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The message of Pope Francis in time of pandemic: Engagement and sentiment on Twitter

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ABSTRACT

This article is an exploratory study aimed at analysing engagement and sentiment on Twitter of the tweets published about Pope Francis's actions with regard to Covid-19. In this context, the analysis also focuses on the beginning weeks of the pandemic caused by the SARS-CoV-2 virus and the Covid-19 disease. One of the most important events held by Pope Francis was the extraordinary moment of prayer in time of pandemic in St. Peter's Square, with the *Urbi et Orbi* blessing on 27 March 2020. The methodology used quantitative and qualitative techniques based on a strategic sample of English and Spanish tweets published between March and December 2020 with specific keywords and hashtags. The results place value on the importance of Pope Francis's message, the value of the *Urbi et Orbi* blessing at the beginning of the pandemic and the symbolic impact of the content, images, and interaction in the communication shared on social media, specifically on Twitter.

1. Introduction

The year 2020 will be remembered for the SARS-CoV-2 virus, the COVID-19 disease, and the emergence and rise of a pandemic that is still putting health care management, solidarity, citizen awareness as well as the resolve of governments, companies, and other types of organizations to the test. The alert of the virus' presence in Wuhan (China) at the end of December 2019 was the starting point of a surge of infections (McMullen 2021) that forced the World Health Organization (WHO) to declare on 30 January 2020, 'a public health emergency of international concern' (WHO 2020a). On 11 March 2020, Tedros Adhanom Ghebreyesus, director-general of the WHO, stated: 'We have therefore made the assessment that Covid-19 can be characterized as a pandemic' (WHO 2020b). Meanwhile, the initial measures taken by leaders in their countries had limited effectiveness and an unequal pace (Cash and Belloy 2020; Barrios and Hochberg 2020; Manfredi-Sánchez, Amado-Suárez, and Waisbord 2021; Sanders 2020).

Eventually, the pandemic became evident and other types of measures were taken: limitations on citizens' rights upheld by states of emergency, partial or full lockdowns, including closed borders, and restrictions that were adjusted in accordance with the health circumstances and complex circumstances. Social life in all of its aspects was limited or, in some cases, was completely halted, with the implications and psychological, economic, and social repercussions that these types of measures have on people. The official data showed a dramatic world reality: on 31 December 2020, there were over 82 million people who were infected and 1.8 million deaths due to Covid-19 (WHO 2021). Ramonet describes the pandemic as a 'total social fact', among other reasons because it shook up 'the entirety of social relations and shocked the totality of policy makers, institutions, and values' (2020, 95). Moreover, during the pandemic, there were related themes that contributed clarity in some cases, and complexity in others, in a society saturated with information (Howarth et al. 2020, 1108). In this context, it was fundamental how organizations, amongst them the Catholic Church, handled internal and external communication of decisions, strategies, and measures during the pandemic. The situation demanded it: 'We have never before seen a pandemic sparked by a coronavirus' (WHO 2020b).

2. Communicating in time of pandemic

The handling of the Covid-19 pandemic in the media has been and will continue to be a subject of study. In research carried out on Spanish and Italian media (Tejedor et al. 2020), the predominance of informative journalistic pieces is shown, while it is seen that the visual framing of the photography chosen tends to favor a humanizing approach by showing the pandemic's emotional side, and without making politicization an obvious characteristic of news content. This dynamic, at least during a significant period at the beginning of the pandemic, was a constant. The 'mass hysteria' that was experienced contributed to political mistakes in communication strategies by those governing (Bagus, Peña-Ramos, and Sánchez-Bayón 2021).

Social media platforms were a communication environment during the pandemic. It is estimated that there are more than 4.2 billion users of social media in the world. In 2020 there was an increase of 490 million users, which meant a year-on-year increase of more than 13%. According to this data, the number of social media users is equal to more than 53% of the world population (Kemp 2021). According to data from the *Digital 2021 Global Overview Report* (We Are Social 2021), the profiles of Twitter users indicate that in the global context the majority are men between 18 and 49 years old. The country at the top of the ranking for Twitter users was the United States of America, followed by Japan. The first Spanish-speaking country was Mexico, in ninth place overall. Spain ranked number twelve. Without a doubt, social media have broadened its presence in the last decade. Some platforms continue leading in specific user groups, while new ones have burst onto the scene, such as TikTok (We Are Social 2021), and then there are those that will probably disappear in the next few years unless they reassess their presence on Internet. Other applications and services are appearing that improve user experience on social media and increase their influence to include other parts of the population and other markets as well.

During the pandemic, the risk of information overload and misinformation existed from the beginning and is still present, 'a fierce war between different factions to impose a dominant narrative of this crisis' (Ramonet 2020, 110). From the start of the pandemic, social media were an environment and meeting place for people to communicate. There were strengths and weaknesses: misinformation in the shape of hoaxes like jokes, exaggerations, decontextualization, or scams (Salaverría et al. 2020, 13); news difficulties (Vela Meléndez 2021); lack of access to qualified sources and the inevitable fragmented knowledge of reality; emotions and negative sensations (Mejia et al. 2020); political media coverage (Slimovich 2021); or political mobilization (García 2020). Content, communication, and interactions were shared on social media, and relations were built, or spaces were simply created to build the sense of being connected to others. Religious life also found its space on social media. A study carried out during the pandemic on Jews and Muslims concluded, on one hand, that social media offered opportunities to expand intracommunity links and religious access, while at the same time, although contradictorily, the quality of the links lessened, thus increasing exposure to religious distractions (Ferguson, Ecklund and Rothschild 2021). This is a reflection of the workings of social media and technological mediation. It is important to remember that social media can be communication channels. Castells highlights that communication can 'share meanings by interchanging information' (2015, 27). The key is the quality of the information, which is indispensable in the post-Covid-19 era (Fattinnanzi 2020).

