

## Digital communication by the National Tourist Offices in the face of the Covid-19 pandemic crisis: a comparison between Asian and European countries on Twitter

Comunicación digital de las Oficinas Nacionales de Turismo ante la crisis de la pandemia del Covid-19: una comparación entre países asiáticos y europeos en Twitter

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### Abstract

The crisis caused by the Covid-19 pandemic and government measures taken as a result have had a direct effect on the tourism industry. This research aims to find out how the National Tourist Offices (NTOs) of various countries in Asia (South Korea and India) and in Europe (Germany and Spain) managed their crisis communication in the face of Covid-19. The study was conducted by analysing the content of messages posted on NTOs' Twitter accounts from

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the onset or detection of the first patient until one month after the World Health Organization's official declaration of a pandemic. The results do not allow establishing communication management models according to geographic areas or the decisions taken by governments. However, the data do reveal that the Asian NTOs analysed reacted more quickly and were more active in their communication at the onset of the crisis compared to those in Europe. They also show that tweets alluding to Covid-19 generated most reactions among users, despite not being the ones most published by the NTOs. This study contributes to countries' management of tourism-related communication in the face of pandemic crises as it provides knowledge on the use of Twitter in communications by various NTOs, which may serve as a reference for the proper digital communication of crises in such situations so that countries' image as destinations is not damaged.

**Keywords:** National Tourism Organisations, Covid-19, digital communication, tourism destination image, Europe, Asia.

### Resumen

La crisis provocada por la pandemia de la Covid-19 y las medidas gubernamentales tomadas a raíz de ella han tenido un efecto directo en la industria turística. Esta investigación tiene como objetivo conocer cómo las Oficinas Nacionales de Turismo (ONT) de varios países de Asia (Corea del Sur e India) y de Europa (Alemania y España) gestionaron su comunicación de crisis ante la Covid-19. El estudio se realizó analizando el contenido de los mensajes publicados en las cuentas de Twitter de las ONT desde el inicio o la detección del primer paciente hasta un mes después de la declaración oficial de pandemia por parte de la Organización Mundial de la Salud. Los resultados no permiten establecer modelos de gestión de la comunicación de acuerdo a las áreas geográficas ni a las decisiones de los gobiernos. Sin embargo, los datos revelan que las ONT asiáticas analizadas reaccionaron más rápidamente y fueron más activas en su comunicación al comienzo de la crisis en comparación con las europeas. También muestran que los tuits alusivos a la Covid-19 generaron la mayor cantidad de reacciones entre los usuarios, a pesar de no ser los más publicados por las ONT. Este estudio contribuye a la gestión de los países de la comunicación relacionada con el turismo ante las crisis de la pandemia, ya que proporciona conocimiento sobre el uso de Twitter en las comunicaciones por parte de varias ONT, lo que puede servir como referencia para la adecuada comunicación digital de las crisis en este tipo de situaciones. que no se dañe la imagen de los países como destinos.

**Palabras clave:** Oficinas Nacionales de Turismo, Covid-19, comunicación digital, imagen de destino turístico, Europa, Asia.

### Summary

1. Introduction
2. Theoretical frame
3. Methodology
4. Results
5. Discussion and conclusions
6. References

## Sumario

1. Introducción
2. Marco teórico
3. Metodología
4. Resultados
5. Discusión y conclusiones
6. Referencias

### 1. INTRODUCTION

The health crisis caused by the viral disease Covid-19 has quickly become a global pandemic that has affected all countries in the world. But Covid-19 has not affected countries equally. China and Asia were the country and the continent where it emerged, but it is in Europe and America that the disease has spread most (World Health Organization, 2020). These different effects are due, among other reasons, to the different measures adopted by countries to manage the health crisis (Priego, 2020). In fact, despite differences between countries, there are some common features in the means of action that distinguish an Asian model and a European model of measures to prevent the spread of the pandemic (Priego, 2020). On the one hand, the response by the countries of Asia was quicker as they adopted measures before the disease mushroomed, using mass testing and monitoring citizens' movements via their mobile phones, a most efficient model at halting the expansion of the pandemic. However, European countries upheld the privacy of individuals, freedoms and constitutional guarantees in the measures they adopted (Priego, 2020).

But the Covid-19 health crisis does not only affect tourism demand. It is also affecting the image of countries and tourist destinations because it causes insecurity and a fear of infection among potential tourists (Nanni & Ulqinaku, 2020). Since destination image (DI) is a key factor to attract tourists and wealth to territories (Lee & Gretzel, 2012), countries' NTOs must properly manage their communication of the crisis, to help them build confidence and reassurance (Oliveira & Huertas, 2019), to strengthen their image and reputation and to create the desire to visit the country once it is again permitted.

