# Beyond challenges and viral dance moves: TikTok as a vehicle for disinformation and fact-checking in Spain, Portugal, Brazil, and the USA

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#### Abstract

This paper analyses the narrative of disinformation disseminated through the social network TikTok, a network which is popular at a global level and whose users are mainly young or very young. To do so, a study was carried out on the content of publications on TikTok in four countries with different idiosyncrasies and national realities: Spain, Portugal, Brazil, and the United States. Interviews were also conducted with fact-checking agencies on the potential for misinformation and fact-checking potential on this social network. The results suggest that due to its characteristics as a fresh, visual network with easily shareable and viral content, TikTok is a network that facilitates the spread of disinformation, but which in turn is a tool for debunking hoaxes beyond the range of action of conventional media.

Keywords: disinformation; TikTok; fake news; fact-checking

# **Resum.** Més enllà de reptes i balls virals: TikTok com a vehicle per al discurs desinformatiu i la verificació d'informació a Espanya, Portugal, el Brasil i els Estats Units

Aquesta recerca analitza la narrativa de la desinformació a través de la xarxa social TikTok, una xarxa que és tendència a escala global i els usuaris majoritaris de la qual són joves o molt joves. Per dur-ho a terme es fa un estudi dels continguts de publicacions a TikTok de quatre països amb idiosincràsies i realitats nacionals diferents com són Espanya, Portugal, el Brasil i els Estats Units. Així mateix, es fan entrevistes amb agències de verificació de fets sobre el potencial desinformatiu i la verificació de la informació en aquesta xarxa social. Els resultats apunten al fet que, per les seves característiques de xarxa visual, fresca i amb continguts fàcilment compartibles i viralitzables, TikTok és una xarxa que facilita l'expansió de la desinformació, però, al seu torn, és una eina per desmentir boles fora del rang d'acció dels mitjans convencionals.

Paraules clau: desinformació; TikTok; notícies falses; mecanismes de verificació

**Resumen.** Más allá de retos y bailes virales: TikTok como vehículo para el discurso desinformativo y la verificación de información en España, Portugal, Brasil y Estados Unidos

Esta investigación analiza la narrativa de la desinformación a través de la red social TikTok, una red que es tendencia a escala global y cuyos usuarios mayoritarios son jóvenes o muy jóvenes. Para ello se realiza un estudio de los contenidos de publicaciones en TikTok de cuatro países con idiosincrasias y realidades nacionales diferentes como son España, Portugal, Brasil y Estados Unidos. Asimismo, se realizan entrevistas con agencias de verificación de hechos sobre el potencial desinformativo y la verificación de información en esta red social. Los resultados apuntan a que, por sus características de red visual, fresca y con contenidos fácilmente compartibles y viralizables, TikTok es una red que facilita la expansión de la desinformación, pero, a su vez, es una herramienta para desmentir bulos fuera del rango de acción de medios convencionales.

Palabras clave: desinformación; TikTok; noticias falsas; mecanismos de verificación

# 1. Introduction

#### 1.1. The spread of disinformation

Disinformation is a multifaceted phenomenon with diverse aspects and different motives, such as spoofing, causing personal or corporate damage or influencing electoral processes (Guallar et al. 2020). People began to talk about fake news after the 2016 US presidential election campaign that resulted in the victory of Donald Trump (Allcott and Gentzkow, 2017; López, Vives and Badell, 2018), and this event, together with the Brexit process in the United Kingdom and the rise of Bolsonaro to the presidency of Brazil are considered among the most critical moments in terms of the spread of fake news (Cabezuelo and Manfredi, 2019; Da Silva and Dourado, 2019; Pérez, Meso and Mendiguren, 2020).

While disinformation represents a broader concept and is defined as false, inaccurate or misleading content that deliberately seeks to cause harm or benefit (European Commission, 2018), fake news refers to information with the appearance of real news created with the aim of propagating a falsehood and misleading readers in order to obtain some kind of benefit, whether political or otherwise (Amorós, 2018). Salaverría et al (2020) defend the use of the term "hoax" to refer to false content created intentionally and disseminated massively through the network for the aforementioned reasons.

The spread of false content is not a recent phenomenon (Salas, 2019) and is related to the so-called Post-Truth Era (Keyes, 2004) characterised by social networks and the current hyperconnectivity in the interests of shorter, more immediate, instant and highly visual content (Mujika, García and Gibaja, 2020).