Since the pontificate of Benedict XVI and now with Pope Francis, a structural transformation has taken place in the communication of the Catholic Church. Pérez-Latre points out that 'religion is an essential voice, whose opinion is actively sought after. At the same time, controversy and contention are generated' (2019, 73). Pope Francis's pontificate set a milestone in the communication strategy with social media. It has been perceived by some as a way 'of repositioning the Holy See in the center of the international stage' (Corvalán Espina 2019, 342). Before the pandemic, religious groups and institutions were already using social media as a communication instrument. The pandemic reinforced the functionality of social media for religious celebrations (Galang, Renus, and Macaraan 2021; Sabaté Gauxachs, Albalad Aiguabella, and Diez Bosch 2021).

Although in this study we will focus our attention on social media and specifically on Twitter, Pope Francis's communications approach cannot be properly assessed outside of the Holy See and the Vatican's communication strategy. Pope Francis is the Bishop of Rome, the head of the Catholic Church, and Sovereign of the Vatican City State. Organizational communication requires planning for the Pope's activities and their repercussions and implications. The Holy See's communication approach from the beginning of the pandemic can be considered strategic and coherent across its diverse communication channels, which range from the Vatican Television Center to *L'Osservatore Romano*, Vatican Radio, the Press Office of the Holy See, and the Vatican Internet Service. The reorganization that Pope Francis promoted was fundamental in unifying the Communication Secretary and the communication structures of the Holy See into a dicastery to enable a 'unitary management and integration' of the Holy See's communication plan (Francis 2015).

The choice of Twitter for this study was strategic (Hwang 2013; Hennig-Thurau, Wiertz and Feldhaus 2015; Xu, Lin and Haridakis 2015). Benedict XVI opened the account @Pontifex (Bonilla 2017). Pope Francis, besides incorporating other social media, maintained and strengthened the Twitter social media account with nearly 19 million followers at present, and with versions in eight languages. Although Pope Francis, just like his predecessor, has a team of people in charge of managing Twitter profiles and other social media, it is a pontifical act, of a chief of state; the content is signed and duly registered (Gustavo Entrala, interviewed by Peiró 2015). The impact of the content published on the Holy See and the Pope's official social accounts is evident. Twitter is an open social media platform although it can be converted to private. Its structure is collaborative, simple, precise, and allows for incorporating interactive and multimedia elements. It is 'a tool conceived in concepts of mobility' (Blanco and Sueiro 2014).

3. Engagement and sentiment on Twitter

There is interest in researching engagement in public communication on social media in areas, such as health (Gertrudix et al. 2021), its use and effectiveness in spreading information related to social movements (Gaby and Caren 2016; Thornthwaite et al. 2018) in building communities online to access information of interest (Olson et al. 2019), as a space for interpersonal dialogue (Martin and MacDonald 2020), or in the business sector (Joshua and Kenneth 2019).

Twitter offers an appropriate environment for exchanging content in public because it is relevant to communication policy and institutional strategies. The concept of engagement appeared in marketing and is considered 'as the interaction between members of a community and a company' (Moreno 2014, 254). Broadening the vision to an organizational perspective, when an organization is committed to its public (local or global), that commitment results in benefitting all of the involved parties because the decisions serve multiple publics (Kent and Taylor 2002).

Because of Twitter's characteristics, it enables the exchange and production of content, and thus promotes engagement, which can also be understood as 'commitment, participation, or implication' (Preciado Ortiz, Vargas Barraza, and Gilsanz López 2018, 85). Research shows that we are experiencing a 'multidimensional phenomena, that simultaneously implies several cognitive, affective, and behavioral components' (Ballesteros Herencia 2019, 220). Specifically, engagement is the commitment that the users of an account or profile on social media take on when interacting on the network, thus obtaining digital data that allows for calibrating the repercussion and impact of published content (Pérez-Martínez 2016). This interaction occurs on Twitter by means of retweets, clicks on 'likes', replying, mentioning, and any action with tweets and accounts that show interest in a tweet or profile.

Another aspect that is studied on social media is the analysis of opinions based on data managed on social media. It is known as sentiment analysis and its aim is to 'recognize and assess the existing emotional value behind the analyzed texts, through their structure, classifying them as positive, negative or neutral' (Arcila-Calderón et al. 2017, 975). The analysis does not imply a qualitative assessment by the computer

system, it specifically analyzes the vocabulary of the text with the reference of a 'dictionary of sentiments' (*lexicons*) (Fernández et al. 2017; Moreno-Ortiz and Hernández 2013) that 'recognizes and evaluates emotional burdens in the message' (Arcila-Calderón et al. 2017, 975). It is a new and complex environment of study. Assessing opinions and their degrees of neutrality, positivity, and negativity is more and more feasible. Nevertheless, the question of how much of the real sentiment of whoever is transmitting the content into the debate or the interactions that take place on social media must be taken into consideration. Of course, the 'trivialization of malice on social media' is not excluded and is exhibited by haters, trolls, or other 'digital oppressors' (Busón Buesa 2020, 122). The possibilities of sentiment analysis are a dimension yet to be explored in communication, especially in public communication (Ortiz Espinoza and Espejel Trujillo 2021; Rodríguez-Díaz and Haber-Guerra 2020; Criado and Villodre 2018; Estévez-Ortiz, García-Jiménez and Glösekötter 2016).

