

Revista de Comunicación de la SEECI, nº 54, 41-61 ISSN: 1576-3420

RESEARCH

http://doi.org/10.15198/seeci.2021.54.e738

Received: 24/09/2021 --- **Accepted**: 10/11/2021 --- **Published**: 10/12/2021

VERIFICATION SYSTEMS IN DIGITAL NATIVE MEDIA AND AUDIENCE INVOLVEMENT IN THE FIGHT AGAINST DISINFORMATION IN THE IBERIAN MODEL

SISTEMAS DE VERIFICACIÓN EN MEDIOS NATIVOS DIGITALES E IMPLICACIÓN DE LA AUDIENCIA EN LA LUCHA CONTRA LA DESINFORMACIÓN EN EL MODELO IBÉRICO

Des José Sixto-García¹. Universidade de Santiago de Compostela (USC). España jose.sixto@usc.es

Description Ana-Isabel Rodríguez-Vázquez. Universidade de Santiago de Compostela (USC). España anaisabel.rodriguez.vazquez@usc.es

Sosé López-García. Universidade de Santiago de Compostela (USC). España xose.lopez.garcia@usc.es

How to cite the article:

Sixto-García, J., Rodríguez-Vázquez, A.I. y López-García, X. (2021). Verification Systems in Digital Native Media and Audience Involvement in the Fight Against Disinformation in the Iberian model. *Revista de Comunicación de la SEECI*, 54, 41-61. http://doi.org/10.15198/seeci.2021.54.e738

ABSTRACT

Disinformation constitutes a serious threat to the democratic exercise of journalism and to societies in general. While the press adheres to the recommendations and ethical codes of different organizations to protect citizens' rights to receive truthful information, digital media offer more and more possibilities for audience participation. Pertaining to this dual reality, this research deals with the usergenerated contents verification systems of the most important digital native newspapers in Spain and Portugal. For this job, those responsible for the systems

¹ José Sixto-García. Universidade de Santiago de Compostela (USC). <u>jose.sixto@usc.es</u>. José Sixto-García is a professor in the Department of Communication Sciences at the University of Santiago de Compostela and is part of the Novos medios research group. His research interests include digital contexts, social networks and new narratives and their impact on news production. ORCID: https://orcid.org/0000-0002-2988-0975



41

within each newspaper were interviewed. The conclusions indicate that newspapers attach great importance to the involvement of audiences in news production, though they also expose the lack of verification systems for the information provided by the public. This work provides the analysis of specific cases and the perspective of professionals in the fight against disinformation. It is argued here that it is not enough for the media to adhere to external deontological guidelines, but rather that they should develop internal news verification systems to regain their credibility, as was the case, for example, during the Coronavirus pandemic (ComScore, 2020).

KEYWORDS: Disinformation; fact-checking; fake news; media ethics; native digital media; democracy; audience.

RESUMEN

La desinformación constituye una seria amenaza para el ejercicio democrático del periodismo y para las sociedades en general. Mientras la prensa se adhiere a las recomendaciones y códigos éticos de diferentes organizaciones para proteger los derechos de los ciudadanos a recibir información veraz, los medios digitales ofrecen cada vez más posibilidades de participación de la audiencia. Perteneciente a esta doble realidad, esta investigación aborda los sistemas de verificación de contenidos generados por los usuarios de los periódicos nativos digitales más importantes de España y Portugal. Para este trabajo se entrevistó a los responsables de los sistemas dentro de cada periódico. Las conclusiones señalan que los periódicos otorgan gran importancia a la participación de las audiencias en la producción informativa, aunque también exponen la falta de sistemas de verificación de la información brindada por el público. Este trabajo aporta el análisis de casos concretos y la perspectiva de los profesionales en la lucha contra la desinformación. Aguí se argumenta que no es suficiente que los medios de comunicación se adhieran a pautas deontológicas externas, sino que deben desarrollar sistemas internos de verificación de noticias para recuperar su credibilidad, como fue el caso, por ejemplo, durante la pandemia de Coronavirus (ComScore, 2020).

PALABRAS CLAVE: Desinformación; comprobación de hechos; noticias falsas; ética de los medios; medios digitales nativos; democracia, audiencia.

Sistemas de verificação em suportes digitais nativos e envolvimento do público no combate à desinformação no modelo ibérico

RESUMO

A desinformação constitui uma séria ameaça ao exercício democrático do jornalismo e às sociedades em geral. Enquanto a imprensa adere às recomendações e códigos de ética de diferentes organizações para proteger os direitos dos cidadãos de receber informações verdadeiras, as mídias digitais oferecem cada vez mais possibilidades de participação do público. Pertencente a esta dupla realidade, esta pesquisa aborda os

sistemas de verificação de conteúdos gerados pelos utilizadores dos mais importantes jornais digitais nativos de Espanha e Portugal. Para este trabalho, foram entrevistados os responsáveis pelos sistemas de cada jornal. As conclusões indicam que os jornais atribuem grande importância à participação do público na produção das notícias, embora também exponham a falta de sistemas de verificação das informações prestadas pelo público. Este trabalho fornece a análise de casos específicos e a perspectiva de profissionais no combate à desinformação. Aqui, argumenta-se que não basta a mídia aderir a diretrizes éticas externas, mas que deve desenvolver sistemas internos de verificação de notícias para recuperar sua credibilidade, como foi o caso, por exemplo, durante a pandemia do Coronavírus (ComScore, 2020) .

PALAVRAS CHAVE: Desinformação; verificando os fatos; notícias falsas; ética na mídia; mídia digital nativa; democracia, audiência.

1. INTRODUCTION

The right of citizens to receive truthful information is being obscured by the spread of fake news and the lack of content verification systems within the media. This situation of disinformation undermines our democratic experience and jeopardizes journalism's commitment to the promotion of a free and pluralistic society. On the one hand, journalists are active in the development of options to encourage citizen participation and involve their audiences in the preparation of the news. Yet on the other hand, the lack of filters allows unscrutinized or even malicious information to be published. 51% of experts believe that the situation will not improve in the coming years and that by 2022 half of the news will be fake news (Herrero-Diz et al., 2019).

