Are gender policies absent from Twitter? Unpacking the silence from citizens and politicians*

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Abstract

In the last decade, the growth of feminist protests worldwide has allowed activist groups to become more prominent in the political sphere (McCabe, 2024; Daby & Moseley, 2022). Spain has been no exception (Alonso et al., 2023): the feminist movement has used social media to highlight their demands, even though the behavior of political representatives suggest that interaction with citizens is not a priority for them (Ramos-Serrano et al., 2018). Understanding how the public employs digital platforms to voice their demands provides valuable insights that can help policymakers shape legislation that meets societal needs. Hence, this study aims to explore the discourse of citizens

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using the 8M hashtags to determine whether they are demanding legislative action from institutions. We also aim to clarify whether messages issued by Spanish MPs address gender-related legislative issues. The data analyzed come from both the official accounts of members of the Congress of Deputies and users who tweeted with the hashtags #HuelgaFeminista, #HaciaLaHuelgaFeminista, #RevueltaFeminista, #8M2020, #8M2021 and #8Marzo2022. Nearly 4 million tweets published between January 2017 and May 2023 were collected and analyzed with R and Python. The research reveals that gender-related posts on Twitter rarely focus on legislative demands, with only 0.36% of the tweets observed dealing with this matter. Meanwhile, the five MPs who discuss this issue most frequently in their accounts are Lídia Guinart (PSOE), Laura Berja (PSOE), Rosa Romero (PP), Carla Toscano (VOX) and Susana Ros (PSOE). However, overall, representatives mention this topic only in just 0.29% of their tweets. Thus, these findings support the idea that social media is not widely used either to call for nor report on public policies aimed at improving women's lives.

Keywords: Twitter; feminism; citizenry; gender; public policy; political communication

Resum. *On són les polítiques de gènere? Una exploració del silenci ciutadà i parlamentari a Twitter*

En l'última dècada, l'auge de les manifestacions feministes a tot el món ha permès que aquests grups d'acció adquireixin una gran presència a l'esfera política (McCabe, 2024; Daby i Moseley, 2022). Espanya no n'ha estat una excepció (Alonso et al., 2023), ja que el moviment feminista ha trobat un espai per visibilitzar les seves demandes a les xarxes socials, malgrat que el comportament dels representants polítics indiqui que la interacció amb la ciutadania no és una prioritat (Ramos-Serrano et al., 2018). Comprendre com la població utilitza les plataformes digitals per expressar les seves demandes ofereix informació valuosa perquè els responsables polítics adaptin la legislació a les necessitats de la societat. Així, aquest estudi pretén explorar el discurs de la ciutadania en les etiquetes del 8M per saber si demanen mesures legislatives a les institucions i si les polítiques espanyoles informen sobre qüestions legislatives relacionades amb el gènere. Les dades van ser recollides tant dels perfils dels representants del Congrés dels Diputats com dels missatges sota #HuelgaFeminista, #HaciaLaHuelgaFeminista, #RevueltaFeminista, #8M2020, #8M2021 i #8Marzo2022 amb R. Gairebé quatre milions de tuits publicats entre gener de 2017 i maig de 2023 van ser analitzats amb Python. La recerca revela que les publicacions relacionades amb el gènere a Twitter no se centren en demandes legislatives, ja que només el 0,36% dels tuits tracten sobre aquesta qüestió. Les cinc diputades que més aborden aquest assumpte són Lídia Guinart (PSOE), Laura Berja (PSOE), Rosa Romero (PP), Carla Toscano (VOX) i Susana Ros (PSOE). No obstant això, els representants en general només expressen la seva opinió sobre aquest tema en el 0,29% dels seus tuits. Aquests resultats donen a entendre que les xarxes socials no s'utilitzen per exigir polítiques públiques que millorin la vida de les dones ni per informar sobre aquestes.