4. The Catholic Church's message regarding Covid-19

With Covid-19, 'humanity discovered that it was more vulnerable and interdependent' (Carroggio 2021). Communication during the pandemic took place in an unusual context. Organizations of the Catholic Church, its worshippers, its hierarchy, the Vatican City State, and, of course, Pope Francis, were not unaware of the complexities of managing the pandemic and communicating a message of faith and hope in accordance with their mission (Tejedor et al. 2020, 8). In Italy, the first infections were detected in January 2020 (Severgnini 2020) and emergency measures were extended throughout the entire country on March 10 (BBC News 2020). During the first week of March 2020, a positive case 'from an external subject' was identified in Vatican City and the Vatican Museums, the Vatican Scavi Tour, the Museum of the Pontifical Villas, and the museum centers of the Pontifical Basilicas were all closed (Holy See Press Office 2020a). On March 20, 'the gift of special Indulgences is granted to the faithful suffering from Covid-19 disease, commonly known as Coronavirus, as well as to health care workers, family members and all those who in any capacity, including through prayer, care for them' (Holy See Press Office 2020b). An indulgence is 'the remission before God of the temporal punishment due to sins, whose guilt has already been forgiven, which the faithful Christian, under certain prescribed conditions, gains through the action of the Church' (Catechism of the Catholic Church 1993, 1471) The sacrament of penance was limited (Holy See Press Office 2020c). Pope Francis created the Vatican Covid-19 Commission under the direction of the Dicastery for Promoting Integral Human Development (the website is: www.humandevelopment.va).

In 2020 the Catholic Church had a complex agenda due to the diversity of media implications and subject matters (Contreras 2021). Covid-19 became a priority. The pandemic made it necessary to plan specific instructions and directions for pastoral work, such as mobilizing Catholic education (Friedman et al. 2020; Moret and O'Dwyer 2020; Fussell 2020), fighting poverty (Merwe 2020), reinforcing liturgy (Mccarthy 2021; Przywara et al. 2021; Kostecki and Piwko 2021), encouraging spirituality (Roosien 2021) or addressing the implications related to the quarantine that was applied as a priority measure to avoid the pandemic from spreading in countries

(Mudge 2021; Jarzembowski 2020). Different ecclesiastical authorities prepared strategies so that the pastoral work in the Church, in all of its phases, would not be affected by the circumstances imposed by legal and health regulations (Foley 2021). Moreover, other subject matters were related to the pandemic, such as the debate about the place of human beings in nature and their role and responsibility in the configuration of planet Earth's well-being, a subject Pope Francis mentioned in *Laudato Si* (Puglisi and Buitendag 2020).

5. Research design

5.1. Objectives and organization

This exploratory study had two objectives. The first was to analyze the engagement and sentiment on Twitter in tweets published about Pope Francis's communication actions in the context of the pandemic from March to December 2020. The second is to focus on the analysis of the first weeks of the pandemic and specifically on a symbolic act like the extraordinary moment of prayer in time of the pandemic. The purpose is to establish lines of reflection that help analyze, with the aid of broader research, how to communicate on social media in complex contexts and extraordinary circumstances.

The research was organized in two stages. The first one consisted in recovering and analyzing tweets published from March to December 2020, in which certain hashtags and specific terms were present (Table 1). This procedure, used in other studies (Caleffi 2015; Cozma and Chen 2013; Papacharissi and de Fatima Oliveira 2012; Burgess and Bruns 2012; Bruns and Burgess 2012), considers the intentionality of using the hashtag as a 'key word' that organizes 'content that is shared each day on Twitter' (Moreno 2014, 112). A second stage required choosing a relevant communication action of Pope Francis to measure its repercussion on Twitter, specifically during the first days of the pandemic. Several actions were assessed. During the Angelus prayer on 26 January 2020, Pope Francis mentioned the ongoing situation in China. Initially as an 'epidemic' (Francis 2020a), later as the 'coronavirus epidemic' (Francis 2020b), and finally 'pandemic' (Francis 2020d). On 15 March 2020, he made two symbolic visits to Rome. One of them to the Basilica of Saint Mary Major to pray before the Virgin, *Salus Populi Romani*. The other visit was to the Church of Saint Marcellus on the Corso, where the 'Holy Crucifix' is, which was carried in a procession in 1522 through Rome during the 'Great Plague'. Nevertheless, due to its presence on Twitter, importance, moment, scenario, testimony, historic exceptionality, and global reach, the *urbi et orbi* blessing was chosen, on 27 March 2020, for being an 'extraordinary moment of prayer in times of epidemic'.

Table 1. Criteria used for the selection of the units of analysis.

	Group 1	Group 2
Language	Spanish	English
Hashtag	#papa	#pope
Any of these words	Covid, pandemia, coronavirus, pandemic, covid19	
Dates	From: 2020-03-01 To: 2021-01-01	

Source: own elaboration.

5.2. Sampling procedure and analysis strategy

The sampling, strategic and not probabilistic (Igartua Perosanz 2006), reduced the bias in choosing the sample. The methodological triangulation, to include different research methods (webometrics, data mining, and content analysis), allowing for identifying different perspectives of the subject of study. The Tweet Binder, NodeXL tool was used to choose the sample, and the data were processed with the Statistical Package for the Social Sciences (SPSS) following the criteria that defined the time and space of the sample (see Table 1).