Users appropriate Internet content and produce their own messages based on it (Marzal and Casero, 2017). These users play a more active role, proposing multidisciplinary and multichannel dialogues while demanding new ways to express themselves (Li, Xiaohui and Zhengwu, 2019).

This scenario has fostered the spread of false content primarily through digital media, broadening the spectrum beyond the information disseminated by mass media (Ceron, De-Lima-Santos and Quiles, 2021; Salaverría, 2020; Sánchez and Magallón, 2020). These publications reinforce the beliefs of a community with a certain ideological bias, particularly in relation to politics, where dissemination is faster in comparison with other issues (Orbegozo, Morales-i-Gras and Larrondo, 2020), and are reaffirmed insofar as they refer to a reality that conforms to what people want to hear, rather than a reality based on evidence; i.e. so-called wishful thinking (Cassam, 2019; MacKenzie and Bhatt, 2020).

It is even possible to see today, for example, how through Facebook, You-Tube, Twitter or more private social networks such as WhatsApp, democratic and electoral systems can be significantly undermined as a result of this (Bharali and Goswami, 2018; Grinberg et al, 2019).

This asymmetrical context and the increasing spread of false or speculative content has prompted journalists, news media and news agencies to create verification channels through which users can check whether a news item is true or false (Vázquez, Vizoso and López, 2019; Terol and Alonso, 2020; García-Ortega and García-Avilés, 2021), as well as different governments around the world to legislate in this regard (Meneses, 2018) and even social networks such as Twitter, Facebook and Snapchat themselves to apply mechanisms such as that implemented specifically at the beginning of 2021 with the digital veto against Donald Trump, while on other more recent platforms such as TikTok, for the time being, it is the algorithm that acts as arbiter and censor.

#### 1.2. The social network TikTok

TikTok is a social network created from the foundations of Music.ly, a predecessor also owned by the Chinese company ByteDance, in which a message code has been developed around entertainment with large quantities of visual stimuli, which involves a great deal of dynamism, speed of production, consumption of content and creative demand (Li et al., 2019; Shuai, Yuzhen and Yifang, 2019). In short, it relies on communication consisting of playbacks, funny stories and "mind-soothing" content (Yu-Liang, Chun-Chin and Shu-Ming, 2019).

It is a platform that has exceeded 800 million users worldwide, positioning itself as the most downloaded mobile app in the first quarter of 2020 (315 million installations worldwide) (Ditrendia, 2020). Its users are mostly 'Generation Z' (Rapkin, 2017; Shuai et al., 2019) although it is true that over the course of 2020 it reported a significant increase in Millennials and even 'Generation X' users as a consequence of the first strict lockdowns resulting from the COVID-19 pandemic.

Its nature as a digital trend has prompted broadcasters of all kinds, including the media and journalists (Sidorenko, Herranz and Cantero, 2020; Vázquez, Negreira and López, 2020) to innovate by quickly adapting to such a particular message code and heterogeneous audience.

However, it is not precisely the latter interlocutors who enjoy the greatest popularity and, therefore, the greatest audience. Since most consumers are still very young people, it can be considered a priori that the community of users of this social network is not always the best interlocutor for certain topics, which involves superficiality in some cases, or conversely, misrepresentation of certain data.

However, according to Van den Bremer and Siebelink (2020), TikTok users have a more critical view and participation in the content they consume through this platform only when they are genuinely interested in the subject, with a very common approach being to view the comment box to check it.

This is in line with Tan (2013) on YouTube usage habits, although they argue that this is still a superficial mechanism as there is no evidence of any attempt to check the information through other digital channels outside the social network. However, most of these users are concerned about their image and personal brand, so they often think carefully about what they are going to post, a practice that had already been emerging in young audience segments on other social networks (Vogel and Rose, 2016; Omar and Dequan, 2020).

TikTok has represented a major digital channel for the dissemination of information related, for example, to the COVID-19 pandemic (Basch, Hillyer and Jaimie, 2020), not only through the actions of official profiles such as that of the World Health Organisation, but also by individual users who, through specific hashtags, have allowed specialists to get a closer look at users' habits in relation to the pandemic, with the impressions and disinformation risks that any social network entails.