Paraules clau: Twitter; feminisme; ciutadania; gènere; polítiques públiques; comunicació política

Resumen. *¿Dónde están las políticas de género? Una exploración del silencio ciudadano y parlamentario en Twitter*

En la última década, el auge de las manifestaciones feministas en todo el mundo ha permitido que estos grupos de acción adquieran una gran presencia en la esfera política (McCabe, 2024; Daby y Moseley, 2022). España no ha sido una excepción (Alonso et al., 2023), ya que el movimiento feminista ha encontrado un espacio para visibilizar sus

demandas en las redes sociales, a pesar de que el comportamiento de los representantes políticos indique que la interacción con la ciudadanía no está entre sus prioridades (Ramos-Serrano et al., 2018). Comprender cómo la población utiliza las plataformas digitales para expresar sus demandas ofrece información valiosa que puede ayudar a los responsables políticos a adaptar la legislación a las necesidades de la sociedad. Así, este estudio pretende explorar el discurso de la ciudadanía en los hashtags del 8M para conocer si demandan medidas legislativas a las instituciones. Además, se desea clarificar si los mensajes de los representantes españoles abordan cuestiones legislativas relacionadas con el género. Los datos analizados provienen tanto de las cuentas oficiales de los miembros del Congreso de los Diputados como de los mensajes escritos bajo los hashtags #HuelgaFeminista, #HaciaLaHuelgaFeminista, #RevueltaFeminista, #8M2020, #8M2021 y #8Marzo2022. Casi 4 millones de tuits publicados entre enero de 2017 y mayo de 2023 fueron recogidos y analizados con R y Python. La investigación revela que las publicaciones relacionadas con el género en Twitter no se centran en demandas legislativas, pues solo el 0,36% de los tuits tratan sobre esta cuestión. Por otra parte, las cinco diputadas que abordan este asunto con más asiduidad son Lídia Guinart (PSOE), Laura Berja (PSOE), Rosa Romero (PP), Carla Toscano (VOX) y Susana Ros (PSOE). Sin embargo, los representantes, en general, solo expresan su opinión sobre este tema en el 0,29% de sus tuits. Por tanto, estos resultados dan a entender que las redes sociales no se utilizan para exigir políticas públicas que mejoren la vida de las mujeres ni para informar sobre las mismas.

Palabras clave: Twitter; feminismo; ciudadanía; género; políticas públicas; comunicación política

1. Introduction

Despite the extensive research on protest within social media, there is still a significant gap in understanding whether these platforms enable legislative deliberation between citizens and politicians on gender issues. According to political opportunity theory, support from elites is crucial for social movements' demands (Meyer & Minkoff, 2004). Therefore, we aim to explore whether including legislative gender actions in the agendas of political representatives contributes to creating a favorable environment for change.

Digital platforms have weakened the dominance of traditional media, giving other actors greater influence in shaping the political agenda (Gilardi et al., 2022; Barberá et al., 2019). As a result, citizens have become more relevant in bringing attention to public issues (Acosta & Lassi, 2020; Gagrčin, 2024), although elites still largely control the digital conversation (Dagoula, 2019). Twitter[1] (now X) is the platform most closely linked to social movements (Navarro & Coromina, 2020) and has become a key space for feminist visibility (Rogan & Budgeon, 2018). Hence, the site may have played a positive role in transforming the social landscape, helping gender issues evolve from being a niche topic (Schöll et al., 2023) to gaining relevance in the Spanish media (Iranzo-Cabrera et al., 2023).

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1. The study period extends to May 2023, when the social network was still known as "Twitter", which is the term used throughout this article. Carrying on this research today on X might have yielded different results, for which we have no data.

In this context, Calvo et al. (2020) examined the social media communications of the Assembly organizing the 8 March demonstrations in Madrid. They found that the messages mainly focused on mobilizing citizens. The Assembly's Twitter posts shared feminist statements and encouraged people to join the strike. They also put forward particular proposals for 8M, but interactions with political parties and trade unions were scarce. A similar pattern appears in Syed & Silva's (2023) study, where Twitter was primarily used to call for mobilization and motivate participants.

However, political representatives have not reflected feminist demands in the same way as citizens have. This may be related to the fact that these leaders mainly use Twitter to broadcast their own messages (Kleftodimos et al., 2018; Gonzálvez Vallés et al., 2021) given that this platform has a high concentration of political journalists (McGregor, 2019) to whom they want to direct their statements and attract media attention (Spierings et al., 2019; Keller, 2020). In other words, politicians use their social networks to communicate their ideological positioning and reinforce their agenda in the media (Guerrero-Solé, 2018).