The following data were analyzed, which made up the analysis categories (see Table 2):

1. Users: username, nickname, account verification by Twitter, and type of profile.
2. Tweet identification: publication date and time.
3. Tweet characteristics: language, tweet content, number of favorites, replies, number of retweets, and the sum of number of favorites and number of retweets.
4. Interactive and multimedia elements: (i) Does the tweet include an image? If it does, what type of image? (ii) Does the tweet include a video? If it does, what type of video? (iii) Does the tweet include a link? If it does, what type of link?

Regarding the analysis of sentiment, the report generated by Tweet Binder provided valid elements to approach this dimension of the social media study, based on tweets recovered with the established criteria. Because it is a measurement exclusive to Tweet Binder we cannot access it. Nevertheless, the values that contribute to the sentiment of the tweets help us offer analysis for this study. It is based on the following premises (see www.tweetbinder.com): (a) a positive tweet is one that 'emits a positive sentiment after having analyzed all of its words'; (b) a word in a tweet that is rated and 'can vary depending on the context'; (c) number of positive, negative, or neutral tweets; (d) number of users; (e) number of impressions or impacts of the tweet. The report is based on the premise that: 'a report with an "Opinion score" of 90 would be positive, while a report with a score of 10 would be very negative'.

The second stage was limited to the *urbi et orbi* blessing of 27 March 2020. The analysis units chosen included the following days of 28 and 29 March. Specific categories were created with variables that helped the qualitative analyses of the tweets published on those dates (see Table 3).

Table 2. Categories related to engagement.

Category	Operational definition
Total users	Unique users who have used the criteria used for tweet retrieval.
Tweets by user	Average number of tweets published by each user
Potential impacts	Potential number of impressions of the hashtag or term used. Number of times it has been viewed.
Potential reach	How many users may have seen the hashtag or term analysed. The global audience.
Followers by user	Average followers per user.
Original tweets	Number of original tweets, not retweets.
Users of original tweets	Number of users who have posted original tweets, not retweets.
Original tweets by user	Average number of original tweets published per user.

Data: Tweet Binder. Source: own elaboration.

Table 3. Categories and variables for the analysis of tweets published from 27 to 28 March 2020.

Category	Variables
Profile type	• Diocese/Archdiocese/Congregations
	• Business (not mass media)
	• Government/public
	• Mass Media (Catholic Church)
	• Mass Media (non-church)
	• Official Vatican media
	• Not identified
	• NGOs/Associations
	• Individuals
Tweet content	• Day of Prayer
	• Event information (previous days)
	• Not related to day of prayer event
	• Not identified
Link type	• News website
	• Error in the link
	• Social media
	• Diocese/Archdiocese/Congregations
	• Personal/institutional blogs
	• Not related to the event
Image type	• Pope Francis—General map of St. Peter's Square
	• Pope Francis—Other moments of prayer
	• Pope Francis—Unrelated to the event.
	• Pope Francis—Before the moment of prayer
	• Not a picture of the Pope and unrelated to the event.
	• Information about the event
	• Meme related to the event
Video type	• Images of the ceremony
	• Pope—Unrelated to the event
	• No relation to the event
	• Information about the event
Tweet verification	• Yes
	• No
	• Account suspended
	• Protected tweet
	• Nickname change

Source: own elaboration.

6. Analysis and results

6.1. Pope Francis in time of pandemic, on Twitter

The actions carried out by Pope Francis beginning in March 2020 that were somehow related to the context of the pandemic were very frequent. The tweets recovered ($N = 9367$), in Spanish (57.1%), and in English (42.9%), following the criteria established in the research, reflected the users' interest in Pope Francis's activities. Users were identified (see Table 4) who have more than 500 followers (48.2% of total users). This percentage, related to engagement of the tweets, is higher amongst the users who posted in English (55.4% of the total users in English). Regarding users' length of time on Twitter, there is a coincidence in that those who are more frequent users have been using Twitter for at least six years.

Other data of interest are those related to users with published tweets (see Table 5). The average of tweets published by the user was 1.65, with 'original tweets', in English, more frequent (62.1%) and active ($\bar{X} = 2.16$). The potential impact was 139,930,884 and the potential reach at 71,938,725. The comparatively greater number of users publishing in Spanish rather than English reflects a greater impact in Spanish; without

Table 4. User characteristics.

	General		Spanish		English	
	Users (n = 5676)	% Totals	Users	% Totals	Users	% Totals
Followers						
0–10	199	3.5	102	3.1	97	4.0
10–50	538	9.5	318	9.8	220	9.1
50–200	1136	20.0	755	23.2	381	15.8
200–500	1068	18.8	687	21.1	381	15.8
500–1000	784	13.8	455	14.0	329	13.6
1000–5000	1310	23.1	623	19.1	687	28.4
More than 5000	641	11.3	319	9.8	322	13.3
Years on Twitter						
0–1	248	4.4	66	2.03	182	7.53
1–2	550	9.7	330	10.13	220	9.1
2–3	321	5.7	195	5.98	126	5.21
3–4	335	5.9	164	5.03	171	7.07
4–5	305	5.4	156	4.79	149	6.16
5–6	318	5.6	176	5.4	142	5.88
More than 6	3599	63.4	2172	66.65	1427	59.04

Source: own elaboration.

Table 5. Twitter impact characteristics.