Likewise, as on other social networks, TikTok attempts to control the flow of speculative and biased videos (Ballesteros, 2020). However, as has been happening on Facebook, Twitter, Instagram and Snapchat, to refer to the social networks with the largest number of users worldwide, on TikTok there is a significant flow of content that encourages disinformation unintentionally, but, above all, also intentionally.

Referring to more specific and recent contexts, during the US presidential elections in 2020, a large amount of content which was considered false went viral on this social network, which has been removed by the platform itself, as reported by The Guardian newspaper on 06/11/20 (see <http://bit.ly/3qprqQE>). There is even evidence of the creation of sensationalist media that also engages in disinformation, as in the case of the @notimundo profile (see <http://bit.ly/30RzvNt>).

# 2. Methodology

Given that this is a global digital trend and that it largely involves young and very young audiences, the main aim of this paper is to determine whether there is inaccurate, speculative or false content on TikTok, and how it is constructed narratively, especially during the year 2020, a complex period as a consequence of COVID-19 and various global political episodes that have generated negative effects in the field of information, such as "infoxication" (López, 2020) due to an excess of content referring especially to the delicate health situation, as well as an "infodemic" (Papapicco, 2020) as a consequence of the flood – in the form of a parallel pandemic – of false news and related hoaxes.

Specifically, the questions posed in this regard are: What is the type of profile that creates hoaxes or misinforms through TikTok? How does the user community react to misinformation content on TikTok? Are they aware of it? What type of narrative describes the hoax or inaccurate content? Are there common or general characteristics?

Therefore, the initial hypotheses are:

- H1: TikTok is a platform prone to misinformation, as are other social networks with a history of misinformation.
- H2: The user community easily responds positively to disinformation content.
- H3: False and inaccurate posts come from fake profiles dedicated to disseminating disinformation.
- H4: Fake and inaccurate content gets high levels of engagement which gives it more visibility in the social network's algorithm.

For the purposes of the research, we propose an analysis of the content of publications on this social network in four countries (two European and two American) with different idiosyncrasies and national identities: Spain, Portugal, Brazil and the United States.

This is a preliminary and exploratory survey based on content selected by the researchers after an extensive review of hashtags with high levels of engagement in relation to current affairs or which expressly refer to disinformation: #vivaespaña (90.8 million views), #Trump2020 (18.48 thousand million views), #usa (31 thousand million views), #covidfake (424,800 views) #eleicoes2020 (211.6 million views), #bolsonaro (1.1 billion views), #antoniocosta (2.3 million views) and #marcelorebelodesousa (6.6 million views).

The particular case of #usa was taken into consideration due to the fact that many contents associated with other tags such as #Trump2020 or #covidfake also included it, which aroused suspicion in the content analysis.

The survey was carried out up to the 31<sup>st</sup> of December 2020, taking as a reference 10 profiles per country, for a total of 40 contents, listed in an assessment table by country with the following study variables: username, profile type, number of followers, 'likes' of the profile, narrative characteristics of the content, number of comments resulting from the content, number of times the content was shared, 'likes'. A brief description of each content will also be included under the results heading.

The selection of the posts was determined by the thematic proposal, rather than by any specific engagement indicator. This has thus allowed for a fairly wide range of possibilities that will reveal a variety of expressions of interaction between the user community and false or misleading content.

The types of user profile were classified as follows:

- (IU) individual user
- (PF) public figure

— NGO

- (PO) political organisation
- (FP) fake profile

In addition, the narrative features were established as:

- (S) selfie
- (UN) user does not appear
- (CH) challenge
- (MU) music
- (TX) text

In this respect, a selfie (S) refers to a video in which the person records him/herself with the front camera of the mobile device. User does not appear (UN) refers to accounts in which, from the profile picture to all content, the user remains anonymous and does not reveal his or her identity. Challenges (CH) refer to challenges and impersonations that are part of the intrinsic dynamics of the TikTok user community. Music (MU) is an important variable for the visualisation of the content by the platform's algorithm and is often used to emphasise an idea or image. Finally, text (TX) refers to any messages that reinforce or attempt to enforce or influence the understanding of specific images. The measurement of the number of times the content examined was shared is limited only to the record provided by TikTok, which is partial data because this social network has the special feature of offering the possibility of sharing its content through any social network and digital platform, such as WhatsApp, Facebook or Instagram, which makes it impossible to carry out such measurements in each external medium, given the replicating effect that many of these have.

