Artículos

Disinformation and digital sexism. Feminism and its agenda as an object of hoaxes in Spanish

Desinformación y sexismo digital. El feminismo y su agenda como objeto de engaño en español

Desinformação e sexismo digital. O feminismo e a sua agenda como objecto de embuste em espanhol

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Abstract

Disinformation about feminism and its agenda has always existed, but its production and circulation has increased with the widespread use of the internet and social media for news consumption, to the point where digital sexism is becoming an increasingly serious problem. The objective of this research is to analyze the characteristics of falsehoods about feminism and its agenda that circulate in Ibero-America through new media. For this purpose, a content analysis of 11 variables is applied to the 271 rebuttals published by 12 Spanish-language media verifiers—all of whom are accredited by the International Fact-Checking Network—from eight Ibero-American countries (Argentina, Bolivia, Chile, Colombia, Ecuador, Mexico, Venezuela and Spain). The results show the preponderance of hoaxes with fabricated multimedia materials or shared without alteration; published by fake, citizen and media accounts; with real or anonymous sources; with polarizing intentions; focused on gender-based violence, abortion and subsidies to feminist entities; and appealing to negative emotions.

Keywords: disinformation; fake news; social media; fact-checking; feminism; digital sexism

Resumen

La desinformación sobre el feminismo y su agenda siempre ha existido, pero su producción y circulación ha aumentado con la generalización del uso de Internet y de las redes sociales para el consumo de noticias, hasta derivar en un problema cada vez más grave de sexismo digital. El objetivo de esta investigación es analizar las características de las falsedades sobre el feminismo y su agenda que circulan en Iberoamérica a través de los nuevos medios. Para ello, se aplica un análisis de contenido de once variables a los 271 desmentidos publicados al respecto por doce medios verificadores en español de ocho países iberoamericanos (Argentina, Bolivia, Chile, Colombia, Ecuador, México, Venezuela y España), todos ellos acreditados por la International Fact-Checking Network. Los resultados evidencian la preponderancia de los engaños con elementos multimedia fabricados o compartidos sin alteración; emitidos por cuentas *fake*, ciudadanas y mediáticas; con fuentes reales o anónimas; con intención polarizadora; centrados en la violencia ejercida contra las mujeres por motivos de género, en el aborto y en las subvenciones a entidades feministas; y que apelan a emociones negativas.

Palabras clave: desinformación; noticias falsas; redes sociales; verificación de información; feminismo; sexismo digital

Resumo

A desinformação sobre o feminismo e a sua agenda sempre existiu, mas a sua produção e circulação aumentou com o uso generalizado da Internet e das redes sociais, ao ponto de se tornar um problema cada vez mais sério de sexismo digital. O objectivo desta investigação é analisar as características das falsidades sobre o feminismo e a sua agenda que circulam na Ibero-América através dos novos meios de comunicação social. Para tal, é aplicada uma análise de conteúdo de onze variáveis às 271 falsidades publicadas por

doze meios de verificação de oito países (Argentina, Bolívia, Chile, Colômbia, Equador, México, Venezuela e Espanha) acreditados pela International Fact-Checking Network. Os resultados mostram a preponderância de embustes com elementos multimédia forjados ou inalterados, emitidos por contas falsas, cidadãos e meios de comunicação, com fontes reais ou anónimas, com intenções polarizadoras, centradas na violência baseada no género contra as mulheres e em subsídios a organizações feministas, e apelando a emoções negativas.

Palavras-chave: desinformação; notícias falsas; redes sociais; verificação de factos; feminismo; sexismo digital

1. Introduction

Disinformation involves "the deliberate creation and sharing of information known to be false" (Wardle, 2017, para. 1), with the objective of "causing harm, gaining benefits, and influencing people's behavior, although some aims are often hidden and remain invisible" (Guallar et al., 2020, p. 597). Research in political science and psychology has noted the deliberate trend toward consumption of fake news that reinforces political preferences and attitudes (Flynn et al., 2017), as well as to consider the assertions that are closest to one's own ideology to be true, even if they are just mere opinions (Mitchell et al., 2017). The circulation of disinformative materials has increased in line with the use of social media for news consumption (Brennen et al., 2020). In fact, it is estimated that this type of content is 70% more likely to be shared on new media (Vosoughi et al., 2018).

Despite the great importance of hoaxes related to politics, health and security, there is other disinformation with equally serious consequences due to the intolerance, violence and exclusion it promotes (Zovatto, 2018), such as that aiming to harm women (Lewis & Marwick, 2017). In this sense, Sobieraj (2018) observes a pattern of direct attacks against women's identity and ideology that she calls "digital sexism" (p. 1702). Not surprisingly, studies reveal that "gender-based violence appears frequently in hoaxes, either to question its importance or to manipulate the numbers of victims or false reports" (Herrero-Diz et al., 2020, p. 177).

The demonization of feminism in its fourth wave (Lenguita, 2021) is not a new phenomenon (De Miguel, 2008; Herrero-Diz et al., 2020; Stabile et al., 2019; Wichels, 2019). However, new media have not only amplified the echoes of critical voices with this movement and critical theory, but have also reinforced disinformation, the main ally of anti-feminist cyberghettos (Herrero-Diz et al., 2020).

The aim of this research is to analyze the characteristics of disinformation regarding feminism and its agenda that circulates throughout Ibero-America through social networks. For this purpose, a content analysis of 11 variables is applied to the 271 rebuttals published on the subject by 12 fact-checking media from eight countries. The paper is structured as follows: section 2 offers a review of the results of the main academic contributions related

to the object of study; section 3 explains the materials used and the methods employed; section 4 details the results; and finally, section 5 relates them to previous research and offers the conclusions.