Social media, and especially Twitter, are key tools for crisis communication (Veil, Buehner, & Palenchar, 2011) and for the communication of crises caused by pandemics (Freberg, Palenchar, & Veil, 2013). But, in addition, social media play an important role in the co-creation of the DI (Neuhofer, Buhalis, & Ladkin, 2012) and they are key tools for marketing and communication by DMOs and NTOs (Molinillo, Liébana-Cabanillas, Anaya-Sánchez, & Buhalis, 2018).

Therefore, the aim of this study is to find out how the NTOs of different Asian and European countries are managing crisis communication through their Twitter accounts to inform stakeholders and potential tourists, create or protect countries' tourist image, convey safety, and generate tourist attraction. And, since there is a European and an Asian model regarding how governments are managing the crisis, we aim, through comparative analysis, to determine whether any differences also exist in the crisis communication of the NTOs of the countries analysed in two continents.

## **2. THEORETICAL FRAME**

### **2.1. Impact of the pandemic crisis and Covid-19 on tourism and DI**

No previous pandemic had led to a complete global shutdown of the tourist industry (Gretzel et al., 2020; Higgins-Desbiolles, 2020). But Covid-19 has also led to a perceived risk among potential tourists (Nanni & Ulqinaku, 2020), an industry crisis (Higgins-Desbiolles, 2020); and all this is affecting the image of destinations and countries (Wen, Aston, Liu, & Ying, 2020).

The perceived risk of Covid-19 has led to a serious crisis for the tourism sector. Tourism is known to be highly vulnerable to crises (Cró & Martins, 2017). Tourism crises are occurrences that can threaten the normal conduct of tourism, damage a tourist destination's reputation of safety and attractiveness, and negatively affect tourists' perceptions (Sönmez, Apostolopoulos, & Tarlow, 1999). Tourism crises caused by pandemics (Jayawardena, Tew, Lu, Tolomiczenko, & Gellatly, 2008) are "exocrises", caused by external factors (De Sausmarez, 2007), which are beyond the control of the tourist industry but affect it directly. Thus, NTOs and DMOs cannot solve the causes of the crises, but they can manage their response to the problem and especially their communication with tourism stakeholders. As crises create

uncertainty, urgent strategies are required for countries and destinations to respond and recover from their negative impacts (Ritchie & Jiang, 2019).

Perceived risk (Nanni & Ulqinaku, 2020) and crises harm country image and DI (Sönmez, Apostolopoulos, & Tarlow, 1999). Studies about country image and DI have proved that DI affects consumer attitudes and behaviours (Chew & Jahari, 2014). Crises have a negative effect on future travel intentions (Molinillo, Liébana-Cabanillas, Anaya-Sánchez, & Buhalis, 2018) and the recommendation of tourist destinations (Prayag, Hosany, Muskat, & Del Chiappa, 2017).

Since DI is a key factor for attracting tourists and wealth to territories (Lee & Gretzel, 2012), countries and tourist destinations strategically manage their communications trying to generate a positive image (Govers, Go, & Kumar, 2007). And faced with crises, NTOs and DMOs should be responsible for managing crisis communication (Carlsen & Hughes, 2008; Oliveira & Huertas, 2019) in cooperation with local tourism organizations (Jiang, Ritchie, & Benckendorff, 2019) to develop strategic communication and promotion actions (Gu & Wall, 2006) to recover their image. Therefore, in this study we will analyse crisis communication by NTOs in Asian and European countries in the face of Covid-19.

## **2.2. The role of social media in co-creating destination image and in crisis communication**

Social media have changed the communication of countries and destinations (Del Chiappa & Baggio, 2015). Their potential for interactivity has allowed the active participation of users and the creation of user-generated content (UGC) (Jacobsen & Munar, 2012). UGC has a powerful impact on the opinions and decisions of other users or tourists.

According Kladou and Mavragani (2015), tourists, sharing their comments and evaluations, influence the formation of other users' DI. This is why tourists, locals, or DMOs have become co-creators of DI through social media communication (Neuhofer, Buhalis, & Ladkin, 2012). Social media are key sources for tourist information, but also for the co-creation of DI (Neuhofer, Buhalis, & Ladkin, 2012).