In order to obtain a professional assessment of this phenomenon and the special nature of the TikTok social network, 'fact-checkers' were consulted in the form of a structured interview about the potential work they carry out through this channel, publishing or monitoring the flow of content, their opinion on the informative qualities of the platform and the potential complexity of the platform, both in terms of its audience and the ease with which its content can be transferred to other social networks. Thus, after several attempts to contact the most representative verification media in the countries surveyed, Maldita.es (Spain) and Lupa (Brazil) finally participated, as well as Cotejo (Venezuela), the latter as an observer from a country which, although not part of the sample, is working in a national context in which there are many complaints about disinformation in the absence of impartial conventional media and a constant persecution of journalists.

The questions asked were about the reasons for having an active profile on TikTok, whether they consider a specific audience segment as part of this initiative, whether they monitor or have considered monitoring TikTok content, whether they consider TikTok to be a complex social network for the verification of fake news and hoaxes, and what they think about the flow of disinformation through this social network.

# 3. Results

There is no standard profile to define the typical "digital disinformer" on TikTok. In Table 5, based on the data obtained from Tables 1, 2, 3 and 4, it is possible to see that in Europe and America, at first glance, disinformation comes from individual users (IU), who typically post selfies (S) or simply videos from other digital platforms, where they are obviously unrecognisable (UN) (see Table 6). However, in any of the most common cases, texts are an important resource for reaffirming the biased idea that the user is trying to put across through multimedia content.

		Regarding the profile			Content: characteristics and engagement			
No.	User	Туре	Followers	ʻlikes'	Narrative	No. of comments	Shared (No. of times)	ʻlikes'
1	@viva_espnaaa <https: <br="" vm.tiktok.com="">ZSpD36H3/&gt;</https:>	FP	34200	505500	UN	1632	4543	76700
2	@rafaadiaaz <https: <br="" vm.tiktok.com="">ZSpD3dVg/&gt;</https:>	IU	385	8652	UN-MU- TX	621	116	7770
3	@callemoslarepublica_1 <https: <br="" vm.tiktok.com="">ZSpDnYWt/&gt;</https:>	IU	3655	93200	S-CH- MU-TX	562	162	7352
4	@gerardoo.vera <https: <br="" vm.tiktok.com="">ZSpUHPkP/&gt;</https:>	IU	377000	7.8 millions	S	90	23	5467
5	@gonzalovy <https: <br="" vm.tiktok.com="">ZSpUSNy9/&gt;</https:>	IU	343	10100	S-MU-TX	714	219	3755
6	@abascalpresidente1 <https: <br="" vm.tiktok.com="">ZSp5XEBy/&gt;</https:>	FP	1661	45600	UN	108	196	1724
7	@espanaviva <https: <br="" vm.tiktok.com="">ZSp54NUE/&gt;</https:>	FP	4220	80900	UN	95	151	1432
8	@fortjosu <https: <br="" vm.tiktok.com="">ZSp53sHV/&gt;</https:>	IU	104000	826200	UN-MU	5922	32100	45200
9	@anitaaa.98 <https: <br="" vm.tiktok.com="">ZSp4LFmd/&gt;</https:>	IU	9025	211200	MU-TX	185	93	1033
10	@xjuandem <https: <br="" vm.tiktok.com="">ZSp4LSqY/&gt;</https:>	IU	1305	20400	S-MU-TX	239	53	2863

 Table 1. Disinformation content produced in Spain on TikTok up to the 31<sup>st</sup> of December

 2020

Source: Own compilation.

Of the four countries surveyed, the second profile associated with disinformation content was the so-called "fake profile" (FP), such as cases 1, 6 and 7 (Table 1) 2, 6, 7, 8 and 9 (Table 2) 1, 3 and 7 (Table 3) and 3, 9 and 10 (Table 4), in which it can be seen that there is no specific publication theme, with their feeds being full of unconnected videos, where it is common to see humorous content interspersed with other political or "technical-scientific" content.

Cases such as number 1 in Table 1, whose description states that its feed consists of humour and politics, illustrates this situation. This particular feed has high levels of engagement, which results in greater promotion of the content by the algorithm.