In this vein, a recent study on political parties in Andalusia by Liberia-Vayá et al. (2024) showed that the aim of most tweets was to define the author's stance on specific issues. The only exception to this strategy occurs during election campaigns, where López-Meri & Casero-Ripollés (2017) observed that Spanish representatives used Twitter to share policy proposals in the 2016 general elections. In the context of a conversation monopolized by the elites (Dagoula, 2019), and where election outcomes are not determined by politicians' activity —or lack thereof— on social networks (Reveilhac & Morselli, 2023), Twitter appears to reinforce established power structures (Ferro-Santos et al., 2024), amplifying politicians' messages rather than democratizing the discussion of public issues.

Even so, Barberá et al. (2019) explain that there is a strong connection between the topics that matter to the public and those addressed by political representatives on Twitter, with the latter being more likely to follow citizens' demands than to introduce new topics themselves. However, according to Gilardi et al. (2022), the agenda on digital platforms does not determine the agenda of political parties; instead, they influence each other. This suggests that, although political parties have very limited direct interaction with civil society (Liberia-Vayá et al., 2024), they do monitor social media (Farkas & Schwartz, 2018) to stay informed about citizens' concerns (Schöll et al., 2023). Therefore, this could present a political opportunity to bring gender issues onto the agenda.

Spanish parties dedicate 10.1% of their electoral programs to proposals related to women (Cabeza Pérez et al., 2023), yet Schöll et al. (2023) note that the times when representatives are most engaged with feminism online tend to coincide with Women's Day. However, beyond these studies, there is little evidence that these leaders address gender-related legislative measures. Given that politicians' behavior on social media have consequences on their

proposals and actions (Jungherr, 2016), it is important to take advantage of the fact that a large percentage of Spanish political representatives use Twitter (Gilardi et al., 2022; Haman & Školník, 2021) to analyze their activity. Moreover, the popularity of feminist hashtags in Spain (Rovira-Sancho & Morales-i-Gras, 2022) makes it possible to study the roles played by both citizens and politicians in the digital public sphere.

From this perspective, the main goal of this article is to compare the use of messages posted by citizens and members of the Spanish Congress of Deputies to determine whether they address gender-related legislative measures between 2017 and 2023. The public has often turned to social media to call for mobilization (Calvo et al., 2020; Syed & Silva, 2023), while political representatives have used them to reinforce their ideological position (Guerrero-Solé, 2018). Thus, our first hypothesis (H1) is that neither citizens nor Spanish MPs address gender-related legislative measures on Twitter.

To explore this further, three specific objectives are defined. First, we aim to examine the sentiment surrounding feminism to assess whether the space under study is being used for constructive discourse that contributes to building a better society. Hashtags are part of the feminist movement's repertoire of action (Rovira-Sancho & Morales-i-Gras, 2022) to raise awareness (Idoiaga Mondragón et al., 2022), so we expect a greater prevalence of positive messages (H2).

In addition, we explore citizens' attitudes towards representatives, as communication marked by insults or attacks could hinder productive dialogue or policies addressing feminist demands. We seek to find out whether there is a different approach depending on the political affiliation of MPs, since progressive parties have traditionally been more aligned with feminist demands than conservative ones (Evans, 2016; Santana & Aguilar, 2019; Bernárdez-Rodal et al., 2020). So, we expect to observe greater support for this cause from the left side of the political spectrum (H3).

Finally, we aim to determine whether tweets about gender policies posted by Spanish MPs increased during the election campaign. So far, evidence shows that legislative topics tend to gain prominence around elections (López-Meri & Casero-Ripollés, 2017), but not outside these periods. Therefore, we expect the representatives under study to increase their communication about gender-related public policies during the campaign period (H4).

2. Methodology

This study focuses on data from the surge of global feminism in 2017 (Nau et al., 2023), which was decisive in the development of the movement and its policies, up to the present day. This timeframe overlaps with the progressive administrations led by Pedro Sánchez after the vote of no confidence against former PM Mariano Rajoy (2018), which ushered in a series of legislative and social changes around feminism, underscoring the relevance and timeliness of this analysis.

The data for this research comes from both the official accounts of political representatives of the Congress of Deputies and from citizens posting under the hashtags #HuelgaFeminista, #HaciaLaHuelgaFeminista, #RevueltaFeminista, #8M2020, #8M2021 and #8Marzo2022. These hashtags were elected because the keywords "8M", "strike" (*huelga*) and "feminist" (*feminista*) are the most commonly used to discuss this topic, often in combination with the year in which the tweet was posted (Acosta & Lassi, 2020; Idoiaga Mondragon et al., 2022; Syed & Silva, 2023).