2. Literature review

2.1. Technical complexity of disinformation

The format of disinformation is closely related to the degree of digital literacy required for its production, as well as to its technical complexity. In contrast to the consolidated academic and social concern about deepfakes (Chawla, 2019; Westerlund, 2019)—videos of false content, but with a hyper-realistic format generated using artificial intelligence tools and machine learning processes (Maras & Alexandrou, 2019), practically undetectable by ordinary citizens (Fletcher, 2018)—, several recent investigations have warned of the proliferation of cheapfakes (Aneja et al., 2021; Paris & Donovan, 2019). This is disinformation created in an almost amateurish way (Schick, 2020) and which presents a low technological complexity (Gamir-Ríos & Tarullo, 2022), as it generally consists of sharing pre-existing materials accompanied by text that alters its original meaning (Aneja et al., 2021), or the crude alteration of images. The low degree of digital literacy required for their creation helps them achieve their intended disinformative effect more quickly (Dowling, 2021).

The majority presence of text in problematic materials circulating on social media is common in the literature (Almansa-Martínez et al., 2022; Coromina & Padilla, 2018; Gutiérrez-Coba et al., 2020; Herrero-Diz et al., 2020; Noain-Sánchez, 2021; Peña-Ascacíbar et al., 2021; Salaverría et al., 2020), of which several also warn of its use in decontextualizing the images it accompanies (Brennen et al., 2020; Salaverría et al., 2020), to the point of concentrating problematic information ahead of mostly unaltered shared multimedia resources (Gamir-Ríos & Tarullo, 2022).

RQ1: How technically complex is the disinformation about feminism circulating on the Internet?

2.2. Epistemological authority of disinformation

According to the review by Tucker et al. (2018), the most common producers of disinformation on the internet are independent or paid trolls, people without public relevance who provoke others on social media to achieve an emotional response; bots, programs that automatically create false content on social media; fake news

websites, which disinform for ideological or economic reasons; conspiracy theorists, who disseminate unscientific or unscientific explanations to complex phenomena in a self-serving manner; hyper-partisan media; the political class; and foreign governments. Trolls and bots often act through fake accounts; the former, sometimes also under their real identity when dealing with people with no relevance in the public sphere.

However, believing in certain knowledge is closely related to the observation in its enunciation of the epistemological principle of authority (Bochenski, 1974), according to which it is necessary to persuade that the sender knows the field on which they comment more than the audience does, and that, in addition, they are not misleading the audience (García-Perea, 2012). In fact, one of the usual mechanisms to which disinformation resorts consists of attributing authority—fictitious, supplanted or real—to people who pronounce on matters in which they are not specialists (Salaverría et al., 2020). However, most research to date has found a much higher frequency of anonymous sources (Almansa-Martínez et al., 2022; Coromina & Padilla, 2018; Gutiérrez-Coba et al., 2020; Tarullo & Gamir-Ríos, 2022).

RQ2: Who disseminate misinformation about feminism circulating on the internet and which sources do they cite?

2.3. Intentionality, discursive strategy and topics

The close relationship between the intention of the disseminator, the discursive strategy employed and the selected topic is key to understanding how disinformation works. In fact, "the main condition for disinformation to occur is intentionality, because as long as there is no intention there is no disinformation" (Emmerich, 2015, p. 46).

In terms of motivation, several studies (Allcott & Gentzkow, 2017; Brennen et al., 2020; Gutiérrez-Coba et al., 2020; Tarullo & Gamir-Ríos, 2022) point to disinformation having several intentions: economic, as each click can be monetized and messages spread hoaxes that benefit certain sectors and harm others (Tucker et al., 2018); illegal, as sometimes profits are generated through illicit actions (Tandoc et al., 2018), such as the theft of personal data for subsequent impersonation and fraud; polarization, to promote ideas that benefit certain people and discredit others (Gutiérrez-Coba et al., 2020); and destabilization, because when citizens need quality information to guide their actions (Casero-Ripollés, 2020), disinformation flows proliferate (Bennett & Livingstone, 2018), generating greater disorder and chaos (López-Borrull & Ollé, 2020). Recent studies have pointed to the polarizing motivation predominating the economic and destabilizing motivation (Brennen et al., 2020; Gutiérrez Coba et al., 2020), as well as the modulation of thematic and emotional appeals to the intention behind the dissemination of disinformative materials (Tarullo & Gamir-Ríos, 2022).

Regarding discursive strategies, Wardle (2017) defines seven types of disinformation: satire or parody, misleading content, imposter content, fabricated content, false connection, false content, and manipulated content. Salaverría et al. (2020) point out that this catalog corresponds more to disinformation techniques and propose the categories hoax, exaggeration, decontextualization, and deception. Most of the analyses available so far are consistent in observing the preponderance of hoaxes, the minority but significant number of decontextualizations and exaggerations, and the almost non-existence of humorous content (Brennen et al., 2020; Canavilhas, et al., 2019; Gutiérrez-Coba et al., 2020; Peña-Ascacíbar et al., 2021; Salaverría et al., 2020), with these or other denominations.

RQ3: Which are the most common intentions, themes and disinformation strategies in problematic materials about feminism circulating on the internet?