However, social media and Twitter are also key tools for crisis communication (Veil, Buehner, & Palenchar, 2011). Organizations now no longer control crisis communication equally (Colley

& Collier, 2009) because the public, with UGC, is also actively involved in such communication (Cheng, 2019).

Social media have transformed the way in which organizations manage the communication of pandemics and the risks they involve (Vijaykumar, Jin, & Nowak, 2015). Moreover, their capacities are essential for managing communication at times of uncertainty generated by pandemics (Freberg, Palenchar, & Veil, 2013). Social media played an important role in the H1N1 pandemic, which was the first in the social media era (Vijaykumar, Jin, & Nowak, 2015).

Twitter stands out among all social media as a particularly suitable platform for crisis communication (Brummette & Sisco, 2015), because Twitter generates less negative reactions among the public than crisis information received through other channels such as blogs or newspapers (Schultz, Utz, & Göritz, 2011).

Aguilar-Gallego et al. (2020) showed that Twitter has been an ideal social media for analysing communication on Covid-19, due to the large number of tweets on coronavirus published in this medium and the amount of interaction and dialogue involved. Therefore, this study analyses NTOs' communication in the face of Covid-19 in that social media.

### **3. METHODOLOGY**

This study analyses the content posted by the NTOs of Spain, Germany, India and South Korea on their official Twitter tourism accounts in order to identify their online communication practices in the handling of the Covid-19 crisis and assesses whether their communication sought to inform stakeholders and potential tourists of the crisis, convey safety, and generate tourist attraction.

As secondary objectives, the study poses finding out how quickly the NTOs published on the issue on Twitter, if they published their own tweets or retweeted those of other entities, and the degree of success of their tweets among users based on the reactions generated. The study also seeks to determine whether common parameters exist in tourism crisis communication between European and Asian countries.

### **3.1. Case studies**

As cases for study, two European and two Asian countries were selected that were affected by SARS-CoV-2 to different degrees and where the government measures adopted to combat the pandemic differ.

It was decided to analyse countries of Asia, as it is the continent where the pandemic emerged. South Korea was selected as it is one of the Asian countries least affected by the virus due to its policy of mass tests right from the outset of the crisis (Priego, 2020). India was also selected as it did not adopt such a policy and its population was more severely affected by the pandemic (Martínez, 2020).

In Europe, Spain was selected as it was one of the countries of Europe to be most affected by the pandemic (Saura, 2020) in the initial stages of the crisis, and Germany, because it is a country where the virus struck less severely due to the government measures adopted (Priego, 2020).

### **3.2. Research questions, data collection and analysis**

To achieve the goals of the study, four research questions were established:

RQ1: What are the main contents of the tweets of the NTOs analysed during the early period of the Covid-19 crisis on Twitter?

RQ2: With what timing did NTOs report on the Covid-19 crisis through their tourism accounts on Twitter? When did tweets start to be posted on the subject?

RQ3: What is the origin of the tweets of the NTOs during the early period of the Covid-19? Were they their own or did they retweet tweets of other organizations?

RQ4: What kinds of reactions (likes and shares) were generated among the public on the basis of the messages posted on Twitter by the four NTOs during the first period of the Covid-19 crisis?

To answer these questions, content analysis was performed based on the creation of an analysis template. The tweets published by the four NTOs were examined since the first case of coronavirus detected in each country until one month after the World Health Organization (WHO) declared Covid-19 a global pandemic. Data were collected by retrieving all tweets published in English by *twitonomy* tool. A total of 597 tweets were obtained.

**Table 1. Data Collected**

Country	Accounts	Date of publication	Tweets' number
Spain	@spain,	From 31 January to 11 April	167
Germany	@GermanyTourism	From 27 January to 11 April	123
India	@tourismgoi	From 30 January to 11 April	206
South Korea	@KoreanTravel	From 20 January to 11 April	105
Total			597

Source: own elaboration.

### 3.3. Analysis template

The content analysis template was designed on the basis of previous studies of crisis management (Coombs, 1998, 2007, 2015; Fowler, 2017; Oliveira & Huertas, 2019; Ulmer, Seeger, & Sellnow, 2007), adapting it to the peculiarities and characteristics of a pandemic crisis and its links with countries as tourist destinations. Special attention was given to the tourist information that countries should communicate in situations of pandemic crises both for reporting what has happened (Coombs, 1998) and to protect the image of the country (Ulmer, Sellnow, & Seeger, 2017).