	Total	Tweets in Spanish	Tweets in English
Total users	5676 users	3259 (57.4%)	2417 (42.6%)
Tweets by user	$\bar{X} = 1.65$	$\bar{X} = 1.64$	$\bar{X} = 1.66$
Users of original tweets	3221 users	1222 (37.9%)	1999 (62.1%)
Average of original tweets per user	$\bar{X} = 1.99$	$\bar{X} = 1.76$	$\bar{X} = 2.16$
Average of followers per user	$\bar{X} = 12,674.19$	$\bar{X} = 13,132.83$	$\bar{X} = 12,055.78$
Potential impacts	139,930,884	76,731,318 (54.8%)	63,199,566 (45.2%)
Potential reach	71,938,725	42,799,899 (59.5%)	29,138,826 (40.5%)

Source: own elaboration.

implying that the average number of tweets per user or frequency of original tweets is greater than between users that published in English.

The hashtags included in published tweets, different than those used to obtain the sample, indicated the interest of users in making the subject of the Catholic Church in the context of the pandemic more visible and interacting about it: #popefrancis, #vaticano, #vatican, #sanpedro, #ángelus or #roma. Retweets can be highlighted as the preferable form of publishing content in both languages, although in Spanish it was more frequent (77.2%) compared to original content created in English (49.8%). We must mention the frequency of tweets with links and images (30.2%), although in English more of this type included visual and interactive resources (43.0%) in the content (see Table 6). The graphics of publishing content frequency during 2020 (from March) show that the first weeks of the pandemic is when Pope Francis's actions had the greatest impact on Twitter (see Figures 1 and 2).

6.2. Sentiment

The sentiment portrayed on Twitter was mainly 'neutral'. More diversity was identified in tweets in English and users who posted them (see Table 7). The tweets published on Twitter, in Spanish, and in English, are 66.3% 'neutral'. Most of the 'positive' tweets are in English (21.2%), as are the 'negative' ones (17.2%). The sentiment regarding the

Table 6. General characteristics of users and tweets related to the study.

Recovered tweets	Total 9367		Tweets in Spanish 5351 (57.1%)		Tweets in English 4016 (42.9%)	
	n	%	n	%	n	%
Original tweets	3221	34.4	1222	22.8	1999	49.8
Retweets	6146	65.6	4129	77.2	2017	50.2
Text tweets	243	5.4	97	1.8	146	3.6
Responses	246	2.6	43	0.8	203	5.1
Tweets with links and images	2833	30.2	1106	20.7	1727	43.0

Source: own elaboration.

potential impact of tweets in English reflects a more distributed opinion, highlighting positivity (19.5%); but also, negative sentiment (27.3%). In the category 'users', the highest percentage is 'positive' in sentiment (21.7%), in Spanish and English. Regarding links and images, the tendency is similar. The retweet category deserves special attention. In this point, although neutrality of sentiment is constant, it is the category where the 'positive' variable has its highest percentage, in general (21.9%), although the retweets in Spanish were steady at 19.7% and in tweets, in English, it increased to 21.9%. Lastly, about original tweets, the neutral sentiment is constant.

The graphs (see Figures 3 and 4) with the distribution of tweet publication show the most representative moments of sentiment during 2020. The first weeks of the pandemic is the period with the greatest presence of positive sentiment.

6.3 'Urbi et orbi' in time of Covid-19

'To the city [referring to Rome] and the world' (*urbi et orbi*) is the solemn blessing, which grants plenary indulgence for the remission of sins, usually given by the Supreme Pontiff on Easter Sunday and Christmas. This blessing is relevant for devout Catholics and, in the Easter Sunday celebration of 2020, gained greater relevance due to the Covid-19 pandemic. For that reason, it was a very significant moment that was broadcast all over the world on radio, television, and online media with the support of the Vatican's media infrastructure by means of the Secretary of Communication. 'Who knows if someday there will only be televised mass' Debray wrote in 1992. He also said that divine revelation implies 'presence' (frontality) and that the Pope's *Urbi et Orbi* blessing transmitted on television allows for such presence (Debray 1992, 253). In the pandemic, television and technology, in general, was a space of encounter between people, a space of encounter between Pope Francis and the faithful. This reflection is of great interest at a time in history in which technology, in an exceptional context like the pandemic, became an environment for the meeting.