2.4. Emotional appeal and protagonism of disinformation

Several factors influence the diffusion, perception and assimilation of disinformation: partisan cues, group cues, emotional cues, exposure and recency, virality, and audiovisual content (Tucket et al., 2018). Audience emotions during exposure also play a pivotal role in the perception of a message as real and in the activation of subsequent agreement and redissemination processes (Chadwick & Vaccari, 2019). For example, anger reinforces the beliefs of the receiving audience and their partisan identification, making it an emotion that enhances affective polarization (Weeks, 2015). The potential for dissemination of fake news is ultimately related to the emotional reaction it provokes in those who receive it (Peña-Ascacíbar et al., 2021). The great weight of emotions in the assimilation and sharing of hoaxes even motivates those who produce content to vary the nature of their appeals depending on what they want to convey (Tarullo & Gamir-Ríos, 2022).

The most recurrent protagonists are usually institutions or organizations related to the main topic, as previous work has already found (Del-Fresno-García, 2019; Rodríguez-Fernández, 2021). These actors are mostly concentrated in institutions or specific parties and movements (Almansa-Martínez et al., 2022; Chadwick & Vaccari, 2019; Freelon et al., 2020; Tarullo & Gamir-Ríos, 2022).

RQ4: Which emotions do disinformation evoke and who are the protagonists of such feelings?

3. Materials and methods

3.1. Materials

This paper analyzes the rebuttals related to feminism and its agenda published up to March 31, 2022 by some of the 13 Spanish-language Ibero-American fact-checking media accredited by the International Fact-Checking Network (IFCN), from nine countries. The composition of the sample was carried out in two stages. In the first phase, the 10,758 rebuttals that were stored on that date in the sections dedicated by these media to the verification of disinformation circulating in social networks or messaging applications were downloaded using the web-scraping tool Octoparse. In the second phase, an initial categorization of a single dichotomous variable was applied to this corpus, which made it possible to select only those publications related to the object of study and which refuted a single piece of misinformation. The resulting corpus amounts to 271 problematic pieces, published by 12 verifiers from eight countries.

Table 1. Composition of the research corpus

Media	Country	Rebuttals	Corpus
Chequeado	Argentina	691	17
Bolivia Verifica	Bolivia	3,083	17
Fast Check	Chile	363	9
ColombiaCheck	Colombia	2,357	44
La Silla Vacía	Colombia	1,073	6
Ecuador Chequea	Ecuador	168	3
El Sabueso	Mexico	343	1
La República	Peru	96	0
Cotejo	Venezuela	236	2
Maldito Feminismo	Spain	162	137
Newtral	Spain	1,742	24
Verificat	Spain	443	4
EFE Verifica	Spain	835	7
		10,758	271

Source: Authors' own

3.2. Method

To answer the research questions, the work applies a content analysis (Krippendorff, 2004; Neuendorf, 2016) of 11 variables to the 271 publications that make up the sample. The coding took the information contained both in the rebuttal published by the verifying media and the disinformative material itself to which it refers into account.

Table 2. Content analysis variables and categories

Variables	Categories	
1. Text	Yes / No	
2. Multimedia resource	Yes / No	
3. Type of multimedia resource	Video / Image / Audio / Link	
4. Degree of alteration of the multimedia resource	Existing / Reconfigured / Fabricated	
5. Sender	*Fake account* / Citizens / Business Leader / Politicians / Media and journalists / Digital influencers	
6. Source	Anonymous / Fictitious / Supplanted / Real	
7. Intention	Informative-clickbait / Polarizing / Destabilizing / Criminal	
8. Type	Humor / Minimization / Exaggeration / Decontextualization / Falsehood	
9. Topic	Abortion / Gender-based violence / Prostitution / Alleged violence against men / Divorce and custody / Gender pay gap / Gender gap in education / Democratic rights / Sex education / Trans and non-binary people / Subsidies / "Woke" culture / Personal aspects / Others	
10. Emotional appeal	Positive	Happiness / Surprise
	Negative	Anger / Fear / Sadness / Disgust
	Other	
11. Protagonist	Left-wing politicians / Right-wing politicians / Women as a collective / Men as a collective / LGBTQI+ people / Church hierarchy / Army, police / Court system / Leaders of progressive social movements / Progressive social movements / Leaders of conservative social movements / Conservative social movements / Other	

Source: Authors' own

The first four variables refer to the technical complexity of disinformation. Their definition has taken into consideration both the spectrum of cheapfakes and deepfakes proposed by Paris & Donovan (2019) and the complexity curve prepared by Gamir-Ríos & Tarullo (2022). The variables *Text* (v1) and *Multimedia resource* (v2) are dichotomous and observe the presence of both formats in the debunked materials; the rest of the variables are categorical. The variable *Type of multimedia resource* (v3) catalogs the format of the shared files and contemplates four possibilities: a) video, b) image, c) audio, and d) link.

The variable *Degree of alteration of the multimedia resource* (v4) categorizes these elements according to the following criteria: a) existing, when it is shared without alteration; b) reconfigured, when it has undergone some type of editing; and c) fabricated, when it has been created ad hoc, in an amateur or professional manner.

Variables 5 and 6 evaluate the epistemological authority of the disinformation (Bochenski, 1974). The variable *Sender* (v5) classifies the origin of the problematic material according to a catalog of options drafted after an exploratory approach to the research corpus. The variable *Source* (v6) studies the attribution of the disinformation contained in the material based on the typology proposed by Salaverría et al. (2020): a) anonymous, it does not reveal the identity of the source to which the disinformation is attributed; b) fictitious, it invents the identity; c) supplanted, it falsely attributes the disinformation to a real source; and d) real, the identity is correctly attributed, although the content is false.