In this way, and in response to RQ1, which focuses on content analysis, following Coombs, (1998, 2007, 2015), Ulmer, Seeger and Sellnow (2007), Ulmer, Sellnow and Seeger (Ulmer, R. R., Sellnow, T. L., & Seeger, 2017) and Oliveira and Huertas (2019), the template was structured into two main categories: 1) communication on the Covid-19 crisis and its



management, and 2) communication to safeguard the image of the country as a tourist destination.

The first category sought to analyse whether the Covid-19 crisis and its management were duly communicated. Hence, this category encompassed two subcategories: 1.1) communication on the Covid-19 crisis, and 1.2) communication on the management of the Covid-19 crisis and protection for the stakeholders.

Subcategory 1.1) on communication on the Covid-19 crisis comprised general information about the SARS-CoV-2 virus or the disease Covid-19, means and numbers of infections, etc. Conversely, subcategory 1.2) communication on the management of the Covid-19 crisis and protection for the stakeholders, comprised information about what was done to manage the Covid-19 crisis, which could encompass 1.2.1) general procedures that did not directly affect the tourism sector: explanation of the use of gloves or masks, instructions on how to wash hands, curbing rumours, etc.; 1.2.2) general procedures that directly affected the tourism sector, such as the closure of hotels, airports, bars and tourist attractions, the ban on mobility, etc.; and 1.2.3) tourism procedures to address the Covid-19 crisis, such as information regarding tourists' safety, protocols to protect tourists, virtual exhibitions, concerts and events as alternatives to tourism experiences, and so forth.

Moreover, the second category (1.2), on the strategic management of communication to safeguard the image of the country as a destination, sought to analyse whether NTOs issued communications and promotions to further strengthen their tourist image.

To answer RQ2, the analysis template collected date of the tweet, since it is essential information to assess the communication carried out, given that, as advocated by Coombs (1998), rapid communication reaction is a key factor for success in a crisis situation.

To answer RQ3, the analysis template considered the origin of the message, distinguishing between own tweets and retweets of other organizations. This is fundamental to analyse the implication that NTOs had in the communication of the Covid-19 crisis, due to the importance of assuming an active role in communication as a primary source of tourist information during a crisis that directly affects the tourism industry (Fowler, 2017; Granville, Mehta, & Pike, 2016).

Finally, to answer RQ4, the template sought to evaluate users’ reactions to the tweets, which includes the likes and shares generated. These reactions contribute to assessing the success of NTOs’ communications (Cheng, 2019; Coombs, 2007).

The tweets analysed were classified into more than one category depending on their content, and the analysis was conducted during the months of April and May 2020.

**Table 2. Content analysis template**

Date		
Origin	Tweet	
	Retweet (From whom?)	
Analysis categories	Subcategories	
1) Communication on the Covid-19 crisis and its management	1.1) communication on the Covid-19 crisis	
	1.2) Communication on the management of the Covid-19 crisis and the protection of stakeholders	1.2.1) procedures not directly affecting the tourism sector 1.2.2) procedures directly affecting the tourism sector 1.2.3) tourism procedures
	2) Communication to safeguard the image of the country as a tourist destination	
Users’ feedback	No. of likes No. of shares	

Source: own elaboration.

## 4. RESULTS

### 4.1. Type and content of the tweets published

If we analyse the type of content, in response to RQ1, only the NTOs of Asian countries published content on the Covid-19 crisis on Twitter (Table 3). The Indian NTO published just over 10% of its tweets with general information on SARS-CoV-2 or how the crisis affected tourism. Specifically, it disseminated information on means of transmission through physical contact and how to avoid it. The NTO of South Korea also published nearly 7% of its tweets on the subject reporting on cancellations of festivals or the importance of taking early

precautions to prevent the spread of the virus. It is surprising that the two European countries did not publish any tweets on this matter.

Regarding the second subcategory, an effort by the German, Indian and Korean NTOs to report on the management implemented and the protection of stakeholders is noted, with values between 15% and 20% of all of their published tweets, while the Spanish NTO did so to a lesser extent (1.2% of its tweets). The German NTO reported more on tourism efforts to address the Covid-19 crisis (12.2% of its tweets), while the Indian and South Korean NTOs reported more on the general handling of the crisis directly affecting the tourism sector (8.7% and 5.7% of their tweets respectively). It should be pointed out that the South Korean NTOs disseminated information on each of three subcategories equally (5% of their tweets in each category).