'We realized that we were all in the same boat, all fragile and misguided; but, at the same time, important and necessary, all having to row together, everyone needing mutual comfort. We're all in this boat' was one of the main ideas Pope Francis laid out in the *Statio Orbis* (Vatican News 2021) or the 'extraordinary moment of prayer in times of pandemic' (Francis 2020c). The ceremony, led by Pope Francis on 27 March 2020, included meditation in the Word of God, the worship of the Blessed Sacrament, and the *urbi et orbi* blessing. It took place without worshipers and under the strict health regulations of the Vatican City State.
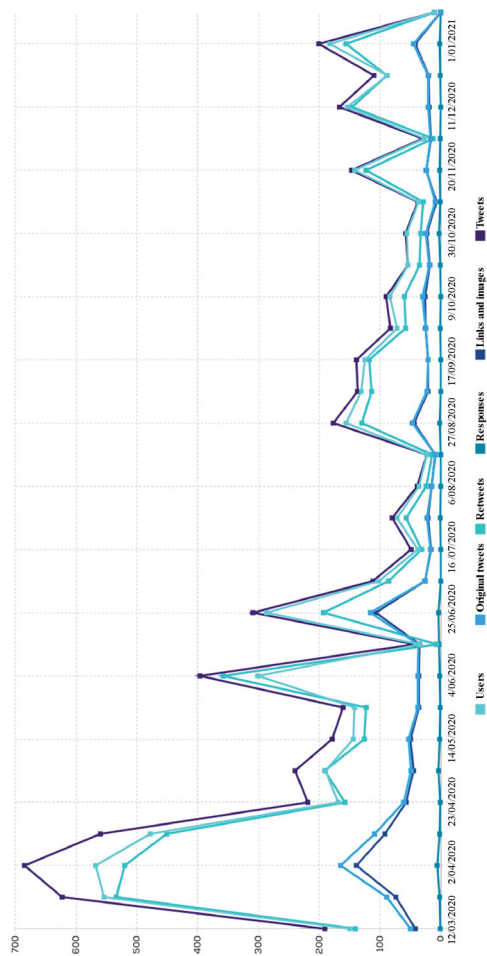
Figure 1. Distribution of users and tweets published in Spanish between March and December 2020. The graph reflects the interest of Twitter users in the tweets published on the activities of Pope Francis. Source: data processed with Tweet Binder.
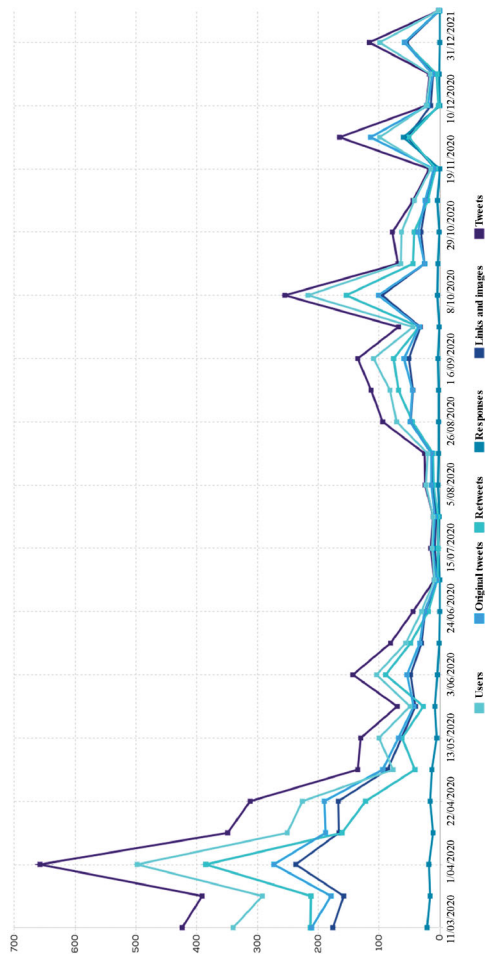
Figure 2. Distribution of users and tweets published in English between March and December 2020. The graph reflects the interest of Twitter users in the tweets published about Pope Francis's activities. Source: data processed with Tweet Binder.

Table 7. Distribution of categories according to sentiment.

|	Total			Tweets in Spanish			Tweets in English		
	Neutral	Positive	Negative	Neutral	Positive	Negative	Neutral	Positive	Negative
Total tweets	6210	1838	1316	3737	987	625	2473	851	691
	66.3	19.6	14.1	69.9	18.5	11.7	61.6	21.2	17.2
Potential impacts	97,107,465	19,355,532	23,466,854	63,506,936	7,031,660	6,192,308	33,600,529	12,323,872	17,274,546
	69.4	13.8	16.8	82.8	9.2	8.1	53.2	19.5	27.3
Users	3962	1369	970	2393	791	472	1569	578	498
	62.9	21.7	15.4	65.5	21.6	12.9	59.3	21.9	18.8
Link/ Images	1976	431	423	796	152	156	1180	279	267
	69.8	15.2	14.9	72.1	13.8	14.1	68.4	16.2	15.5
Retweets	4020	1344	782	2861	814	454	1159	530	328
	65.4	21.9	12.7	69.3	19.7	11.0	57.5	26.3	16.3
Original tweets	2190	494	534	876	173	171	1314	321	363
	68.1	15.4	16.6	71.8	14.2	14.0	65.8	16.1	18.2