The variable *Intention* (v7) is based on several prior classifications (Brennen et al., 2020; Gutiérrez-Coba et al., 2020; Tarullo & Gamir-Ríos, 2022) and contemplates: a) informative/clickbait, related to the media to obtain traffic and generate revenue through advertising; b) polarizing, disqualifies a party, movement or leadership; c) destabilizing, attacks the system as a whole; and d) criminal, aims to steal data or has illicit objectives.

The variable *Type* (v8) adapts the catalog of Salaverría et al. (2020) and distinguishes five disinformative discursive strategies: a) humor, use of parody, satire or caricature; b) minimization, reduction of the quantitative aspects of the information; c) exaggeration, amplification of these aspects; d) decontextualization, hiding or distorting the qualitative aspects in which the facts were produced; e) falsehood, outright falsification or invention.

The variable *Topic* (v9) categorizes the materials according to their theme by means of a catalog drafted from the Feminist Agenda 2030 (Creación Positiva & Associació Drets Sexuals i Reproductius, 2017).

The variable *Emotional appeal* (v10) takes the classic typology of primary emotions proposed by Damasio (2001) into consideration: a) anger, if the hoax appeals to annoyance or indignation against the institution or the protagonist; b) fear, by generating concern or a sense of danger; c) disgust; d) sadness, by appealing to grief or longing; e) surprise, by providing unexpected but gratifying information; and f) happiness, by generating hope in contrast to fear or uncertainty.

Finally, the variable *Protagonist* (v11) classifies the person or entity that is the object of the disinformation based on various categories established after an initial study of the corpus.

Coding was done by one of the two signatories. The test carried out by both researchers independently and separately on 18.45% of the sample (n=50) gives Krippendorff's Alpha

coefficients—calculated using ReCal software (Freelon, 2013)—that were consistently above 0.8.

4. Results

4.1. Technical complexity of disinformation

Of the disinformation analyzed, 95.9% (n=260) have text (v1) and 83.3% (n=226) present some type of multimedia resource (v2). With respect to their type (v3), those using static images stand out (65.5%), followed by videos (23.5%) and links (10.6%). As for the alteration of these resources (v4), 37.2% of the files show no alteration to the original, compared to 25.2% that do and 37.6% that have been created from scratch to misinform.

Cross tabulating the variables referring to the type of multimedia resource and its degree of alteration, reflected in Table 3, shows that the most frequent combinations to disinform about feminism and its agenda are the fabrication of images (32.7%) and their editing (17.7%), but the use of pre-existing photographs and videos disseminated without alteration also stands out (15% and 13.3%, respectively).

Table 3. Type of multimedia resource, according to its degree of alteration

	Existing		Reconfigured		Fabricated		Total	
	f	%	f	%	f	%	f	%
Video	30	13.3	16	7.1	7	3.1	53	23.5
Image	34	15.0	40	17.7	74	32.7	148	65.5
Audio	0	0.0	0	0.0	1	0.4	1	0.4
Link	20	8.8	1	0.4	3	1.3	24	10.6
	84	37.2	57	25.2	85	37.6	226	100

Source: Authors' own

4.2. Epistemological authority of disinformation

The most frequent senders of disinformation (v5) are fake accounts (29.5%), followed by accounts created by people without public relevance (26.6%), journalists or the media (21.8%) and politicians (18.1%). In turn, the sources most present in problematic materials (v6) are real ones (38.4%) and anonymous ones (31.7%).

The cross-tabulation of both variables, shown in Table 4, evidences that the most common combinations are fake accounts that use anonymous sources (14%), media accounts that mention real sources (12.5%), citizen accounts with anonymous sources (11.8%), political accounts with real sources (11.1%), citizen accounts with real sources (8.5%) and fake accounts with supplanted sources (6.6%).

Table 4. Type of issuer, according to the source present in the hoax

	Anonymous		Fictitious		Supplanted		Real		Total	
	f	%	f	%	f	%	f	%	f	%
Fake account	38	14.0	14	5.2	18	6.6	10	3.7	80	29.5
Citizens	32	11.8	7	2.6	10	3.7	23	8.5	72	26.6
Business Leader	0	0.0	0	0.0	1	0.4	1	0.4	2	0.7
Politicians	8	3.0	2	0.7	9	3.3	30	11.1	49	18.1
Media and journalists	8	3.0	7	2.6	10	3.7	34	12.5	59	21.8
Digital influencers	0	0.0	3	1.1	0	0.0	6	2.2	9	3.3
	86	31.7	33	12.2	48	17.7	104	38.4	271	100

Source: Authors' own

4.3. Type, intention and topic of the disinformation

The most frequent intentions (v7) of the problematic materials are polarizing (48%) and destabilizing (38.7%). The most common discursive strategies (v8) are falsehood (67.9%) and, although much less common, decontextualization (22.9%). The most frequent topics (v9) are gender-based violence (31.7%), subsidies to feminist entities (14.8%), abortion (14.4%), the set of characteristics attributed to the "woke" culture (7%), violence allegedly committed against men (6.6%), and the rights of trans and non-binary people (5.2%).

The cross-tabulation of the variables referring to intention and discursive strategy reveals—as shown in Table 5—that the most frequent combinations are falsehoods with a polarizing (32.1%) or destabilizing (25.5%) intention, followed by polarizing decontextualization (12.2%), falsehoods with a supposedly informative purpose (10%) and decontextualization with a destabilizing purpose (9.6%).