We selected these hashtags because we wanted to study the spontaneous conversations of ordinary citizens, avoiding those promoted exclusively by political parties, which might not reflect broader public sentiment. While we are aware that choosing hashtags linked to specific judicial cases, such as #YoSíTeCreo in the "Wolf Pack" case (Navarro & Coromina, 2020), could have yielded more favorable results, their relevance would have been biased. Focusing on the general hashtags offers a stronger insight into whether gender-related legislation is a recurring topic among the wider population.

Within feminist digital activism, hashtags stand out as one of the most widely used tools to build collective awareness, organize social protests and spark conversations in the digital sphere (Idoiaga Mondragon et al., 2022). However, it is essential to consider that hashtags can be prone to hijacking, where a discourse unrelated to the original purpose takes over the conversation (Bradshaw, 2022).

On the other hand, the reason for examining the accounts of members of the Congress of Deputies is that the only study addressing this topic so far (Liberia-Vayá et al., 2024) expressed the limitation of being able to examine only the profiles of political parties, not individual ones. To the best of our knowledge, MPs' accounts have never been analyzed for this purpose to date. Likewise, Liberia-Vayá et al. (2024) did not perform a sentiment analysis of their sample, which we have included as an objective in the present research.

All tweets published by the 274 deputies with Twitter account (DATADIP), as well as those posted by citizens using the hashtags above (DATACIU) between January 1st, 2017, and May 1st, 2023, were collected with R. The data was gathered after this date using the academictwitteR package before the platform closed free API access in 2023. This tool enabled the retroactive retrieval of large datasets (Rovira-Sancho & Morales-i-Gras, 2022) to be then analyzed with Python. The first sample included 785,408 tweets from politicians, while the second had 2,926,671 tweets from citizens, totaling nearly four million messages. For preprocessing, we used the spacy library, a natural language processing (NLP) tool that offers features like tokenization, lemmatization, and entity identification. After preprocessing and removing duplicates and retweets, DATACIU was reduced to 552,249 tweets for final analysis. In contrast, all DATADIP tweets were retained.

2.1. Sentiment analysis

Next, we employed 'pysentimiento' (Pérez et al., 2021), an open-source Python library designed for opinion mining and other NLP tasks in social contexts. It provides access to the latest generation models for emotion detection, hate speech identification and sentiment analysis. For the latter, we specifically used the robertuito-sentiment-analysis model. It is built on RoBERTuito (Pérez et al., 2022), a Spanish-language adaptation based on the RoBERTa architecture (Liu et al., 2019), which uses self-attention mechanisms to weigh the importance of different words within a text. These features allow for a nuanced understanding of bidirectional context, representing an improvement over earlier models like BERT (Devlin et al., 2018).

Analyzing political discourse on social media poses significant challenges for natural language processing (NLP) models due to semantic nuances and figurative language like irony or sarcasm, but RoBERTuito offers a solid methodological foundation for such tasks. Its key advantage is its training on diverse informal language and socio-political discussions typical of Twitter. This corpus includes posts often covering current events with political and social topics, which enhance the model's ability to interpret sentiment in similar contexts. The application of RoBERTuito-based models to complex tasks such as identifying sexism on social media, as demonstrated in the EXIST 2022 framework (Rodríguez-Sánchez et al., 2022), highlights their relevance for analyzing socio-politically charged feminist texts.

It is important to note that RoBERTuito was pre-trained from scratch on a massive corpus of tweets in Spanish, making it particularly well-suited to capture the nuances of social media language in this specific linguistic context (Pérez et al., 2022). Recent studies on digital platforms such as Iranzo-Cabrera et al. (2024) also selected RoBERTuito over other Spanish language models like MarIA or BETO to analyze hate speech directed at the Spanish Minister of Equality on Twitter precisely because its specific pre-training makes it ideal for understanding the slang and informality characteristic of this platform.

Moreover, the robertuito-sentiment-analysis model we employ is an adaptation of RoBERTuito that has been further fine-tuned specifically for sentiment classification by adding another layer on top of the pre-trained model. This fine-tuning process was carried out using the TASS 2020 corpus, which includes a variety of Spanish dialects (García-Vega et al., 2020). The resulting model classifies tweets into three sentiment categories: positive, negative, and neutral.