**Table 3. Categories of types and content**

	General		Spain		Germany		India		South Korea	
	<u>Total Freq.</u>	%	<u>Total Freq.</u>	%	<u>Total Freq.</u>	%	<u>Total Freq.</u>	%	<u>Total Freq.</u>	%
<b>1. Communication on the Covid-19 crisis and its management</b>	<b>112</b>	<b>18,8%</b>	<b>2</b>	<b>1,2%</b>	<b>25</b>	<b>20,3%</b>	<b>61</b>	<b>29,6%</b>	<b>24</b>	<b>22,9%</b>
1.1. Communication on the Covid-19 crisis	28	4,7%	0	0,0%	0	0,0%	21	10,2%	7	6,7%
1.2. Communication on the management of the Covid-19 crisis and the protection of stakeholders	84	14,1%	2	1,2%	25	20,3%	40	19,4%	17	16,2%
1.2.1. General procedures not directly affecting the tourism sector	27	4,5%	1	0,6%	5	4,1%	15	7,3%	6	5,7%
1.2.2. General procedures directly affecting the tourism sector	30	5,0%	1	0,6%	5	4,1%	18	8,7%	6	5,7%
1.2.3. Tourism procedures to deal with the Covid-19 crisis	27	4,5%	0	0,0%	15	12,2%	7	3,4%	5	4,8%
<b>2. Tourism promotion</b>	<b>559</b>	<b>93,6%</b>	<b>163</b>	<b>100,0%</b>	<b>122</b>	<b>99,2%</b>	<b>181</b>	<b>87,9%</b>	<b>93</b>	<b>88,6%</b>
Total	597		163		123		206		105	

Source: own elaboration.

The Korean and Indian NTOs also reported on steps taken generally that did not directly affect tourism (5.7% and 7.3% of tweets respectively), with information to prevent the spread of the virus such as hand washing, the use of masks, and so forth. The Korean NTO even used an educational game to learn about the coronavirus; and the Indian one issued a phone number for emergencies and to obtain information to curb fake news about the disease. The German NTO published less on this subject (4.1%) and the Spanish NTO published a single tweet (0.6% of tweets). Its communication was limited to generic recommendations like *take care* or *stay safe*.

India published 8.7%, South Korea 5.7%, Germany 4.1% and Spain only 0.6% of their tweets regarding information on general efforts to tackle the Covid-19 crisis that directly affected the tourism sector. In this typology, the NTOs released content inviting followers to stay at home. These tweets reminded of the importance of supporting government lockdown policies. The Korean NTO even released information on tourist attraction closures. It is surprising that the Spanish NTO posted only one tweet in this category in which it reported that Spain was fighting the pandemic, asking its followers to look after themselves and inviting them to visit the destination in the future. The tweet did not include a link to expand on or update information on Covid-19.

Finally, regarding the subcategory of reporting on tourism-related efforts made to address the Covid-19 crisis, the German NTO published 12.2%, the Korean 4.8% and the Indian 3.4% of their tweets about the subject. These NTOs posted messages in order to provide alternative tourism experiences using virtual concerts and exhibitions and aiming to display their attractions virtually. But the Spanish NTO did not post a single tweet in this respect.

Finally, it is noted that all NTOs posted messages mainly in the category of communication to safeguard the image of the country as a tourist attraction, specifically between 87% and 100% of their tweets.

The tweets by the Indian NTO provided information on the country's emblematic tourist attractions, celebrations and events, such as Goa carnival, the Bharat Parv festival of Indian culture and cuisine, or on medical tourism.

The tweets by the NTO of South Korean disclosed cultural content, such as the museums of Seoul or traditional Korean architectural style *hanoks*. They also posted some of the country's emblematic buildings and landmarks such as Guryongsa Temple or Hallasan Mountain and content to propose more experimental tourism.

The Spanish NTO issued a variety of contents to promote tourism such as typical dishes, what to do in cities like Barcelona or Madrid, a collection of legends from different places, and a guide to the most impressive panoramic viewpoints in Spain.

Finally, the tweets by the German NTO focused on disseminating a variety of information and photographs of such emblematic buildings as Weesenstein Castle, parks, cultural activities and exhibitions, artists like Beethoven and the country's cuisine.