		Regarding the profile			Content: characteristics and engagement			
No.	User	Туре	Followers	ʻlikes'	Narrative	No. of comments	Shared (No. of times)	ʻlikes'
1	@tiagocenas <https: <br="" vm.tiktok.com="">ZSsUHt6f/&gt;</https:>	IU	10500	1203000	S	23	1	105
2	@teixi_cl0ud1 <https: <br="" vm.tiktok.com="">ZSsyN2sB/&gt;</https:>	FP	12600	3799000	UN-MU- TX	157	119	3333
3	@mafaldaatcosta <https: <br="" vm.tiktok.com="">ZSsyNoRF/&gt;</https:>	IU	14300	140000	S-MU-TX	80	78	2173
4	@portugualviral <https: <br="" vm.tiktok.com="">ZSsUbxx2/&gt;</https:>	PF	85900	1500000	UN-TX	124	231	1132
5	@portugalinhe <https: <br="" vm.tiktok.com="">ZSsUExu7/&gt;</https:>	PF	44900	998600	UN-TX	0	6	267
6	@ntvoficial <https: <br="" vm.tiktok.com="">ZSsyBWvX/&gt;</https:>	FP	8060	62500	UN	5	10	114
7	@memes_tuga69 <https: <br="" vm.tiktok.com="">ZSsymuH5/&gt;</https:>	FP	10400	150900	UN	2	5	107
8	@manellmiranda <https: <br="" vm.tiktok.com="">ZSsySHqK/&gt;</https:>	FP	469	6817	UN-TX	34	217	4489
9	@sabugaswow <https: <br="" vm.tiktok.com="">ZSthU7dx/&gt;</https:>	FP	104	1145	UN	87	466	1088
10	@fabiopakete <https: <br="" vm.tiktok.com="">ZSsykfQd/&gt;</https:>	IU	4782	9601	UN	0	25	67

 Table 2. Disinformation content produced in Portugal on TikTok up to the 31<sup>st</sup> of December

 2020

Source: Own compilation.

In Portugal and Brazil, disinformation content is more focused on politics, in some cases referring to the issue of the COVID-19 vaccination. There are even 'Deepfake' videos where the face of an individual is replaced, in this case, by that of the president of Portugal (cases 8 and 10 Table 2), attributing words or acts to him that have not really happened, misrepresenting his actions to very young, less informed audiences, either voluntarily or involuntarily, as Casero-Ripollés (2020) points out.

		Regarding the profile			Content: characteristics and engagement			
No.	User	Туре	Followers	ʻlikes'	Narrative	No. of comments	Shared (No. of times)	ʻlikes'
1	@cavaleiroandante <https: <br="" vm.tiktok.com="">ZSsNYrBm/&gt;</https:>	FP	663	12500	UN-TX	305	3327	9169
2	@germias946 <https: <br="" vm.tiktok.com="">ZSsNBQsa/&gt;</https:>	IU	100400	1400000	UN	9102	213900	281700
3	@cristao_puritano <https: <br="" vm.tiktok.com="">ZSsNNHDU/&gt;</https:>	FP	17400	57700	UN	209	367	7063
4	@fechadocombolsonaro2 <https: <br="" vm.tiktok.com="">ZSsNeogp/&gt;</https:>	IU	18300	235100	UN-TX	236	767	5029
5	@leandroaviolao <https: <br="" vm.tiktok.com="">ZSsyCLJ3/&gt;</https:>	IU	142	4163	S	58	732	970
6	@gustavodavi21 <https: <br="" vm.tiktok.com="">ZSstWDLV8/&gt;</https:>	IU	2886	59900	UN	36	156	668
7	@luiz_ricardo7 <https: <br="" vm.tiktok.com="">ZSsUhVt4/&gt;</https:>	FP	9356	291900	UN-TX	394	1004	30900
8	@pauloferreira <https: <br="" vm.tiktok.com="">ZSsUgbJr/&gt;</https:>	IU	2237	20600	UN-TX	272	540	3223
9	@planetjemil <https: <br="" vm.tiktok.com="">ZStWp5xw&gt;</https:>	IU	5561	153700	UN-TX	2	3	92
10	@leandroguerra95 <https: <br="" vm.tiktok.com="">ZSsyjH9c/&gt;</https:>	IU	3746	86400	UN-TX	143	172	660

Table 3.	Disinformation	content	produced	in Brazil	on	TikTok up	to the	31st of	December
2020									

Source: Own compilation.