Tandoc, Lim and Ling (2017) analysed thirty-four academic articles that used the term 'fake news' between 2003 and 2017 and established a taxonomy to classify this type of news articles based on levels of facticity and deception: news satire, news parody, fabrication, manipulation, advertising and propaganda. Habgood-Coote (2018), however, advocates for journalists and academics to stop using the terms 'fake news' and 'post-truth', arguing that they have propagandistic connotations that bolster anti-democratic practises. There is evidence of different perspectives referring to the same concept. Still, the information disorder (Wardle and Derekhshan, 2017) that we are currently witnessing is something unprecedented. Furthermore, it is becoming increasingly difficult to distinguish between the nonsense information that algorithms can create and that which is manufactured with intent, generally to earn money (Bridle, 2018), as well as the use of personally and emotionally targeted news produced by algorithmic journalism (Bakir and McStay, 2017). It is even more striking when disinformation is generated as a result of accidents, tragedies or health crises, as was the case with misleading messages spread after the Malaysia Airlines flight MH17 crash in eastern Ukraine (Rietjens, 2017) or during the COVID-19 pandemic (Frenkel, Alba and Zhong, 2020).

Regardless of the name given to 'fake news', numerous research projects, politicians and academics have, in recent years, attempted to value the role of digital literacy in strengthening the resilience of citizens against disinformation, especially from the escalation of perceived crises following election and referendum results in the US and UK respectively (McDougall et al., 2019). The search for an antidote against disinformation is a constant concern for supranational organizations and institutions such as UNESCO (Ireton and Posetti, 2018) or the European Commission (2020, 2018). The European Commission's action plan (2018) to intensify efforts to counter disinformation in the world is based on four key aspects: 1) improved detection, analysis and exposure of disinformation; (2) increased cooperation and joint responses to threats; (3) improved collaboration with online platforms and the media industry; and (4) to raise awareness of and improve social resilience.

The DIGCOMP Project (European Commission), the Krumsvik model (Norway), the TPACK model (USA), the JISC model (UK), the ISTE Standards (USA) and the P21 model (USA) are examples of development models of digital literacy, highlighting the emerging need for educational policies (Pérez-Escoda, García-Ruiz and Aguaded, 2019, Brites, 2017). Librarians (Frederiksen, 2017) have also warned that discerning between fake and real information is becoming increasingly complex, arguing that the only possible solution to this lies in digital literacy.

There are others critical voices like Buckingham (2019), who warns that limiting the solution to fake news in digital literacy is a reductionist approach that would not solve the problem. The author promotes a broader concept of media literacy, based not only on technology, but also on critical thinking on the economic, ideological and cultural dimensions of the media. With that being said, he has acknowledged scale of the problem and stressed the difficulties entailed in overcoming it. Gutiérrez-Martín, Torrego-González and Vicente-Mariño (2019) point out the need to reclaim the truth as a journalistic and social value in the digital context, and for media literacy to be included as an essential task for all educational agents, that is, school, media and social groups.

Egelhofer and Lecheler (2018) understand that fake news represents an unprecedented shift in public and political opinion on what journalism represents and how the information production process is constructed in a digitized world. They argue that fake news constitutes a two-dimensional phenomenon of communication; that firstly, this label refers to the practice of the deliberate creation of pseudo-journalistic misinformation and, secondly, that the term is used in attempts to delegitimize the media via political instrumentalization.

For a piece of information to be fake news, it obviously must be false and be created with the intention to deceive. Furthermore, it must also be presented in a journalistic format that imitates the content of the media (Lazer et al., 2017; Horne and Adali, 2017). Different are the hoaxes or rumours spread by private individuals, but without the appearance of a journalistic product, for example through WhatsApp audio messages. In this case, the recipients do not interpret this content as journalistic because it lacks the format intrinsic to that type of product, although the

intent of the authors is equally negligible. Several previous investigations (Guess, Nyhan and Reifler, 2018; Lazer et al., 2018; Nelson and Taneja, 2018; Howard et al., 2017; Silverman, 2016) concluded that fake news is disseminated mainly through social media thanks to the virality they gain in those spaces (Allcott, Gentzkow and Yu, 2019), something not allowed for within traditional media (Carlson, 2016). Meanwhile, those news stories that are inaccurate, but do not hide a deliberate interest in deceiving audiences, cannot be considered fake news. They are referred to simply as 'false news' (Egelhofer and Lecheler, 2018).

1.1. Verification Systems in the Media

The fake news phenomenon does not only affect citizens, but journalistic companies that face increasingly demanding information verification processes on a daily basis. On the one hand, they must verify what viral information or information published in other media is actually true. On the other, they have to guarantee the reliability of the data and information sent by the public through citizen participation mechanisms (Malmelin and Villi; 2016, Napoli, 2010) and via the growing spaces designed for co-creation (Frow et al., 2015; Aitamurto, 2013; Ind and Coates, 2013).

It is necessary to know how the media deal with these challenges. This is especially true in the modern context, where the media's credibility and legitimacy are increasingly questioned (Carlson, 2018) as they also face strong competition from the democratization of culture (Moreno- Caballud, 2014). Previous studies have concluded that news verification is carried out only after the erroneous information had been disseminated (Shao et al., 2018). Furthermore, studies have found that the fact verification warnings disseminated by social media operators were barely effective (Pennycook et al., 2020; Allcott and Gentzkow, 2017). Facebook, for example, ended up withdrawing them as this type of labelling proved to be completely counterproductive, only leading to the display of hoaxes (Lyons, 2017). Facebook's current strategy is based on reducing the distribution of this kind of content among users, although it doesn't eliminate it. The assumption that a news story is true, simply because it was not tagged as false, was highly problematic. Nonetheless, a recent investigation confirmed that users are now more sceptical about the content they consume on networks (Clayton et al., 2019).