To assess the model's accuracy on our specific dataset, we carried out a manual validation on a random, balanced sample of 201 tweets from the citizen corpus (DATACIU). This subsample was manually labeled by two researchers, achieving a robust inter-rater agreement score with a Cohen's Kappa of 0.90. These manual labels were then compared to the predictions made by the robertuito-sentiment-analysis model's for the same sample (see Table 1).

Table 1. Manual validation results of the sentiment analysis model

	Precision	Recall	F1-Score	Support
NEG	0.82	0.77	0.80	71
NEU	0.70	0.62	0.66	76
POS	0.70	0.87	0.78	54
Accuracy			0.74	201
Macro Avg	0.74	0.75	0.74	201
Weighted Avg	0.74	0.74	0.74	201

Source: Elaborated by the authors from the data reported above.

The model achieved an overall accuracy of 74%. A more detailed analysis reveals strong performance in identifying negative (F1-score of 0.80) and positive (0.78) sentiments, while the model struggled more with the neutral category, which obtained a lower F1-score of 0.66. This result is expected, reflecting a well-documented challenge in sentiment analysis. The inherent ambiguity and lack of strong emotional cues in neutral texts make them considerably harder for automated systems to classify, a principle established in foundational studies of the field (Koppel & Schler, 2006). Therefore, the model's weaker performance for this specific category is consistent not only with well-established research, but also with recent findings from similar platforms (Iranzo-Cabrera et al., 2024)

Once the validation was completed, the final DATACIU sample was searched for different forms of the Spanish words for "law", "legislation", "norm", "measure" and "regulation" combined with variations of "gender", "feminism", "woman" and "sexism" (*machismo*), to identify tweets discussing gender or women in a legislative context. Furthermore, only tweets with a prediction probability of 70% were selected to filter the model's results (Kiritchenko et al., 2014; Ruz et al., 2020) and ensure greater reliability in the sentiment analysis results. Finally, we isolated the days leading up to the two elections held during the timeframe studied to test the prominence of the legislative topic in the DATADIP sample, focusing on the intervals from April 12th to 26th, 2019, and from November 1st to 8th, 2019.

3. Results

3.1. Twitter is not used for legislative action

The main objective of this research was to find out whether citizens call for gender-related legislative measures from institutions and whether political representatives advocate for them. A review of previous studies shows that neither group had identified this as a motivation for using social media, leading us to believe that both citizens and MPs were unlikely to discuss gender-related legislation on Twitter (H1). The analysis confirmed that only 0.36% of the population's tweets were about gender-related laws or mea-

sures, which suggests that Twitter is not a common platform for citizens to call for such changes in legislation.

When examining the role of political representatives under these hashtags, we found that none of them used this tool in their gender-related tweets, so we cross-checked the hypothesis against the sample of their Twitter profiles. Results showed that only 0.29% of the DATADIP sample addressed gender-related measures, thus confirming that Spanish MPs did not use Twitter as a channel to announce such legislative proposals. However, to better contextualize this use of social media, we tested whether MPs discussed laws on their accounts regardless of the topic. We found that 5.52% of the tweets analyzed dealt with legislative issues in general (see example in Figure 1).

Figure 1. Examples of tweets about legislation, gender-related from MP Inés Arrimadas[2], and unrelated from MP Ángel López Maraver[3]

@InesArrimadas

It is shameful that PSOE and Podemos maintain their fight in the offices while in the street women are still unprotected by the blunder of this law. What more do they need to happen to correct it? How many rapists have to benefit? 1,000? 2,000?

8:07 p. m. 14 Feb. 2023

@A_LopezMaraver

The @RFECaza and @fedecazacyl are already working to urgently reverse the situation generated by this decision. This measure undermines the rural economy and implies an ecological disaster of unimaginable proportions. We will continue hunting in Castilla y León.

4:52 p. m. 27 Feb. 2019

Source: Twitter.

It is also interesting to identify the MPs who have mentioned gender-related legislation most frequently on their Twitter accounts. Graph 1 shows that, among the fifteen representatives who posted the most about gender-related laws, six belonged to PSOE[4], four to Podemos, three to PP, and two to VOX. Even though female socialist MPs appear most often in the graph, there is a wide ideological range overall. Additionally, there were thirteen female deputies compared to only two male (Jaime de Olano, PP; and Francisco José Contreras, from VOX).

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2. <https://x.com/InesArrimadas/status/1625572396571807745>.
3. <https://x.com/A_LopezMaraver/status/1100785773715079168>.
4. Although defining the ideology of parties is much more complex, if we follow the traditional left-right political spectrum, national Spanish parties are classified in this order: Podemos, PSOE, Ciudadanos, PP and VOX. For an analysis of their positions on gender, see Cabeza Pérez et al. (2023).