	@mel_d2ktk <https: <br="" vm.tiktok.com="">ZSpQweno/&gt; @toni_boloni <https: <="" th="" vm.tiktok.com=""><th>Reg</th><th>arding the</th><th>profile</th><th colspan="4">Content: characteristics and engagement</th></https:></https:>	Reg	arding the	profile	Content: characteristics and engagement			
No.	User	Туре	Followers	ʻlikes'	Narrative	No. of comments	Shared (No. of times)	ʻlikes'
1	<https: <="" td="" vm.tiktok.com=""><td>IU</td><td>1827</td><td>248400</td><td>UN-TX</td><td>disabled</td><td>6038</td><td>248000</td></https:>	IU	1827	248400	UN-TX	disabled	6038	248000
2		IU	3910	114100	UN-TX	1343	5432	80200
3	@aplhadavis0005 <https: <br="" vm.tiktok.com="">ZSpC57vJ/&gt;</https:>	FP	8409	68800	UN-TX	3255	42900	68800
4	@its_danzy <https: <br="" vm.tiktok.com="">ZSpCYP9L/&gt;</https:>	IU	437700	19500	S-TX	310	110	10400
5	@diarioexxtra <https: <br="" vm.tiktok.com="">ZSpCDCrk/&gt;</https:>	PF	138000	1.4 millions	UN-TX	2629	3615	198900
6	@ashleyblake128 <https: <br="" vm.tiktok.com="">ZSpCrxXQ/&gt;</https:>	IU	30500	166500	S-TX	1162	2592	191000
7	@alexnino_ <https: <br="" vm.tiktok.com="">ZSpCm4Rg/&gt;</https:>	IU	302800	9.9 millions	S-TX	495	1787	18200
8	@fonzieethenolaguy <https: <br="" vm.tiktok.com="">ZSpCEmsL/&gt;</https:>	IU	572	4313	UN-TX	174	341	1676
9	@wakeup0666 <https: <br="" vm.tiktok.com="">ZSpXJvyx/&gt;</https:>	FP	1642	3566	UN-MU- TX	8	15	106
10	@2reddotreaxts <https: <br="" vm.tiktok.com="">ZSpX1caq/&gt;</https:>	FP	551	2913	UN-MU- TX	6	15	97

 Table 4. Disinformation content produced in the United States on TikTok up to the 31<sup>st</sup> of December 2020

Source: Own compilation.

Perhaps the most sensitive cases have been seen in the United States (Table 4), where politics is mixed – often in a forced manner – with the health situation, with conspiracy theories of various kinds or with the supposed existence of superior races that are the ones who really manage the future of the planet, as in the case of the 'reptilian' theory (case 5 Table 4).

The first content in Table 4 is noteworthy in that it refers to a particular situation of racial hatred, with comments disabled, which has prevented the user community from expressing themselves accordingly. The video shows alleged footage from a security camera at the entrance to a private home, where a delivery man apparently exclaims that the person he is about to deliver to is a racist, so he decides to throw the package at the door.

The user who posted this video indicates with complementary text that the subject's reaction is due to the pro-Donald Trump flags in the person's garden (which are not visible in the footage).

Although the video may or may not be authentic, it is difficult to determine whether the voice that can be heard is really that of the delivery person in question or a fabrication. Also, as the flags in question are not visible, it could be a video taken out of context and biased by the accompanying text.

Table 5. Type of disinformation user profile by country (review up to the 31st of December2020)CountryIUPFNGOPOFP

Country	IU	PF	NGO	PO	FP
Spain	7	0	0	0	3
Portugal	3	2	0	0	5
Brazil	7	0	0	0	3
USA	6	1	0	0	3
Total	24	3	0	0	13

Source: Own compilation.

In the sample surveyed, there was no evidence of disinformation content by political parties or non-governmental organisations, although some videos from parties such as VOX in Spain, or actions carried out through other digital platforms have led to the creation of fake accounts or the potential radicalisation of some users, who publish as if they were intermediaries of these ideas, which are ultimately false and end up fuelling hatred and social antagonism, as can be seen in the comments of cases 1 (Table 1), 7 (Table 3) or 5 (Table 4), for example.