A current study presents the effectiveness of web interfaces such as BaitWatcher in detecting incongruous news headlines, concluding that it is necessary to develop an interpretable artificial intelligence (AI) agent for the design of a better interface in order to mitigate the effects of online misinformation (Park et al., 2020). Other solutions related to AI and content automation, such as Google Fact Check Tools, have recently come into being. These types of initiatives are in line with the recommendations made by Pomerleau and Rao (2016) in regards to creating a database on fake news. Nonetheless, their effectiveness is yet to be proven. In WhatsApp, for example, the encryption of messages does not allow artificial intelligence to examine their content. For this reason, the company decided to limit the forwarded messages during the coronavirus pandemic as a way to combat disinformation (Davis, 2020).

We must highlight the role that organizations such as the Fake News Challenge – made up of more than 100 volunteers and 71 teams from the academia and the newspaper industry from around the world– play in furthering the development of verification tools based on artificial intelligence, machine learning and natural language processing. They believe that "AI technologies hold promise for significantly automating parts of the procedure human fact checkers use today to determine if a story is real or a hoax" (Fake News Challenge, 2020). First Draft is another interesting initiative made up of organizations brought together by the Google News Lab, including Facebook or Twitter.

Other organizations and associations are firmly committed to human value as an essential tool for verifying the facts. A relevant example is the International Fact Checking Network (IFCN), a unit of the Poynter Institute created in 2015 and which has 67 media associates from around the world. The Code of Principles (2016) that the media members of this unit must comply with consists of five points: (1) a commitment to non-partisanship and equity; (2) a commitment to transparency of sources; (3) a commitment to transparency in financing and organization; (4) a commitment to the transparency of the methodology; and (5) a commitment to open and honest corrections. In 2017 Facebook announced that signing up to this code was a prerequisite for their data verifiers.

The Trust Project is an international media consortium created in 2015 and based at the Markkula Center for Applied Ethics at Santa Clara University. Among its more than 70 members are newspapers such as The Washington Post and The Independent. They follow criteria very similar to that of IFCN in the fight against disinformation and the verification of facts and news. NewsGuard scores the level of reliability of the media on a scale of 1 to 100 according to nine criteria related to transparency and rigorous reporting. In addition, they created an extension for Internet browsers (Chrome, Safari, Firefox and Edge) that allows the user to certify whether a website is reliable or not. This verifier was launched in 2018, and by the following year, 500 pages had already improved their journalistic work methodology by following the criteria set by this tool (Mondéjar, 2019).

In Spain, Maldita.es is a journalistic tools site that detects false and malicious information. Together with Newtral, they are the only Spanish organizations that are part of the High Level Group (HLEG) on fake news and disinformation, formed by the European Commission in 2018. The fact-checking process that follows is based on three steps: (1) a team member investigates the disinformation, contacts primary sources, contrasts the information to that within official databases, and uses technological processes to identify images or audios; (2) the rest of the team raise doubts about the verification through a group on Telegram and (3) after examining the verifier's work, the entire team votes regarding the refutation. If there is even one vote against the verification process, it must start again from the beginning. All team members also have the right to a veto, meaning that if a single member vetoes a refutation, it will no longer be published. Newtral is an independent start-up whose sole shareholder is the Spanish journalist Ana Pastor. She is the director and

presenter of 'El Objetivo', the first fact-checking initiative in Spain, and from which Maldita.es emanated. In 2019, after their contract with the Associated Press and the North American verification website Snopes was broken, Facebook signed Maldita.es and Newtral to combat fake news (Pérez, 2019). In doing so, Facebook joined them together with France Presse as part of their effort to lessen the flow of disinformation around the world.

In summary, all the initiatives mentioned try to utilize human potential within their fact verification processes, without jeopardising the supplementary and supporting role that AI systems may play within these tasks. But what about the media themselves? The European Commission (2018) advises both print press organizations and broadcasters to intensify their efforts to achieve the highest levels of compliance with ethical and professional standards with the aim of maintaining a trustworthy and pluralistic media ecosystem. We value the existence of collegiate bodies, associations and entities that fight against the serious problem of disinformation. Nevertheless, these efforts must translate into work mechanisms and productive routines in the newsrooms. It is practically impossible to investigate the intent behind fake news production. Nonetheless, it is understood that it is important to provide the scientific and academic community with cases of how the media fight disinformation from behind the scenes, and for them to know what systems are used to capture malicious intent. In line with the contributions of Hoxha and Hanitzsch (2018), it is also argued here that interviewing journalists is essential in identifying the processes that they use to create news in the current context.

2. OBJECTIVES

This investigation has two objectives: (1) to demonstrate the existence of verification systems in native digital media and (2) to analyse the role of the audience in the fight against disinformation. This paper is keenly interested in native digital media, where content is created on and for the Internet, since it is this format that provides the audience with the greatest possibilities for participation and co-creation. The decision was made to study the Iberian model, so the leading digital native media outlets from Spain and Portugal were selected. The selections were based on the highest weekly usage percentage according to the data collected in the *Digital News Report 2019* (Reuters Institute, 2019). The Spanish selection was eldiario.es and the Portuguese was Observador.

The selection is justified by the audience data and brand awareness of the newspapers and, therefore, it is a non-probabilistic sample that is used in scenarios where the population is variable and small. Thus, it is appropriate (Igartua, 2006) to select cases of that are characteristic of that universe (López-Roldán and Fachelli, 2015; Otzen and Manterola, 2017). The results are presented from a comparative perspective, since the technique of comparative studies has a long tradition and is widely used in different areas of knowledge, from medicine (Hietanen et al., 2005) to veterinary science (Calvo, Abarca and Trape, 1981) to philological studies (Guijarro-Fuentes, 2005).

3. MATERIAL AND METHODS

In accordance with the lines of research proposed by Hoxha and Hanitzsch (2018), interviews were conducted with those responsible for managing the object of study in the analysed media (audience editors, engagement editors or analytics editors). To do this, a questionnaire was developed combining questions of a quantitative and qualitative nature, catering to the secondary objectives of the research.