Source: own elaboration.
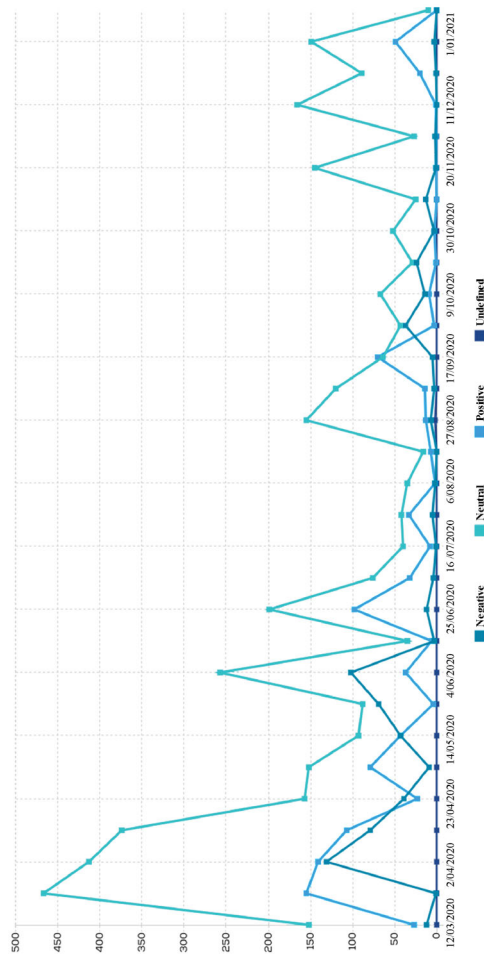
Figure 3. Distribution of users and sentiment analysis in tweets published in Spanish between March and December 2020. "Neutral" tweets become more frequent. In the first weeks, once the pandemic has been declared, tweets with "positive" sentiment are more relevant, coinciding with the event in St. Peter's Square. Source: data processed with Tweet Binder.
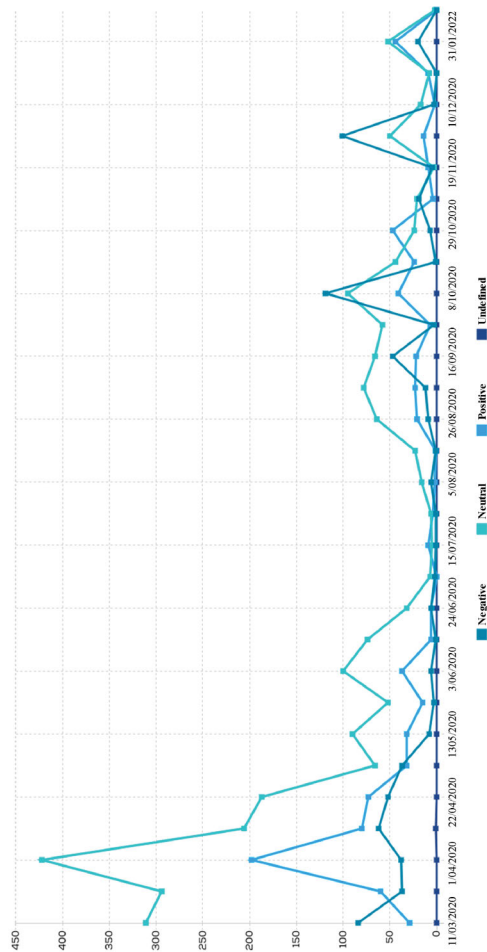
Figure 4. Distribution of users and sentiment analysis in tweets published in English between March and December 2020. A similar trend is maintained with respect to tweets published in Spanish (see Figure 3). "Neutral" tweets become more frequent. In the first weeks, once the pandemic has been declared, tweets with "positive" sentiment are more relevant, coinciding with the event in St. Peter's Square. Source: data processed with Tweet Binder.

This ceremony was a space of solace for the suffering of families who had lost their loved ones, a message of hope, aimed at Italy and the world (Allen 2020). A wake-up call to look at the situation from a different perspective. To show a vision of cooperation so that medicine and science were accessible to all humanity (Hanvey 2020). From another perspective, it was an event that highlighted Pope Francis's 'contextual intelligence' which was referred to by Osorio Cuervo: 'a humble leader, because he set up a dialogue between the leader's intuition, the reality, and the context, where the first thing that is emphasized is that the context determines the action' (2019, 111). The moment of prayer contained all of the elements and circumstances to make up an evangelical witness (Francis 2021) as Monsignor Lucio Ruiz declared: 'be missionaries, carry this thought, feeling, conversion of the heart, and these works so that they are contagious' (cited by Vatican News 2021). Stanzani points out that the choice of the Bible passage was appropriate: Pope Francis 'has used the metaphor of the boat that humankind is in […] Tossed on the storm, the boat with disciples is used as an icon of vulnerability and of the common condition of humanity' (2020, 926–927). In the presence of the surge of the fourth industrial-technological revolution, some consider that Covid-19 accelerated this revolution and all that it entails for governments and national and international institutions. Debates on issues that affect people, including the climate crisis, are becoming stronger in society (Hanvey 2020).

The media resonated with the novelty of the event.

ABC published the following:

It was a scene without precedents, strange and daunting but, besides the priest who accompanied him to help him up and down the steps, the Holy Father was not alone, as hundreds of millions of worshippers followed his prayer on the internet, radio, and television. (Boo 2020)

La República (Colombia) highlighted the impact regarding the audience:

This unprecedented ritual of the "Urbi et Orbi" blessing, the first time it was done alone and reaching millions of people in the world online, looked to pardon the 1.3 billion Catholics of their sins at a difficult time with lockdown measures affecting over 3 billion people. (Lorduy 2020)

The newspaper *El País* reviewed the event in these terms:

Yesterday Pope Francis offered a historical *Urbi et orbi* blessing (for all of the cities and for the whole world). He did it from Saint Peter's Square at the Vatican, which was completely deserted and half-lit due to the measures ordered by the Holy See to preserve safety measures for the worshippers. […] Pope Francis prayed for the end of the pandemic in a completely empty St. Peter's square under a heavy rain. (País 2020, 25)

In *The New York Times*:

The coronavirus that is threatening the world and knows no religion has penetrated the high walls of the Vatican and come to the doorstep of Pope Francis and the elderly cardinals who live near him. […] He spoke alone and before a vast and empty square, its cobblestones slicked with rain and reflecting the blue lights of the police locking down Rome to fight the virus. (Horowitz 2020)

Corriere della Sera:

Un giorno ricorderemo questi elevi tempi che stiamo vivendo con tante altre immagini: il conto giornaliero dei morti, le corsie degli ospedali, la sfida affannata a un nemico invisibile. Ma la preghiera per la fine della pandemia, la elevis benedizione Urbi et Orbi, la solitudine del Papa andranno ad arricchire la galleria di quegli attimi decisivi in cui la televisione sa scrivere in diretta la nostra vita, la nostra angoscia.

[One day we will remember these important times we are living through with many other images: the daily count of the dead, the hospital wards, the frantic challenge of an invisible enemy. But the prayer for the end of the pandemic, the eloquent Urbi et Orbi blessing, the Pope's solitude will enrich the gallery of those decisive moments in which television knows how to record our lives and our anguish.]