Table 5. Type of disinformation, according to the intention of the hoax

	Informative		Polarizing		Destabilizing		Criminal		Total	
	ƒ	%	ƒ	%	ƒ	%	ƒ	%	ƒ	%
Humor	5	1.8	3	1.1	0	0.0	0	0.0	8	3.0
Minimization	0	0.0	1	0.4	7	2.6	0	0.0	8	3.0
Exaggeration	0	0.0	6	2.2	3	1.1	0	0.0	9	3.3
Decontextualization	3	1.1	33	12.2	26	9.6	0	0.0	62	22.9
Falsehood	27	10.0	87	32.1	69	25.5	1	0.4	184	67.9
	35	12.9	130	48.0	105	38.7	1	0.4	271	100

Source: Authors' own

In turn, tabulating the variables intention and topic, shown in Table 6, indicates that the most common combinations are disinformation on gender-based violence with a destabilizing (15.9%) or polarizing (11.4%) intention, followed by problematic materials on abortion with a polarizing intention (9.6%) and on subsidies to the feminist movement with the same purpose (9.2%).

Table 6. Topic of disinformation, according to the intention of the hoax

	Informative		Polarizing		Destabilizing		Criminal		Total	
	ƒ	%	ƒ	%	ƒ	%	ƒ	%	ƒ	%
Abortion	3	1.1	26	9.6	10	3.7	0	0.0	39	14.4
Gender-based violence	12	4.4	31	11.4	43	15.9	0	0.0	86	31.7
Prostitution	0	0.0	1	0.4	0	0.0	0	0.0	1	0.4
Alleged violence against men	5	1.8	9	3.3	4	1.5	0	0.0	18	6.6
Divorce and custody	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Gender pay gap	0	0.0	1	0.4	3	1.1	0	0.0	4	1.5
Gender gap in education	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Democratic rights	1	0.4	4	1.5	8	3.0	0	0.0	13	4.8
Sex education	0	0.0	1	0.4	4	1.5	0	0.0	5	1.8
Trans and non-binary people	0	0.0	6	2.2	8	3.0	0	0.0	14	5.2
Subsidies	2	0.7	25	9.2	13	4.8	0	0.0	40	14.8
"Woke" culture	3	1.1	12	4.4	4	1.5	0	0.0	19	7.0
Personal aspects	2	0.7	4	1.5	3	1.1	0	0.0	9	3.3
Others	7	2.6	10	3.7	5	1.8	1	0.4	23	8.5
	35	12.9	130	48.0	105	38.7	1	0.4	271	100

Source: Authors' own

4.4. Emotional appeal and protagonists of disinformation

The most frequent emotional appeal (v10) is anger (55.4%, n=150), followed by fear (13.3%, n=36), sadness and happiness (both with 9.2%, n=25) and surprise (6.6%, n=18); the appeal to disgust is marginal (1.8%, n=5). There is therefore a clear predominance of negative emotions (79.7%) over positive ones (15.9%). In turn, the most common protagonists of disinformation (v11) are conservative social movements (28.8%), women as a collective (26.9%), right wing politicians (10%), men as a collective (9.6%) and progressive social movements (8.5%). The crossing of both variables, reflected in Table 7, shows that all the protagonists are treated in a mostly negative way.

Table 7. Protagonist of disinformation, according to the emotion appealed

	Positive		Negative		Other		Total	
	f	%	f	%	f	%	f	%
Left-wing politicians	1	0.4	15	5.5	0	0.0	16	5.9
Right-wing politicians	2	0.7	24	8.9	1	0.4	27	10.0
Women as a collective	25	9.2	48	17.7	0	0.0	73	26.9
Men as a collective	2	0.7	22	8.1	2	0.7	26	9.6
LGBTQI+	0	0.0	6	2.2	0	0.0	6	2.2
Church hierarchy	0	0.0	1	0.4	0	0.0	1	0.4
Army, police	1	0.4	0	0.0	0	0.0	1	0.4
Court system	0	0.0	0	0.0	0	0.0	0	0.0
Leaders of progressive social movements	0	0.0	1	0.4	0	0.0	1	0.4
Progressive social movements	5	1.8	18	6.6	0	0.0	23	8.5
Leaders of conservative social movements	0	0.0	3	1.1	0	0.0	3	1.1
Conservative social movements	5	1.8	71	26.2	2	0.7	78	28.8
Other	2	0.7	7	2.6	7	2.6	16	5.9
	43	15.9	216	79.7	12	4.4	271	100

Source: Authors' own

5. Discussion and conclusions

This paper has analyzed the characteristics of Spanish-language disinformation on feminism and its agenda. To do so, it has applied a content analysis to 271 rebuttals published between 2017 and March 31, 2022 by 12 Ibero-American fact-checking media.

In regard to RQ1, referring to the format of disinformation, the results indicate that the predominant element is text and that on most occasions it is accompanied by other multimedia material types, particularly images shared without any type of alteration. The majority presence of text and static images corroborates that detected in previous research

(Almansa-Martínez et al., 2022; Coromina & Padilla, 2018; Gutiérrez-Coba et al., 2020; Herrero-Diz et al., 2020; Noain-Sánchez, 2021; Peña-Ascacíbar et al., 2021; Salaverría et al., 2020), as does the generally null or gross alteration of shared multimedia resources (Gamir-Ríos & Tarullo, 2022), which evidences the predominance of cheapfakes (Aneja et al., 2021; Paris & Donovan, 2019; Schick, 2020) in misinformation about feminism and its agenda, as well as the ease of generating disinformation about them.