- 1. To identify who is in charge of managing relations with audiences in the native digital media, collecting the professional profile denomination (audience editor, engagement editor, growth editor, impact and metrics analyst, cross platform editor, Lab Media editor, Social Media editor...) and checking if it is part of a one-person or multi-person department.
- 2. To examine the evaluations of those responsible for the media regarding citizen participation systems and co-creation mechanisms enabled for the publics.
- 3. Check the existence of news verification systems in the digital native media.
- 4. To analyse the involvement of audiences in the verification processes

According to the research objectives, the questionnaire was structured in five thematic blocks. Blocks 1, 3 and 4 are related to the collection of quantitative information, while blocks 2, 5 and 6 are oriented to the collection of qualitative information:

- Identification of the professional profile employed in the newsroom and location of specific profiles for working with audiences (audience editor, engagement editor, growth editor, impact and metrics editor, cross platform editor, Lab Media editor, Social Media editor or others), as well as a description of the company organization chart and structuring of the human resources assigned to the department.
- 2. Analysis of synergies and relationships between the audience relations department and organizational unit.
- 3. Localization of content verification strategies, allocation to areas or sections in the newsrooms and fact-checking tools used.
- 4. Audience involvement in fact-checking processes through user registration, personalization, news rating, comments, surveys, blog of readers, closer user communities (private dialogue between the media and the audience), closed user communities for specific topics (or thematic sections), chatbots, user generated content (UGC) or others, as well as analysis of results measurement methods such as Google Trends, Trendsmap or others.
- 5. Presentation of examples of audience engagement in other media and exploration of similar alternatives. Specifically, the following examples were offered: (a) Group PostThis on Facebook of The Washington Post, a closed, moderated group for readers interested in accountability journalism stories; (b) The Reader Center of The New York Times to build deeper links with the audience and from where journalists talk directly to readers about news coverage; (c) News and Brews of NPR of Illinois (USA) to encourage face-to-face encounters with audiences.
- 6. Development of co-creation initiatives.

A total of 23 questions were set. The questionnaire included a mixture of closed (dichotomous) and open questions, depending on the case. At the end of the questionnaire, a series of items were established for gradual assessment. For this last part, the Likert rating scale was used as a reference (Wigley, 2013), although it was adapted to a basic scale of three options (disagree, agree, strongly agree) to facilitate the response work of the journalists and to identify trends. The average response time was 27.5 minutes.

Contact with the media outlets was established on February 26, 2020 via email and phone. From eldiario.es, Ander Oliden, chief of Information and chief editor of the front page and social networks, was interviewed. From Observador, Raquel Rosa, the subscription manager, was interviewed.

4. DISCUSSIONS

Firstly, at eldiario.es there is a one-person department tasked with managing and maintaining contact with the audiences. The title of the person in charge is 'director of new audiences' and is supported by the social media editors of the cover and networking team. Both sets of professional profiles rely heavily on their writing skills. In Observador, on the other hand, this function is entrusted to the Social Media Department, made up of six people working rotating shifts, and who also depend on Newsroom.

Eldiario.es claim to use verification tools to test the information they publish. "The entire newsroom works on verification tasks and we have a collaboration agreement with Maldita.es for the development of a section (El Detector) and a weekly collaboration for Desalambre, our Human Rights section," (A. Oliden, personal communication, March 5, 2020). They acknowledge, however, that they do not involve audiences in verifying the information. Observador did not provide much information on this issue, claiming to "use it" (R. Rosa, personal communication, March 19, 2020), though also neglecting audience involvement.

Eldiario.es is offers a fairly wide range of citizen participation mechanisms (comments, surveys, readers' blog, etc.). They also provide opportunities for the cocreation of content (the ability to send confidential leaks, to correct texts [partners only], comments taken into account by the newsroom [members only], online voting [members only] and face-to-face meetings between journalists and subscribers). This means that information from the public could end up somewhere within eldiario.es' written output, or at least could appear as part of a web publication. In Observador, the opportunities for both citizen participation (user registration, comments or app personalization) and co-creation (correction of texts and sending of user generated contents) are more limited. Rosa stated "we allow comments on our articles. We also allow users to register in order to subscribe to newsletters and have access to our Premium content. We also engage with our audience via Facebook messenger whenever a person contacts us" (personal communication, March 19, 2020).

The editor in chief of eldiario.es understands that these mechanisms "constitute a form of audience participation in the sense that they are a means of contact with the editorial staff" (A. Oliden, personal communication, March 5, 2020). He further clarified that, "sometimes, when the comment refers to issues related to content, journalists liaise with readers to discuss the issue." Oliden also explains that they "periodically receive members of eldiario.es in our newsroom to hold talks with the director, journalists and other members of the newspaper's team. Usually there is discussion of coverage, planned changes and questions are answered about how the newsroom works. It is also useful to seek the opinion of the community of partners about our content" (personal communication, March 5, 2020). Rosa says that in the Portuguese newspaper they "have arranged direct contact initiatives" and that they "have organised some conferences onsite". They consider these are "a positive way to engage with our audience" (personal communication, March 19, 2020).

Regarding the co-creation of content, Oliden confirms that they "have launched some initiatives to request participation on different issues with which to develop stories based on the experience of our readers", but that, nevertheless, "initiatives are still being prepared as a way to improve those flows of participation" (personal communication, March 5, 2020). At Observador, the subscription's manager stated that they encourage their audience "to send us emails whenever they have a correction or a suggestion to our articles", but that they "are not currently developing new approaches" (R. Rosa, personal communication, March 19, 2020).

Both media outlets analysed show a keen interest in incorporating audiences into newsrooms and involving them in journalistic work. With some differences in graduation (see Table 1), there is an obvious trend towards promoting contact with the publics. This is also apparent in the use of offline spaces, as those responsible for the media understand that increasing audience involvement within their media also increases the quality of information. Both media are sources committed to establishing direct workspaces between editors and audiences and place positive value on the previous experiences they have developed. From the point of view of the spaces destined for co-creation, the responses are congruent and confirm that the media have an interest in improving participation systems with audiences and in enabling new spaces so that the publics can co-create their own products.