#### **4.2. Timing of the posting of the tweets**

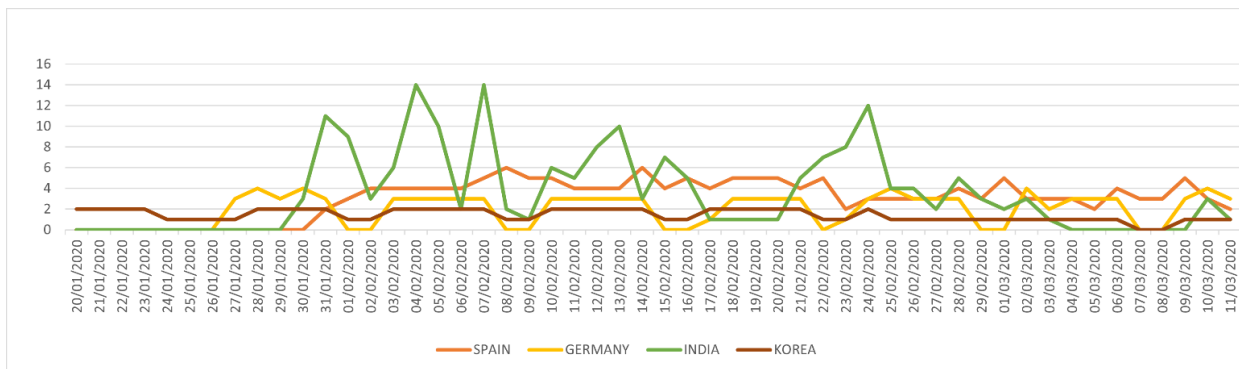
The analysis of the timing (RQ2) shows a clear dichotomy between continental European and Asian NTOs in the speed of publication after the detection of the first patient. In Spain, the first positive case was detected on 31 January and the NTO published its first tweet 47 days later. It did so by posting a tweet reporting that Spain was fighting against the coronavirus, without any further practical and useful information for the follower. Similarly, the NTO of Germany published its first tweet referring to the coronavirus crisis 49 days after the identification of the first patient. It did so on 16 March in a tweet reporting that Germany had implemented drastic measures in order to stop the spread of the virus, requesting that followers should keep safe and respect the rules of quarantine, and offering a link for tourists to get information on the latest updates on how the coronavirus was affecting travel to Germany.

In contrast, in the Asian countries, South Korea's first patient was diagnosed on 20 January and India's on 30 January, and their NTOs posted their first tweets on the subject 3 and 4 days later, respectively. The tweet by the South Korean NTO mentioned the existence of outbreaks in the country and reported the need to take precautions to get early treatment and to prevent its spread. In addition, the NTO provided a link with news for travellers. And the tweet by the Indian NTO reported that the country was taking steps in the face of Covid-19, such as self-isolation and community surveillance in the country.

When comparing the speed with which the NTOs posted their tweets, taking as a time reference the space between the identification of the first patient and the official declaration of the pandemic by the WHO (Graphs 1), it can be seen that all four were more active on Twitter before the declaration, as they posted an average of 84% of their tweets during this period. However, after the pandemic was declared, the NTOs posted a low average daily number of tweets (South Korea 1%; Germany 0.75%; India 0.75%; and Spain 0.22%).

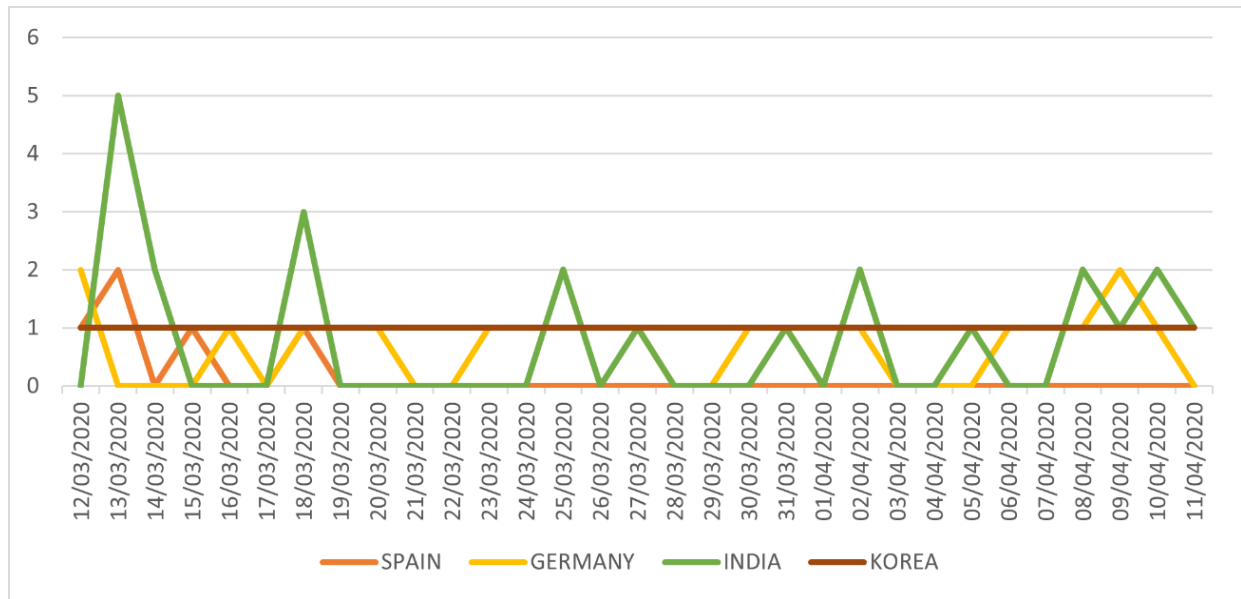
Notably, only the Asian NTOs posted tweets on Covid-19 before the declaration of the pandemic by the WHO on 11 March. Specifically, the NTOs of South Korea and India respectively posted 35.7% and 10.3% of their tweets about Covid-19 prior to the declaration. Conversely, the German and Spanish NTOs only mentioned the issue after the pandemic had been declared. Thus, it can be seen that the European NTOs were much slower to react regarding information on Covid-19. The Indian NTO was the only one to mention Covid-19 on the day of the WHO’s declaration via three tweets.