In this way, the first third of Graph 1 shows a predominance of female socialist MPs compared to other groups. These are Lídia Guinart, Laura Berja and Susana Ros, who, together with Rosa Romero Sánchez (PP) and Carla Toscano de Balbín (VOX), were the five MPs who talked about gender-related laws most frequently on their Twitter profiles (see example in Figure 2). All of them have been members of the Equality Commission, and have been involved in various legislative proposals related to gender-based violence and its State Pact, victim protection and other initiatives.

Graph 1. Mentions of gender legislation by representatives
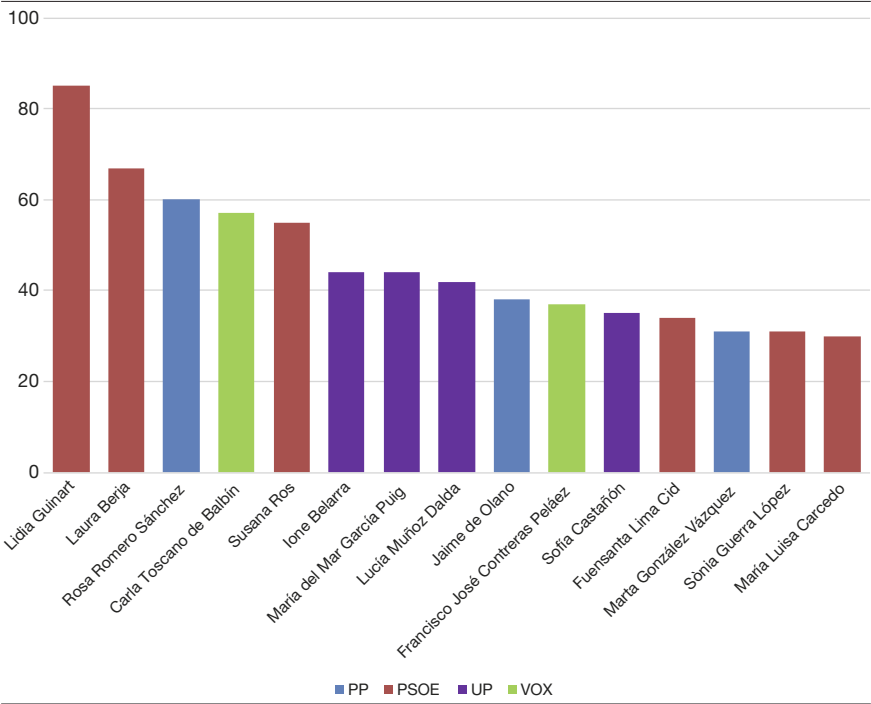
Source: Elaborated by the authors from the data reported above.

Figure 2. Examples of tweets about gender-related legislation from MP Lídia Guinart[5] and MP Carla Toscano[6]

@lidiaguinart

✓ Government ends historic discrimination against domestic workers.

✓ The @boegob publishes today the Organic Law of Sexual Freedom (Only yes is yes).

Guaranteeing women's rights.

#TheGovernmentOfThePeople)

9:40 a. m. 7 Sept. 2022

@eledhmel

Irene and Ione are back to lying again and to avoiding the issue, accusing the judges of being sexist for applying their rubbish law.

Neither the judiciary nor the Spanish people deserve these clowns.

8:15 p. m. 1 Feb. 2023

Source: Twitter.

3.2. Negative messages prevail over positive ones, but there is a tendency towards more constructive language around the feminist movement

The second key aspect of this study was to examine the discourse surrounding feminism within these hashtags. Previous research suggested that they are often used by the feminist movement to raise awareness, which led us to expect a higher volume of positive messages from citizens in this space (H2).