Eldiario.es and Observador equally exhibit their desire to involve audiences in the production of information. They completely rule out limiting their measurement of the impact of news on the audience using only metrics and analytics provided by algorithms of websites, apps or social networks. However, neither media source contends that the publics should be involved in the verification of the facts; they limit this task only to journalists.

Table 1. Assessment of Audience Participation in the Media

		Strongly Disagree		Agree		Strongly Agree		Don't Know	
Item to Asses	SP	PT	SP	PT	SP	PT	SP	PT	
Direct dialogue with the audience in the online space is essential for the media.				X	X				
The direct encounter between the editors and the public in the offline environment (cafes, gatherings) is essential.				X	X				
The creation of closed communities in the media, involving the audience in journalistic work, helps improve the quality of information.			Х			Х			
I am in favour of opening direct workspaces between editors and audiences.			Х	X					
I have had similar experiences with the audience and they seem very positive to me. I like to work in direct contact with the audience.			X	X					
I believe that the newspaper I work for has an interest in improving audience participation and opening new spaces for co-creation.			X	X					
The newspaper I work for only measures the impact of news on the audience with consumption metrics on the web, apps and social networks, but has no interest in involving the audience in the production of information.	X	X							
I believe that the media should involve the publics in the verification of the news.	X	X							

SP Spain PT Portugal

Source: Own elaboration

5. CONCLUSIONS-RESEARCH RESULTS

According to objective 1, the media sources analysed in this study greatly value audience participation. For this reason, they have enabled spaces for both citizen participation and co-creation. Although the most opportunities for involvement lie within digital media, these spaces also require professional profiles specialized in the management of these relationships. At eldiario.es, these management responsibilities are carried out by a one-person department (director of new audiences), while in Observador they are performed by a six-person team (Social Media Department). Both newspapers understand that the participation of audiences improves the quality

Sixto-García, J., Rodríguez-Vázquez, A.I. y López-García, X. *Verification Systems in Digital Native Media and Audience Involvement in the Fight Against Disinformation in the Iberian model*

of journalistic work. Consequently, they have developed participation models on the web and on social networks, and also face-to-face meetings between audiences and journalists.

Secondly, and perhaps surprisingly, despite the importance given to the public, neither eldiario.es nor Observador intend, nor consider it necessary, to integrate their audiences into their news verification processes (objective 2). Rather, they maintain that this work should be limited to professional journalists. In no case do they turn to ordinary citizens to contrast facts or verify news, although this could be useful in situations where members of the general public are implicated sources or eyewitnesses to events. The existence of artificial intelligence mechanisms is not verified either. What is evident is a strong commitment to human talent as exemplified by eldiario.es's adherence to Maldita.es.

The authors concur with the notion put forward by the two media outlets here that they themselves are ultimately responsibility for the news they publish. Nonetheless, this paper also advocates the allocation of more resources and more human action in the verification of user generated contents. As an example, according to data from ComScore (2020), during the COVID-19 outbreak, the traditional media have regained power, and their output is being viewed with more credibility than social networks. As spaces for co-creation and citizen journalism become more prevalent, so does the need to train audiences in media and digital skills. Until this is achieved, the media need to integrate more professional profiles dedicated to verification and to filter in time and form what is published in the spaces dedicated to citizen journalism. Failure to do so could mean that the media, especially digital media, ended up hosting not only false information, but also fake news. Even under the utopian assumption of a society fully competent in digital and media competencies, there would always be the possibility that malicious citizens decided to deceive the rest if the journalist's work is ignored.

Table 2 shows the conclusions with respect to the secondary research objectives. It identifies the professional profiles in charge of managing audience relations in each of the media, the mechanisms of audience involvement, the degree of implementation of co-creation systems and the involvement of readers in the verification of news.

Table 2. Audience and Fact-Checking in Each Media

	Eldiario.es	Observador			
Specific professional profile Yes for working with audiences		Yes			
Audience relations professional profile identification	 Directors of new audiences Social media editors on the front page and network team 	Social Media Department			
Human Resources for Audience Relations	Team	Team of 6 people with rotative shifts			
Work area and situation in organization	Newsroom	Newsroom			
Using Verification Tools Human resources for fact-	Yes • Editorial staff	Yes Editorial staff			
checking	Collaboration agreement with Maldita.es (fact checking platform) for a section (El Detector) and a weekly section for Desalambre, Human Rights section				
Audience involvement in fact- checking	No	No			
Avenues of participation and co-creation with audiences	 User registration Personalization Comments Surveys Blog of readers Spaces for members only (meetings with journalists, events on the functioning of the media). Talks with the director, journalists and other members of the team. eldiario.es responds (space for doubts or complaints) Conversations with partners 	 User registration Comments Allow user to register to subscribe newsletter and Premium content. Engage with audience via Facebook Messenger whenever a person contacts them. Conferences on site. Direct contact initiatives 			
Analytical measuring systems	-	ChartbeatGoogle Analytics.			

Sixto-García, J., Rodríguez-Vázquez, A.I. y López-García, X. *Verification Systems in Digital Native Media and Audience Involvement in the Fight Against Disinformation in the Iberian model*

Media communication with audiences	 When the commentary deals with content issues, editors communicate with readers. Debate on news coverage in face-to-face meetings 	Encourage audience to send emails whenever they have a correction or a suggestion
Development of co-creation	Initiatives to solicit stories from readers' personal experiences. They are preparing initiatives to improve participation flows	-

Source: Own elaboration

The media increasingly give importance to audience participation. This has been demonstrated in earlier writings on the formulas for citizen participation (Malmelin and Villi, 2016; Napoli, 2010), on the provision of spaces for the co-creation of content in which users can develop their own experience (Frow et al., 2015; Aitamurto, 2013; Ind and Coates, 2013). This research has verified those same findings.