**Graph 1. Timing of tweets posted by the four NTOs until the declaration of the pandemic**



Source: own elaboration.

**Graph 2. Timing of tweets posted by the four NTOs following the declaration of the pandemic**



Source: own elaboration.

Also noteworthy is the fact that from 18 March, seven after days of the declaration of the pandemic, the NTO of Spain posted its sole tweet mentioning Covid-19 and stopped posting content on the subject keeping silent throughout the rest of the study period, which is surprising (Graphs 2). However, after the declaration, all but one of the tweets posted by the Indian NTO mentioned Covid-19.

### 4.3. Origin of tweets

Regarding the origin of the message (RQ3), Table 4 shows that the majority of tweets published (over 85%) by all NTOs were their own, with South Korea standing out, reaching 100%.

**Table 4. Origin of the messages published**

	General		Spain		Germany		India		South Korea	
	Total Freq.	%	Total Freq.	%	Total Freq.	%	Total Freq.	%	Total Freq.	%
Tweet	523	87.6%	160	98.2%	118	95.9%	140	68.0%	105	100.0%
Retweet	74	12.4%	3	1.8%	5	4.1%	66	32.0%	0	0.0%
Total	597	100.0%	163	100.0%	123	100.0%	206	100.0%	105	100.0%

Source: own elaboration.

It should also be noted that the NTOs of Germany, South Korea and Spain practically exclusively posted tweets on the Covid-19 crisis. In contrast, the Indian NTO retweeted more tweets of other organizations such as the Ministry of Health, of Culture, the Regional Office of Press Information Bureau or the country’s prime minister.

**4.5. Reactions to the tweets published**

Regarding the high reactions obtained by users in response to RQ4, the results (Table 5) show that a total of 128,516 likes and 37,355 shares were obtained, with an average of 215.26 likes and 62.57 shares per tweet.

**Table 5. Reactions generated among the public**

	Likes	Shares	Average likes per tweet	Average shares per tweet
Spain	24191	6704	148.41	41.13
Germany	6781	1825	55.13	14.84
India	63964	16746	310.50	81.29
South Korea	33580	12080	319.81	115.05
Total	128516	37355		

Source: own elaboration.

It is generally observed that the most liked and shared tweets are related to the Covid-19 crisis. For example, the tweet by the Spanish NTO to receive most interactions (370 shares and over 1600 likes) was the one informing that Spain was fighting against the coronavirus and inviting followers to visit the country in the future. And the same thing happened with the posts by the other countries.

Thus, the issue of Covid-19 was seen to arouse more reactions, interest and participation by followers of the NTOs in the period under review, which would be consistent with the importance of the organizations getting involved in and communicating on crisis issues when they occur (Carlsen & Hughes, 2008; Oliveira & Huertas, 2019).