Concerning RQ2, which is focused on epistemological authority, the research has found the predominance of two combinations of disinformation issuer and mentioned source. On one hand, political and media spaces, which mostly resort to real sources, even if their content is false. On the other hand, fake accounts or accounts of people with no public relevance, which mostly resort to anonymous sources. The first aspect evidences the role of the media and the political class in the generation and dissemination of problematic materials (Tucker et al., 2018); it also agrees with that suggested by Salaverría et al. (2020), who observe that, in line with the epistemological principle of authority (Bochenski, 1974), the attribution of competence to people who pronounce on matters in which they are not specialists is one of the usual disinformation mechanisms. The second aspect departs from that observation and aligns with the results of other research that had already noted the predominance of anonymous sources (Almansa-Martínez et al., 2022; Coromina & Padilla, 2018; Gutiérrez-Coba et al., 2020; Tarullo & Gamir-Ríos, 2022) and pointed out the role of fake or non-publicly relevant accounts in the generation and dissemination of problematic materials (Tucker et al., 2018). This is consistent with the role of internet users in the generation and propagation of disinformation disorder (Wardle & Derakhshan, 2017) and confirms their status as prosumers of information, but also disinformation (Jenkins, 2006), an aspect facilitated by, among other issues, the low digital literacy required for the creation and circulation of hoaxes.

As in previous research, the results of RQ3, referring to the intentions, topics and discursive strategies, show the predominance of polarizing motivations around specific leaderships or movements and, to a lesser extent, of destabilizing ones regarding the system as a whole (Gutiérrez-Coba et al., 2020; Tarullo & Gamir-Ríos, 2022), as well as the preponderance of falsehood as a discursive tool for generating hoaxes (Brennen et al., 2020; Canavilhas, et al., 2019; Gutiérrez-Coba et al., 2020; Peña-Ascacíbar et al., 2021; Salaverría et al., 2020). The thematic predominance of gender-based violence (Herrero-Diz et al., 2020) and abortion also shows that disinformation on the feminist agenda is mainly aimed at questioning the right of women over their own bodies, as well as polarizing the exercise of this right.

In response to RQ4, referring to emotions and protagonism, the results show the predominance of negative appeals in disinformation, especially anger. This is also in line with previous research and aligns with the evidence that anger reinforces the beliefs of the recipient audience and their partisan identification (Weeks, 2015). In turn, the predominance of the right-wing political class and women as protagonists is consistent with other work that observes that the most common subjects of disinformation are

groups of political ideologies related to the main topic (Rodríguez-Fernández, 2021; Del-Fresno-García, 2019), regardless of whether the relationship is produced by negation or affirmation.

In conclusion, this research has found that disinformation on feminism operates in a similar manner to disinformation in general, both in formal aspects and in terms of the issuers, sources, intentions, discursive strategies and emotional appeals. The finding evidences the full consolidation of topics ascribed to the feminist agenda as an object of disinformation, a particularly serious aspect considering the contribution of conflicting materials to affective polarization (Mourão & Robertson, 2019; Tucker et al., 2018; Weeks, 2015). Disinformation about feminism thus constitutes a fundamental element of digital sexism (Herrero-Diz et al., 2020; Sobieraj, 2018) and of the demonization of feminism (Lenguita, 2021; Stabile et al., 2019; Wichels, 2019) in its fourth wave.

Authors' contributions

Andrea M. Malquín-Robles: Conceptualization, Resources, Methodology, Investigation, Data curation, Formal Analysis, Writing- original draft. **José Gamir-Ríos:** Supervision, Methodology, Data curation, Formal Analysis, Validation, Visualization, Writing- review and editing. All authors have read and agree to the published version of the manuscript. Conflicts of interest: The authors declare that they have no conflict of interest.

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References

Allcott, Hunt, & Gentzkow, Matthew (2017). Social Media and Fake News in the 2016 Election. *Journal of Economic Perspectives, 31*(2), 211-236. https://doi.org/10.1257/jep.31.2.211

Almansa-Martínez, Ana, Fernández-Torres, María Jesús, & Rodríguez-Fernández, Leticia (2022). Desinformación en España un año después de la COVID-19: Análisis de las verificaciones de Newtral y Maldita. *Revista Latina de Comunicación Social, 80*, 183-200. https://www.doi.org/10.4185/RLCS-2022-1538

Aneja, Shivangi, Midoglu, Cise, Dang-Nguyen, Duc-Tien, Riegler, Michael, Halvorsen, Paal, Niessner, Matthias, Adsumilli, Balu, & Bregler, Chris (2021). MMSys'21 Grand Challenge on detecting

cheapfakes. 12th ACM Multimedia Systems Conference (MMSys'21). https://doi.org/10.48550/arXiv.2107.05297

Bennett, W. Lance, & Livingston, Steven (2018). The disinformation order: Disruptive communication and the decline of democratic institutions. *European Journal of Communication, 33*(2), 122–139. https://doi.org/10.1177/0267323118760317

Bochenski, Joseph M. (1974). *¿Qué es autoridad? Introducción a la lógica de la autoridad*. Herder.