The involvement of the audiences in the processes relating to information production in general, and in the preparation of news in particular, appears very positive. However, on the other hand, this participation also constitutes a significant risk if the content they provide is not adequately filtered through verification systems. The democratization of culture (Moreno-Caballud, 2014) brings great benefits for creativity and for more equal access to information, but it is taking place within a social, political, economic and technological context in which the role of the media appears increasingly discredited and undermined (Carlson, 2018). One of the most notable causes of this situation relates to disinformation and the presence of fake news in the media. This leads to the loss of public confidence in journalists, and seriously erodes the right to receive information, thus impairing the quality of the democracy within states.

To alleviate this situation, initiatives have emerged around the world that are committed to quality journalism that is free and pluralistic. Examples include those related to artificial intelligence and machine learning such as the recent Google Fact Check Tools, or the systems implemented by some social networks such as Facebook. Media and journalists are increasingly committed to associations, institutions or movements such as the Fact Checking Network or The Trust Project that seek to add human value to the process of detecting fake news developed by automated mechanisms and algorithms.

Following the contributions of researchers such as Egelhofer and Lecheler (2018), this paper argues that it is pertinent and necessary to differentiate between false news and fake news. The former is a representation of a lack of contrast in sources, even of possible malpractice in the arrangement of information prepared by

journalists and published in the media, while the latter is defined by its intent to deceive. For this reason, fake news becomes more prevalent during times of great social upheaval, where the objective of its use is to misinform. Examples of this are Brexit and the pandemic caused by COVID-19. The potential power of fake news increases when it is presented as professional journalism in design and appearance (Lazer et al., 2017; Horne and Adali, 2017), leaving many users unable to identify its falsity.

To alleviate this situation, supranational organizations are betting on digital literacy or media literacy as solutions. However, there is also a lack of consensus here. There are those that understand that increasing skills in digital literacy would resolve this issue (Pérez-Escoda, García-Ruiz and Aguaded, 2019; Frederiksen, 2017). Yet there are also who see this as a reductionist vision that must be complemented with skills in media literacy (Buckingham, 2019) and with the recovery of the truth as a fundamental journalistic value (Gutiérrez-Martín, Torrego-González and Vicente-Mariño, 2019).

For their part, the media have a great challenge ahead. Apart from following the ethical and deontological recommendations of national and international professional associations for the eradication of disinformation, this paper argues that journalists themselves must apply verification mechanisms in the newsrooms. In the analysis of the Iberian model of the most relevant digital native media in Spain and Portugal, no significant differences between the two countries are noted. Rather, trends and patterns of action are shared.

If fake news infiltrated the media, it would be practically impossible to reverse the damage done to reputation of the media and professional journalism. Citizens could lose faith in the reliability and credibility of the media, versus that of personal opinions or other unreliable Internet sites. A situation in which citizens see their right to receive truthful and verified information as being compromised surely signifies a fragile democracy overall. For human capital to be valued, yet complemented by artificial intelligence systems, would be ideal within these processes of data verification. The role of journalists remains essential to fact check and combat disinformation in the world, as it seems that society cannot rely on machines alone for this kind of work.

6. REFERENCES

Aitamurto, T. (2013). Balancing Between Open and Closed: Co–creation in Magazine *Journalism*. *Digital Journalism*, 1(2), 229-251. https://doi.org/10.1080/21670811.2012.750150

Alcott, H., Gentzkow., M and Yu, C. (2019). Trends in the diffusion of misinformation on social media. *Research and Politics*, 1(8). https://doi.org/10.1177/2053168019848554

- Sixto-García, J., Rodríguez-Vázquez, A.I. y López-García, X. *Verification Systems in Digital Native Media and Audience Involvement in the Fight Against Disinformation in the Iberian model*
- Allcott, H. and Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211-36. https://doi.org/10.1257/jep.31.2.211
- Bakir, V. and McStay, A. (2018). Fake News and The Economy of Emotions. *Digital Journalism*, 6(2), 154-175. https://doi.org/10.1080/21670811.2017.1345645
- Bridle, J. (2018). New Dark Age: Technology and the End of the Future. Verso.
- Brites, MJ. (Coord.) (2017). *Digital literacy and education (2014-July 2016), national reports (Portugal, UK, Ireland, Spain, Serbia and Italy).* ELN European literacy network, digital literacy team (WG2). https://www.is1401eln.eu/en/gca/index.php?id=149
- Buckingham, D. (2019). Teaching media in a 'post-truth' age: fake news, media bias and the challenge for media/digital literacy education. *Culture and Education*, 31(2), 213-231. https://doi.org/10.1080/11356405.2019.1603814
- Calvo, MA., Abarca, L. and Trape, J. (1981). Comparative study *Trichophyton Mentagrophytes* and *Trichophyton Verrucosum*. *Sabouraudia: Journal of Medical and Veterinary Mycology*, 19(1), 9-11. https://doi.org/10.1080/00362178185380031
- Carlson, M.(2018). The information politics of journalism in a post-truth age. *Journalism Studies,* 19(13), 1879–1888. https://doi.org/10.1080/1461670X.2018.1494513
- Carlson, M. (2016). Embedded links, embedded meanings: Social media commentary and news sharing as mundane media criticism. *Journalism Studies*, 17(7), 915-924. https://doi.org/10.1080/1461670X.2016.1169210
- Clayton, K., Blair, S., Busam, JA., Forstner, S., Glance, J., Green, G., Kawata, A., Kovvuri, A., Martin, J., Morgan, E., Sandhu, M., Sang, R., Scholz-Bright, R., Welch, A., Wolff, A., Zhou, A. and Nyhan, B. (2019). Real Solutions for Fake News? Measuring the Effectiveness of General Warnings and Fact-Check Tags in Reducing Belief in False Stories on Social Media. *Polit Behav*. https://doi.org/10.1007/s11109-019-09533-0
- ComScore (2020). *Traditional media regains power and credibility during the Coronavirus pandemic.* https://bit.ly/2RIXplv
- Davis, S. (April, 7, 2020). Could a limit on forwarding messages slow coronavirus fake news? *Euronews*. https://www.euronews.com/2020/04/07/could-a-limit-onforwarding-messages-slow-coronavirus-fake-news
- Egelhofer, JL. and Lecheler, S. (2019). Fake news as a two-dimensional phenomenon: a framework and research agenda, *Annals of the International*