## 5. DISCUSSION AND CONCLUSIONS

First, this study demonstrates the NTOs success of using Twitter for communicating the Covid-19 crisis, corroborating previous studies (Veil, Buehner, & Palenchar, 2011) and confirming the utility of this medium for organizations' communications when pandemic crises occur (Aguilar-Gallegos et al., 2020; Freberg, Palenchar, & Veil, 2013). The success of the use of Twitter is demonstrated by the high number reactions obtained by users in the form of likes and shares of the posted tweets, as other authors have also shown previously (Coombs, 2007; Uşaklı, Koç, & Sönmez, 2017). In addition, it can be seen that the most successful tweets among those posted by NTOs during the analysis period, with the most reactions, are those dealing with Covid-19. Yet, curiously, tweets on this subject were not the most published by the NTOs analysed. Thus, crisis communication could have been more strategic if more tweets had been posted about Covid-19.

Based on the fact that crisis communication requires organizations to report on crises when they occur (Coombs, 1998), the results of the study have shown that in general the NTOs analysed included Covid-19 in a third of their tweets, although the Spanish NTO published virtually none. Thus, NTOs could have played a more active role in communicating a crisis that directly affects tourism.

Another key aspect for successful crisis communication is information about crisis management and the protection of stakeholders (Coombs, 2007). And this study shows that this aspect was also reported unequally by the NTOs analysed. The tweets posted by the NTOs of Germany, India and South Korea did report this aspect and links or numbers for tourists to get further information were identified, which was most highly valued. In contrast, the Spanish NTO posted virtually no such tweets. It is a pity that this NTO failed to take advantage of the potential of a social media such as Twitter for crisis communication and to inform of the efforts being made to protect stakeholders.

The study also shows that the NTOs that did post messages on the efforts being made to protect the stakeholders used Twitter successfully not only as a means to disseminate information about Covid-19, but also as a means of entertainment to lighten up lockdown via virtual concerts and visits that involved user participation. The success of this use of Twitter

can also be seen by the reactions obtained from these tweets by users, demonstrating that technology can be a resource for use when it is not possible to travel in person. In addition, as recently demonstrated, this resource has been used successfully during the Covid-19 crisis (Nanni & Ulqinaku, 2020) and it will bring about the development of e-Tourism in the future (Gretzel et al., 2020) to find new solutions to pandemic crises.

On the other hand, this study shows that all the NTOs mostly posted tourism-related communications to promote their country as a destination and to preserve its attractiveness and good image, in spite of the crisis. Since, as has been previously demonstrated, country image and DI are key factors to attract tourists and wealth to territories (Lee & Gretzel, 2012), this study has shown that the NTOs analysed have continued to manage their tourism marketing and communication adequately despite the Covid-19 crisis. However, it should be made clear that a country's image does not solely rely on its promotion of tourism; due crisis communication management is also necessary to give a country a good image (Coombs, 2007).

This study has also shown that Twitter enables the cooperative management of crisis communication with other tourism organizations and institutions by retweeting the posts of others. In this line, previous studies suggested that NTOs should lead crisis management cooperatively with local tourism organizations (Jiang et al., 2019) and with other organizations to develop communication and promotion actions jointly (Gu & Wall, 2006) to recover their image. In this regard, our study shows that only India's NTO retweeted publications of other tourist institutions and gave voice to other sources. Although organizations' own tweets are important as they demonstrate their involvement (Fowler, 2017; Granville, Mehta, & Pike, 2016), coordinated communication and promotion action is also important, as is joint management of the crisis. But only the NTO of India took advantage of this potential and retweeted more tweets of other organizations.

Finally, the study also shows differences in managing crisis communication between Asian and European countries, but only in two of the aspects discussed. Asian NTOs were seen to be more proactive than the Europe ones in crisis communication: on the one hand, they reported more about Covid-19, and on the other, they did so sooner. Both information on the crisis (Coombs, 2007) and communication reaction speed (Coombs, 1998) are key aspects of crisis communication. Thus, in general, the Asian NTOs analysed managed the crisis more

appropriately with regard to these two aspects. It should be noted that the various government decisions adopted by countries (mass testing in Germany and South Korea, unlike Spain and India) are not related to the type of content published by the NTOs, as Korea and India were the NTOs that most published on measures to contain the spread of the virus.

The results of this study offer a contribution to the management of crisis communication by NTOs and DMOs that may suffer pandemic crises in the future. They provide knowledge on the use of Twitter and on the content posted most successfully and user reactions, which will serve for due crisis and image management of countries and destinations in the event of pandemic crises.

However, the main limitation of this study is that it only analyses the tweets from two European and two Asian countries which, although revealing differences in communication management between the countries analysed, does not enable us to speak of an Asian or a European model of crisis communication. Thus, future research should focus on increasing the number of case studies, extending the period of analysis and should also observe how NTOs continue to report on the issue once the pandemic is over and mobility restrictions are lifted.

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