(Grasso 2020)

The symbolic value of the images captured on camera was reproduced in print journalism and digital media, it was televised and shared on social media. The Pope 'emerged as a relevant figure and voice for considering the meaning of this crisis' (Contreras 2021, 6) transcendent for Catholics and non-Catholics (James 2020).

6.4. The moment of prayer on Twitter

The results demonstrate the interest of Twitter users in different events in which the Pope showed his concern over the pandemic. On 27–29 March, the largest number of tweets was recorded ($n = 244$), coinciding with the extraordinary moment of prayer, without dismissing other facts. On 3 March 2020, Pope Francis's negative Covid test result appeared in the news. The Twitter content shared on March 15 was related to several events: (a) the confirmation that the Easter Week religious services would be held without worshippers in attendance; (b) the Pope's visit to the image of the Blessed Virgin Mary under the title of the *Salus Populi Romani* in the Basilica of the Saint Mary Major and; c) the prayer, in the church of San Marcello on the Corso, at the 'Holy Crucifix' that ceased the great plague that afflicted the inhabitants of Rome in 1522.

The day of prayer about the pandemic was March 27, but the study sample includes ($n = 244$) the tweets published on the 27 (51.6%), 28 (29.9%), and 29 (18.4%) of March. 52.5% of the tweets were published in English and 47.5% in Spanish. Regarding the type of tweet: 74.2% were original tweets and 25.8% retweets. 9.0% of the tweets belong to verified accounts. Regarding the profile of the accounts publishing tweets, 57.8% are 'personal' profiles and 23.8% belong to '(non-ecclesiastic) media outlets'.

Regarding the content of the tweets, the highest frequency of tweets was about the 'day of prayer' (71.7%) while 7.4% offered 'information about the event'. 18.9% of the tweets were not related to the event and 2.0% of the content could not be identified. The presence of images in the tweets was significant (51.2%), while videos only appeared in (14.8%); nevertheless, it is worth mentioning the links included in the tweets (59.8%) that were aimed at broadening the content of the published tweets.

Images added significant symbolic value, and there were several images related to the day of prayer that had a considerable number of likes and retweets in the Spanish

and English tweets. The day of prayer had a singular setting, which we have mentioned: an empty St. Peter's Square and the image of Pope Francis. Most of the tweets that included images ($n = 128$) depicted that scene: a wide shot of St. Peter's Square with Pope Francis (37.5%). The second most popular type of images were closeups of the Pope in the same setting (21.1%). If we consider the tweets that published images related to the Pope and during the prayer making the figure of the Pope relevant, the percentage was significant (67.2%). The use of video included in the tweets was less (13.9%) in the total of analyzed tweets ($n = 244$). However, considering this data, 73.5% of the tweets with videos were images of the ceremony and 11.8% included information on the event, despite not including images of the ceremony. The sentiment in the first weeks of the pandemic reflects the interest of Twitter users in placing value on the events carried out by Pope Francis. If we focus our attention on the period between March 24 and March 31 the attention to specific tweets about the event was valued positively.

7. Conclusions

The objectives of this exploratory study were, first, to analyze engagement and sentiment on Twitter of tweets published about Pope Francis's communicative actions in the context of the pandemic from March to December 2020. In hindsight, the analysis was limited to the first weeks of the pandemic and specifically to the extraordinary moment of prayer in time of pandemic with the *urbi et orbi* blessing.

The literature in the field puts value on the importance of studies of engagement and sentiment to evaluate the communicative actions of figures and organizations. In exceptional situations, like the pandemic, this type of study is more relevant because it contributes to establishing appropriate strategies and opportunities to reinforce presence in virtual communities and on social media. It facilitates monitoring based on statistical data, although, without a doubt, it will require qualitative analysis with other dimensions of reading and analysis.

The sample, although it was not representative or strategic, allowed for obtaining data that offered a map of how the figure of Pope Francis was present in the subject matter of the pandemic on Twitter. The sample had its limitations for analysis because many tweets were not included (without the criteria used in the search or other criteria) that could have contributed interesting information. The strategy used to recover tweets did minimize bias and recovered tweets that had, because of the use of hashtags and keywords, the intention of being seen and shared on this social network.

The number of tweets related to Pope Francis and the search criteria related to the pandemic were expected. Another question was the specific interest in drawing the attention of Twitter users who viewed Pope Francis as outsiders, that is, the attention of that outside of the Catholic Church's circle of influence.

The results allow for offering some approximate responses to the research goals. Regarding engagement, the users' interest in sharing Pope Francis's actions was clear; specifically, in the first weeks of the pandemic, there were significant testimonies. Nevertheless, this desire appeared to inspire a trend that continued during the year, and there were several moments in which this engagement was reflected in both

English and Spanish in the number of retweets and likes. We must specify that we are limiting the analysis to the search criteria for this research. These criteria have been restrictive and leave out of the sample other messages from Pope Francis that had repercussions. The engagement was limited to the pandemic. If we analyze engagement during the week of 24–31 March it was evident how the events of that week were the most significant and the *urbi et orbi* blessing was the most relevant. In concerning sentiment analysis, 'neutrality' was the most frequent in the tweets, retweets, images, and users. That said, the 'positive' sentiment was present in a large percentage of tweets, with the *urbi et orbi* being the most relevant.

These data reflect the importance of social media in the public communication of leaders and organizations. Pope Francis's strategy is interpreted as accompanying a society that needed a message of hope and faith. A line of research would be to carry out a qualitative study about the message and repercussion of this engagement and sentiment beyond publishing and being present on Twitter.

Disclosure statement

Notes on contributor

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