- Sixto-García, J., Rodríguez-Vázquez, A.I. y López-García, X. *Verification Systems in Digital Native Media and Audience Involvement in the Fight Against Disinformation in the Iberian model*
- *Communication Association*, 43(2), 97-116. https://doi.org/10.1080/23808985.2019.1602782
- European Commission (2018). *A multi-dimensional approach to disinformation:* Report of the independent high level group on fake news and online disinformation. Publications Office of the European Union.
- European Commission (2020). *Fighting disinformation*. https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/fighting-disinformation en
- Fact Checking Network (2016). *Code of Principles*. https://ifcncodeofprinciples.poynter.org/
- Fake News Challenge (2020). *Exploring how artificial intelligence technologies could be leveraged to combat fake news.* http://www.fakenewschallenge.org/
- Frederiksen, L. (2017). Fake News. *Public Services Quarterly*, 13(2), 103-107. https://doi.org/10.1080/15228959.2017.1301231
- Frenkel, S., Alba, D. and Zhong, R. (March, 8, 2020). Surge of Virus Misinformation Stumps Facebook and Twitter. *The New York Times.* https://www.nytimes.com/2020/03/08/technology/coronavirus-misinformation-social-media.html
- Frow, P., Nenonen, S., Payne, A. and Storbacka, K. (2015) Managing co-creation design: A strategic approach to innovation. *British Journal of Management*, 26, 463-483. https://doi.org/10.1111/1467-8551.12087
- Guess, A., Nyhan, B. and Reifler, J. (2018) *Selective exposure to misinformation:* Evidence from the consumption of fake news during the 2016 U. S. presidential campaign [Pdf File]. https://www.dartmouth.edu/~nyhan/fake-news-2016.pdf
- Guijarro-Fuentes, P. (2005). Tiempo y Aspecto: estudio comparativo entre nativos y no nativos de nivel avanzado de español. *Hispanic Research Journal,* 6(2), 99-115. https://doi.org/10.1179/146827305X38760
- Gutiérrez-Martín, A., Torrego-González, A. & Vicente-Mariño, M. (2019). Media education with the monetization of YouTube: the loss of truth as an exchange value. *Culture and Education*, 31(2), 267-295. https://doi.org/10.1080/11356405.2019.1597443
- Habgood-Coote, J. (2019). Stop talking about fake news! *Inquiry*, 62(9-10), 1033-1065. https://doi.org/10.1080/0020174X.2018.1508363
- Herrero-Diz, P., Conde-Jiménez, J., Tapia-Frade, A. and Varona-Aramburu, D. (2019). The credibility of online news: an evaluation of the information by

- Sixto-García, J., Rodríguez-Vázquez, A.I. y López-García, X. *Verification Systems in Digital Native Media and Audience Involvement in the Fight Against Disinformation in the Iberian model*
- university students. *Culture and Education*, 31(2), 407-435. https://doi.org/10.1080/11356405.2019.1601937
- Hietanen, A., Era, P., Henrichsen, J., Rosenhall, U., Sorri, M. and Heikkinen, E. (2005). Hearing among 75-year-old people in three Nordic localities: A comparative study. *International Journal of Audiology*, 44(9), 500-508. https://doi.org/10.1080/14992020500189112
- Horne, BD. and Adali, S. (2017). *This just in: Fake news packs a lot in title, uses simpler, repetitive content in text body, more similar to satire than real news.* arXiv:1703.09398 [cs.SI] [Pdf File]. https://arxiv.org/abs/1703.09398
- Hoxha, A. and Hanitzsch, T. (2018). How conflict news comes into being: Reconstructing 'reality' through telling stories. *Media, War & Conflict*, 11(1), 46-64. https://doi.org/10.1177%2F1750635217727313
- Igartua, JJ. (2006) Métodos cuantitativos de investigación en Comunicación. Bosch.
- Ind, N. and Coates, N. (2013). The meanings of co-creation. *European Business Review*, 25(1), 86-95.
- Ireton, C. and Posett, i J. (Eds) (2018). *Journalism, 'fake news' and disinformation: Handbook for journalism education and training*. Unesco.
- Lazer, D., Baum, M., Benkler, Y., Berinsky, A., Greenhill, K., Menczer, F., Metzger, M., Nyhan, B., Pennycook, G., Rothschild, D., Schudson, M., Sloman, S., Sunstein, C., Thorson, E., Watts, D. and Zittrain, J. (2018). The science of fake news. *Science* 359(6380), 1094-1096. https://doi.org/10.1126/science.aao2998
- Lazer, D., Baum, M., Grinberg, N., Friedland, L., Joseph, K., Hobbs, W. and Mattsson, C. (2017). *Combating fake news: An agenda for Research and Action* [Pdf Files]. https://shorensteincenter.org/wp-content/uploads/2017/05/Combating-Fake-News-Agenda-for-Research-1.pdf
- López-Roldán, P. and Fachelli, S. (2015). El diseño de la muestra. In: P. López-Roldán and S. Fachelli (eds.) *Metodología de la investigación social cuantitativa*. Universitat Autònoma de Barcelona.
- Lyons, T. (December 20, 2017). Facebook app Replacing Disputed Flags with Related Articles. *Facebook*. https://about.fb.com/news/2017/12/news-feed-fyi-updates-in-our-fight-against-misinformation/
- Malmelin, N. and Villi, M. (2016). Audience Community as a Strategic Resource in Media Work. *Journalism Practice*, 10(5), 589-607. https://doi.org/10.1080/17512786.2015.1036903

