spanish-speaking presidents need to deeply study their government communication via Twitter, as they need to significantly improve their media competence in communicating with citizens.

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Annexes

The annexes of this research can be viewed at the following link: https:// bit.ly/2TcK9At or by capturing the accompanying QR code, which will allow the reader to automatically visit the annexes from their Smartphone or Tablet.



Figure 1 Annexes of the investigation

Source: own elaboration

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