Brennen, Scott J., Simon, Felix M., Howard, Philip. N., & Nielsen, Rasmus Kleis (2020, 7 de abril). *Types, sources, and claims of COVID-19 misinformation.* Reuters Institute for the Study of Journalism. https://n9.cl/upe32

Canavilhas, João, Colussi, Juliana, & Moura, Zita-Bacelar (2019). Desinformación en las elecciones presidenciales 2018 en Brasil: Un análisis de los grupos familiares en WhatsApp. *Profesional de la Información, 28*(5), e280503. https://doi.org/10.3145/epi.2019.sep.03

Casero-Ripollés, Andreu (2020). Impact of Covid-19 on the media system. Communicative and democratic consequences of news consumption during the outbreak. *Profesional de la Información, 29*(2), e290223. https://doi.org/10.3145/epi.2020.mar.23

Chadwick, Adrew, & Vaccari, Cristian (2019). *News sharing on UK social media: isinformation, disinformation & correction*. Loughborough University, Online Civic Culture Center. https://hdl.handle.net/2134/37720

Chawla, Ronit (2019). Deepfakes: How a pervert shook the world. *International Journal of Advance Research and Development, 4*(6), 4-8. https://n9.cl/mid5kw

Creación Positiva & Associació Drets Sexuals i Reproductius (2017). *Agenda 2030 Feminista*. Foli Verd, SCCL. http://www.agenda2030feminista.org/esp/

Coromina, Óscar & Padilla, Adrián (2018). Análisis de las desinformaciones del referéndum del 1 de octubre detectadas por Maldito Bulo. *Quaderns del CAC*, (44), 17-26. https://www.cac.cat/sites/default/files/2018-08/Q44_ES.pdf

Damasio, Antonio (2001). Fundamental feelings. *Nature*, *413*, 781. https://doi.org/10.1038/35101669

De Miguel, Ana (2008). Feminismo y juventud en las sociedades formalmente igualitarias. *Revista de Estudios de Juventud*, (83), 29-45. http://www.injuve.es/sites/default/files/RJ83-05.pdf

Del-Fresno-García, Miguel (2019). Desórdenes informativos: Sobreexpuestos e infrainformados en la era de la posverdad. *Profesional de la información, 28*(3). https://doi.org/10.3145/epi.2019.may.02

Dowling, Melissa-Ellen (2021). Democracy under siege: Foreign interference in a digital era. *Australian Journal of International Affairs, 75*(4), 383-387. https://doi.org/10.1080/10357718.2021.1909534

Emmerich, Norberto (2015). Campaña de desinformación. En Ismael Crespo Martínez, Orlando D'Adamo, Virginia García Beaudoux & Alberto Mora Rodríguez (coords.), *Diccionario Enciclopédico de Comunicación Política* (pp. 44-47). ALICE y Centro de Estudios Políticos y Constitucionales.

Freelon, Dean (2013). ReCal OIR: Ordinal, Interval, and Ratio Intercoder Reliability as a Web Service. *International Journal of Internet Science, 8*(1), 10-16. https://www.ijis.net/ijis8_1/ijis8_1_freelon.pdf

Freelon, Deen, Marwick, Alice, & Kreiss, Daniel (2020). False equivalencies: Online activism from left to right. *Science, 369*(6508), 1197-1201. https://doi.org/10.1126/SCIENCE.ABB2428

Fletcher, John (2018). Deepfakes, Artificial Intelligence, and Some Kind of Dystopia: The New Faces of Online Post-Fact Performance. *Theatre Journal, 70*(4), 455-471. https://muse.jhu.edu/article/715916

Flynn, D. J., Nyhan, Brendan, & Reifler, Jason (2017). The Nature and Origins of Misperceptions: Understanding False and Unsupported Beliefs about Politics. *Advances in Political Psychology, 38*(1), 127–150. https://doi.org/10.1111/pops.12394

Gamir-Ríos, José, & Tarullo, Raquel (2022). Predominio de las cheapfakes en redes sociales: Complejidad técnica y funciones textuales de la desinformación desmentida en Argentina durante 2020. *adComunica*, (23), 97-118. http://dx.doi.org/10.6035/adcomunica.6299

García-Perea, María Dolores (2012). El investigador educativo: autoridad epistemológica y autoridad legal. *IE Revista de Investigación educativa de la REDIECH, 3*(4), 73-88. https://doi.org/10.33010/ie_rie_rediech.v3i4.555

Guallar, Javier, Codina, Lluís, Freixa, Pere, & Pérez-Montoro, Mario (2020). Desinformación, bulos, curación y verificación: Revisión de estudios en Iberoamérica 2017-2020. *Telos: Revista de Estudios Interdisciplinarios en Ciencias Sociales, 22*(3), 595-613. https://doi.org/10.36390/telos223.09

Gutiérrez-Coba, Liliana, Coba-Gutiérrez, Patricia, & Gómez-Díaz, Javier Andrés (2020). Noticias falsas y desinformación sobre el Covid-19: Análisis comparativo de seis países iberoamericanos. *Revista Latina de Comunicación Social*, (78), 237-264. https://www.doi.org/10.4185/RLCS-2020-1476

Herrero-Diz, Paula, Pérez-Escolar, Marta, & Plaza Sánchez, Juan Fancisco (2020). Desinformación de género: Análisis de los bulos de Maldito Feminismo. *Icono 14, 18*(2), 188-216. https://icono14.net/ojs/index.php/icono14/article/view/1509

Jenkins, Henry (2006). *Convergence Culture: Where Old and New Media Collide*. New York University Press.

Krippendorff, Klaus (2004). *Content analysis: An introduction to its methodology*. SAGE.