- Sixto-García, J., Rodríguez-Vázquez, A.I. y López-García, X. *Verification Systems in Digital Native Media and Audience Involvement in the Fight Against Disinformation in the Iberian model*
- McDougall, J., Brites, MJ., Couto, MJ. and Lucas, C. (2019). Digital literacy, fake news and education. *Culture and Education*, 31(2), 203-212. https://doi.org/10.1080/11356405.2019.1603632
- Mondéjar, D. (May 17, 2019). Verificadores de verificadores, la Unión Europea y Facebook: actores en la lucha contra la desinformación. https://mip.umh.es/blog/2019/05/17/verificadores-union-europea-facebook-desinformacion/
- Moreno-Caballud, L. (2014). Cuando cualquiera escribe. Procesos democratizadores de la cultura escrita en la crisis de la Cultura de la Transición española. *Journal of Spanish Cultural Studies*, 15 (1-2), 13-36. https://doi.org/10.1080/14636204.2014.938441
- Napoli, P. (2010). Revisiting 'mass communication' and the 'work' of the audience in the new media environment. *Media, Culture & Society*, 32(3), 505–516. https://doi.org/10.1177%2F0163443710361658
- Nelson, JL. and Taneja, H. (2018). The small, disloyal fake news audience: The role of audience availability in fake news consumption. *New Media & Society*, 20(10), 3720-3737. https://doi.org/10.1177%2F1461444818758715
- Otzen, T. and Manterola, C. (2017). Sampling Techniques on a Population Study. *International Journal of Morphology*, 35, 227-232. http://dx.doi.org/10.4067/S0717-95022017000100037
- Park, K., Kim, T., Yoon, S., Cha, M. and Jung, K. (2020). BaitWatcher: A lightweight web interface for the detection of incongruent news headlines. In: K. Shu K, S. Wang, D. Lee and H. Liu (Eds.) *Fake News, Disinformation and Misinformation in Social Media-Emerging Research Challenges and Opportunities*. Springer.
- Pennycook, G., Bear, A., Collins, E. and Rand, DG. (2020). The Implied Truth Effect: Attaching Warnings to a Subset of Fake News Headlines Increases Perceived Accuracy of Headlines Without Warnings. *Management Science*, 66(11), 4944-4957. https://pubsonline.informs.org/doi/abs/10.1287/mnsc.2019.3478
- Pérez, J. (March 12, 2019). Facebook ficha a Newtral y Maldita para combatir las noticias falsas. https://elpais.com/tecnologia/2019/03/12/actualidad/1552350738_032029.html
- Pérez-Escoda, A,. García-Ruiz, R. and Aguaded, I. (2019) Dimensions of digital literacy based on five models of development. *Culture and Education*, 31(2), 248-266. https://doi.org/10.1080/11356405.2019.1603274
- Pomerleau, D. and Rao, D. (2016). Fake news challenge stage 1 (FNC-I): Stance detection. http://www.fakenewschallenge.org

- Sixto-García, J., Rodríguez-Vázquez, A.I. y López-García, X. *Verification Systems in Digital Native Media and Audience Involvement in the Fight Against Disinformation in the Iberian model*
- Reuters Institute (2019). *Digital News Report 2019*, Instituto Reuters Institute/ University of Oxford, http://www.digitalnewsreport.org/
- Rietjens, S. (2019). Unraveling Disinformation: The Case of Malaysia Airlines Flight MH17. *The International Journal of Intelligence, Security, and Public Affairs*, 21(3), 195-218. https://doi.org/10.1080/23800992.2019.1695666
- Shao, C., Ciampaglia, GL., Varol, O., Flammini, A. and Menczer, F. (2018). The spread of fake news by social bots. *Nature Communications*, 9, 4787-4828. https://doi.org/10.1038/s41467-018-06930-7
- Tandoc, E., Lim, Z. and Ling, R. (2018). Defining "Fake News". *Digital Journalism*, 6(2), 137-153. https://doi.org/10.1080/21670811.2017.1360143
- Wardle, C. and Derakhshan, H. (2017). *Information disorder toward an interdisciplinary framework for research and policymaking* [Pdf File]. Council of Europe
- Wigley, C. (2013). Dispelling three myths about Likert scales in communication trait research. *Communication Research Reports*, 30(4), 366-372. https://doi.org/10.1080/08824096.2013.836937

AUTHORS:

José Sixto-García

Is a professor in the University de Santiago de Compostela (USC) and is part of the Novos medios research group. His research interests include digital contexts, social networks and new narratives and their impact on news production.

ORCID ID: https://orcid.org/0000-0002-2988-0975

Google Scholar: https://scholar.google.es/citations?user=65vIOnQAAAAJ&hl=en

Research Gate: https://www.researchgate.net/profile/Jose-Sixto-Garcia

Ana-Isabel Rodríguez-Vázquez

Is a professor in the Department of Communication Sciences at the University of Santiago de Compostela. He belongs to the Research Group on Audiovisual Studies (GEA) of the USC and collaborates in projects of the Novos Medios Group. Investigates programming and audiences.

ORCID ID: http://orcid.org/0000-0001-7975-1402

Google Scholar: https://scholar.google.es/citations?hl=en&user=pvFnRVEAAAAJ **Research Gate:** https://www.researchgate.net/profile/Ana-Rodriguez-Vazquez

Sixto-García, J., Rodríguez-Vázquez, A.I. y López-García, X. *Verification Systems in Digital Native Media and Audience Involvement in the Fight Against Disinformation in the Iberian model*

Xosé López-García

Is professor of journalism in the Department of Communication Sciences at the Universidade de Santiago de Compostela. He coordinates the Novos Medios research group. His lines of research include the study of digital and print media, and the analysis of the impact of technology on mediated communication.

ORCID ID: http://orcid.org/0000-0002-1873-8260

Google Scholar: https://scholar.google.es/citations?hl=en&user=omudXhsAAAA]

Research Gate: https://www.researchgate.net/profile/Xose-Garcia-2