**Table 6.** Most used type of narrative by disinformation profile (review up to the 31<sup>st</sup> of December 2020)

Profile type	Selfie (S)	User does not appear (UN)	Challenge (CH)	Music (MU)	Text (TX)
IU	9	12	1	7	16
PF	0	3	0	0	3
NGO	0	0	0	0	0
PO	0	0	0	0	0
FP	0	14	0	3	7
Total	9	29	1	10	26

Source: Own compilation.

According to the data shown in Table 6, the narrative practice most used in content classified as disinformation on TikTok is the publication of a video fragment taken out of context and coming from another digital platform, accompanied by some text that influences the observation and interpretation of the content by the user community.

#### 4. Discussion and conclusions

From the sampling carried out, the content of the four countries analysed can be considered to fulfil the first hypothesis put forward, since it is indeed easy to spread disinformation through TikTok, with "individual users" who are not related – at least not publicly – to specific political parties or organisations, using generic hashtags on most occasions and challenges unrelated to the proposed content, but with high popularity rates.

The attempt to use high-visibility hashtags to try to increase the reach of content is noteworthy, although this has begun to be penalised by the algorithm, as stated by TikTok Spain's own staff (see <a href="http://bit.ly/2LZgbPD">http://bit.ly/2LZgbPD</a>).

Individual profiles are the most likely to create this type of false content, which confirms the third hypothesis, since the false or inaccurate information comes from fake profiles dedicated to spreading disinformation, but, on the other hand, with a significant presence of individual users who also publish other types of content, leading other people to give them greater credibility.

It is worth noting that users do not always react positively to these posts, this being evident on occasions involving content with a political and health-related tone, where the user community has reacted negatively. Although this does not necessarily prevent them spreading and going viral, it does generate contradiction with them, as in cases 9 (Table 1) 1, 5, 7 and 10 (Table 2) 9 (Table 3) and, 9 and 10 (Table 4), and this does not allow the second hypothesis to be confirmed.

It is necessary to distinguish between users who show a clear political tendency, in some cases bordering on fanaticism, and express this in their posts, and disinformation content of a political, health, environmental, etc. nature, whose discourse may be more effective as the users themselves are not aware that it is fake content, and the spread of disinformation is not possible if there are no recipients to confirm and spread this fake content.

With regard to the fourth hypothesis on engagement and the operability of the TikTok algorithm, it was observed that fake content as such is not always the type of content that obtains the highest visibility. However, the algorithm is indeed conditioned by posts in which the fake content is presented in a humorous way, even if it deals with political issues.

A noteworthy example of this is case 1 (Table 1) entitled "Pedro Sánchez resignation", which is not satirical content, but the sender is a profile with high levels of engagement in general terms. The large number of followers it has (34,200) gives it a large audience, which broadens the possibilities of exposure, as these recipients are then free to extract the content from the platform and divert it to other digital channels according to their interests. The strategy of interspersing biased political content with other humorous non-political posts has allowed the profile to engage an audience that is large in number and potentially receptive to its message.



#### Figure 1. Video of political interest on TikTok profile defined as satirical (Video 1, Table 1)

Source: TikTok profile of @viva espnaaa.

While in Brazil the disinformation and fake content refers to the context of politics and health (political criticism is not directed at the national government but rather at regional and local authorities), in Portugal it is more difficult to determine the specific reasons for spreading disinformation, although a tendency towards irony and humour is detected in the dissemination of fake content, also with a special emphasis on politics and, above all, on the figure of the president of the government and the prime minister.

**Figure 2.** Video from Brazil in which a local government is accused of mismanagement of public roads, something which is later refuted as it is neither the place nor the work in question (Video 7, Table 3)



Source: TikTok profile of @luiz\_ricardo7.

However, this is not – for the moment – a scenario of serious political polarisation, although it is true that in 2020 there has been greater media exposure of André Ventura, representative of Chega, a far-right party, the only one in this country to have a profile on TikTok, but still with very low levels of engagement. Similarly, it cannot be ruled out that in time this scenario will change, and political content will increase and become more relevant on TikTok.

Conversely, in Spain, growing political polarisation does have a more visible impact than other topics on fake content and disinformation work on this social network. Most of the cases reviewed here (9 out of 10) refer to issues that have to do with discourse against the government, political representatives or the parties themselves, both in their economic and health management, specifically in relation to COVID-19.