Lenguita, Paula (2021). Luchas feministas, cuidados y comunidad en la post-pandemia. *Telos: Revista de Estudios Interdisciplinarios en Ciencias Sociales, 23*(1), 141-149. https://www.doi.org/10.36390/telos231.11

Lewis, Rebecca, & Marwick, Alice (2017). *Taking the Red Pill: Ideological Motivations for Spreading Online*. University of Pennsylvania Annenberg School for Communication. https://n9.cl/pmhi1

López-Borrull, Alexandre (2020). Fake news y coronavirus: La información como derecho y necesidad. *COMeIN [en línea], 98*. https://doi.org/10.7238/c.n98.2025

Maras, Marie-Helen, & Alexandrou, Alex (2019). Determining authenticity of video evidence in the age of artificial intelligence and in the wake of deepfake videos. *International Journal of Evidence & Proof, 23*(3) 255-262. https://doi.org/10.1177/1365712718807226

Mitchell, Amy, Gottfried, Jeffrey, Shearer, Elisa, & Lu, Kristine (2017, 9 de febrero). *How Americans Encounter, Recall and Act Upon Digital News*. Pew Research Center. https://n9.cl/e8ajh

Mourão, Rachel R., & Robertson, Craing. T. (2019). Fake news as discursive integration: An analysis of sites that publish false, misleading, hyperpartisan and sensational information. *Journalism Studies, 20*(14), 2077-2095. https://doi.org/10.1080/1461670X.2019.1566871

Neuendorf, Kimberly A. (2016). *The content analysis guidebook*. SAGE. https://dx.doi.org/10.4135/9781071802878

Noain-Sánchez, Amaya (2021). Desinformación y Covid-19: Análisis cuantitativo a través de los bulos desmentidos en Latinoamérica y España. *Estudios sobre el Mensaje Periodístico, 27*(3), 879-892. https://doi.org/10.5209/esmp.72874

Paris, Britt, & Donovan, Joan (2019). *Deepfakes and cheapfakes: The manipulation of audio and visual evidence*. Data & Society. https://www.n9.cl/fpnrw

Peña-Ascacíbar, Gonzalo, Bermejo-Malumbres, Eloy, & Zanni, Stefano (2021). Fact checking durante la COVID-19: Análisis comparativo de la verificación de contenidos falsos en España e Italia. *Revista de Comunicación, 20*(1), 197–215. https://doi.org/10.26441/rc20.1-2021-a11

Rodríguez-Fernández, Leticia (2021). *Propaganda digital: Comunicación en tiempos de desinformación*. UOC.

Salaverría, Ramón, Buslón, Nataly, López-Pan, Fernando, León, Bienvenido, López-Goñi, Ignacio, & Erviti, María Carmen (2020). Desinformación en tiempos de pandemia: Tipología de los bulos sobre la Covid-19. *Profesional de la Información, 29*(3), e290315. https://doi.org/10.3145/epi.2020.may.15

Sobieraj, Sarah (2018). Bitch, slut, skank, cunt: Patterned resistance to women's visibility in digital publics. *Information, Communication & Society, 21*(11), 1700-1714. https://www.tandfonline.com/doi/full/10.1080/1369118X.2017.1348535

Schick, Nina (2020, 22 de diciembre). *Don't underestimate the cheapfake*. MIT Technology Review. https://n9.cl/6cfj4

Stabile, Bonnie, Grant, Aubrey, Purohit, Hermant, & Harris, Kelsey (2019). Sex, Lies, and Stereotypes: Gendered Implications of Fake News for Women in Politics. *Public Integrity, 21*(5), 491-502. https://www.tandfonline.com/doi/full/10.1080/10999922.2019.1626695

Tandoc Jr, Edson C., Lim, Zheng Wei, & Ling, Richard (2018). Defining "Fake News": A typology of scholarly definitions. *Digital Journalism, 6*(2), 137-153. https://doi.org/10.1080/21670811.2017.1360143

Tarullo, Raquel, & Gamir-Ríos, José (2022). Asustar para desestabilizar: Desinformación sobre la COVID-19 en Argentina y España. *Cuadernos.info*, 52, 47–68. https://doi.org/10.7764/cdi.52.42915

Tucker, Joshua. A., Guess, Andrew, Barberá, Pablo, Vaccari, Cristian, Siegel, Alexandra, Sanovich, Sergey, Stukal, Denis, & Nyhan, Brendan (2018). Social media, political polarization, and political disinformation: A review of the scientific literature. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3144139

Vosoughi, Soroush, Roy, Deb, & Aral, Sinan (2018). The spread of true and false news online. *Science, 359*(6380), 1146-1151. https://doi.org/10.1126/science.aap9559

Wardle, Claire (2017, 16 de febrero). *"Fake News." It's Complicated*. First Draft https://medium.com/1st-draft/fake-news-its-complicated-d0f773766c79

Wardle, Claire & Derakhshan, Hossein (2017). *Information Disorder: Toward an Interdisciplinary Framework for Research and Policymaking*. Council of Europe. https://rm.coe.int/information-disorder-toward-an-interdisciplinary-framework-for-researc/168076277c

Weeks, Brian E. (2015). Emotions, Partisanship, and Misperceptions: How Anger and Anxiety Moderate the Effect of Partisan Bias on Susceptibility to Political Misinformation. *Journal of Communication, 65*(4), 699–719. https://doi.org/10.1111/jcom.12164

Westerlund, Mika (2019). The emergence of deepfake technology: A review. *Technology Innovation Management Review, 9*(11), 40-53. http://doi.org/10.22215/timreview/1282

Wichels, Susana (2019). "Femenina, sí. feminista, no." Demonización del feminismo en blogs portugueses. En J. C. Suárez Villegas, S. Marín Conejo & P. Panarese (eds.), *Comunicación, género y educación. Representaciones y (de)construcciones* (pp. 115-121). Dykinson.

Zovatto, Daniel (2018). El estado de la democracia en América Latina a casi cuatro décadas del inicio de la tercera ola. *Revista Derecho Electoral*, 25, 1-24. https://dialnet.unirioja.es/servlet/articulo?codigo=6273217