Example 9 (Table 1) is even more striking because the person who publishes it is a girl who engages in posting the State budgets applied during the mandate of the different government presidents of the democratic era. Her final argument is that the socialist Pedro Sánchez bases his administration on the budgets of the previous conservative-led administration, alleging the socialist's inability to approve new national budgets. She reinforces this explanation with the phrase "STOP FAKE NEWS", although this may seem a contradiction (see Figures 3 and 4).

Figures 3 and 4. Political TikTok post with handling of data without source references (Video 9, Table 1)



Source: TikTok profile of @anitaa.98.

Finally, in the United States, the 2020 presidential elections led to one of the most complex scenarios in terms of the flow of politically charged disinformation content on TikTok, which in many cases inevitably became intertwined with the health situation resulting from COVID-19, as Pablo Hernández of Maldita.es states, and as can be seen in the cases listed in Table 4.

This disinformation scenario becomes more complex when hybridised with messages that support conspiracy theories of various kinds, as in cases 3, 4 and 5 in Table 4, for example.

**Figures 5, 6 and 7.** Political TikTok post linking the Covid-19 virus to the number of the Beast and Joe Biden's US 2020 campaign (Video 3, Table 4)



Source: TikTok profile of @aplhadavis0005.

As Table 6 shows, at present, disinformation on TikTok is narratively determined by individual users, most of them fake profiles, who insert videos and photos from other digital platforms, taken out of context and reinforced with biased texts.

In view of this situation, several journalists and specialists have now seen the need to apply verification criteria and participate in TikTok. Thus, Agencia Lupa (Brazil) and Maldita.es (Spain) justify their profiles on this channel as being a consequence of the rapid expansion of the social network during the first strict lockdowns imposed as a result of COVID-19, due to the fact that it is a "network used mainly by young people who may be more vulnerable to fake news and because it is a trending platform".

Maldita.es has been monitoring the social network since 2019 and generates educational content because, according to Pablo Hernández (Maldita. es), "it is necessary to act by creating TikTok format denials and providing truthful information through the social network itself". Lupa, meanwhile, tends to intervene on the basis of fake content sent to them by users themselves. Both fact-checkers consider it important to create content in the message code that the platform itself imposes, in order to achieve a better reach. From Venezuela, Karla Torres de Cotejo warns that although TikTok is a very popular social network among young people, this does not imply that it is a medium prone to a greater flow of disinformation and fake content. TikTok is not a platform where users go specifically to seek information – quite the contrary. However, on the way through the main feed, they do come across information and, therefore, also disinformation and fake content.

The content consumption proposed in TikTok is not designed to promote profiles but specific content. Users construct their "news" and "reality" with what the algorithm proposes in the feed, which is not necessarily made up of the accounts followed. This algorithm volatilises a large amount of content, which is likely to escalate rapidly, making the platform vulnerable to disinformation, which is currently incipient, but which, as it continues to grow, could become a more serious problem.

According to the latest State of Mobile Devices 2021 report from the App Annie consultancy (see <http://bit.ly/3nNrTdv>), people tend to spend more time on TikTok (20 hours in 2020) than on Facebook (16 hours in 2020), and more time connected to mobile devices than to conventional TV: in the US almost 4 hours per day and in Brazil almost 5 hours per day, for example.

Curiously, in contrast, due to its status as a trending network, the current convergence of so many audience segments and the fact that it is a platform where the tone of the message is fresh and dynamic, it seems that TikTok is seeking to gradually and organically establish itself as a more expeditious and accessible way to disprove fake news outside the range of action of conventional media, as in the case of the report of the "fake snow" in Madrid in January 2021 (see <a href="http://bit.ly/39EoLvC>">http://bit.ly/39EoLvC></a>), even providing the possibility of the emergence of new journalistic and/or information proposals such as @holajulen <a href="http://bit.ly/2XNyKsM">http://bit.ly/3xKomb</a>>.

This paper has attempted to advance the differentiation of the potential disinformation narrative on TikTok with regard to other social digital platforms, with the aim of enriching the study of this type of statement and thus adding a new resource to the respective analysis in order to mitigate the scourge of lies and speculation in today's digital society.

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