Sentiment analysis[7] showed that in 2018, negative tweets outnumbered positive ones, but this gap has narrowed over the years (see Graph 2). This does not mean that negative messages decreased in absolute numbers, but rather that their percentage of the total went down, approaching the share of positive tweets in 2022 (see examples in Figure 3 and Figure 4). In other words, both types of sentiment increased, but positive ones grew at a greater rate, so the analysis resulted in a trend towards balance.[8]

5. <https://x.com/lidiaguinart/status/1567417633011650562>.
6. <https://x.com/eledhmel/status/1620863356612784128>.
7. The years 2017 and 2023 are excluded from this analysis due to the small number of tweets in the sample after preprocessing.
8. Neutral tweets are not shown in Graph 2 because the bias inherent in the model used to predict the sentimentality tends to assign a higher confidence score to these tweets. Many of the messages in the sample are informative and lack clear emotional content, while some of them may express both sentiments, leading the model to classify them as neutral. To avoid misleading results, only tweets with a clear positive or negative sentiment are presented.

Graph 2. Percentage of positive and negative tweets over the years
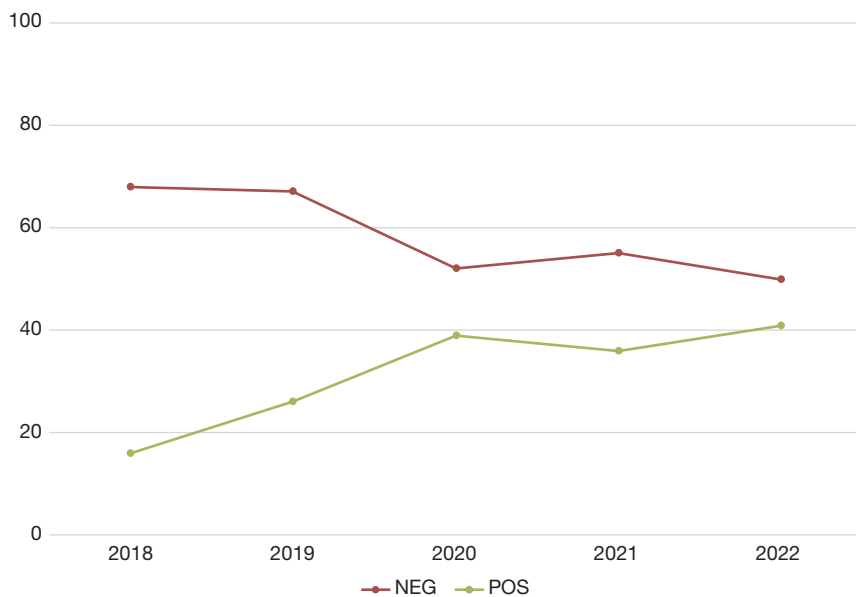
Source: Elaborated by the authors from the data reported above.

Figure 3. Examples of tweets[9] of the hashtags studied

@FernandodPablo

It's true Angel. More babies die in their mothers' wombs in Spain than civilians in #Ukraine. Last #8March2022 more babies were aborted than women died for any other reason... and yet we spend billions on an ideology that is part of the problem.

11:45 p. m. 13 Mar. 2022

@PVilciu

On Friday in a meeting with team leaders from different parts of the world the CTO said about paternal leave: In Spain we have had the CRAZY idea of equalising paternal and maternal leave, I had 15 days and that was enough. Machismo overflows, what would people in other countries think? #8M2021

12:46 a. m. 14 Mar. 2021

@lito_gdls

The #feminazis in Spain of #8M2021 say they can't go to demonstrate there because of the perimeter closure and that....

!! THIS IS A REASON TO FIGHT FOR THE REAL FEMINIST MOVEMENT !!!!

https://elpais.com/sociedad/2021-03-20/erdogan-retira-a-turquia-del-convenio-europeo-contra-la-violencia-machista.html?ssm=TW_CC

11:01 p. m. 20 Mar. 2021

@mundodesofia54

This caveman right banned the #8M2021 protests and now fills Madrid with outmoded hooligans endangering the health of the people of Madrid, of Spain and also of France.

@IdiazAyuso is to health what Hitler is to democracy

5:27 p. m. 27 Mar. 2021

Source: Twitter.

3.3. Right-wing parliamentary groups enjoy greater positivity than left-wing ones

Within the sentiment analysis on the entire DATACIU sample, we examined the tone that citizens used to refer to the politicians mentioned under these hashtags, as this could affect both the legislative measures they demand from them and how the representatives perceive these messages. We expected a

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9. <https://x.com/FernandodPablo/status/1503140335735738369>; <https://x.com/PVilciu/status/1370884086378729475>; <https://x.com/lito_gdls/status/1373394190890102786>; <https://x.com/mundodesofia54/status/1375847046268194830>.

more positive attitude towards left-wing politicians (H3) because, for decades, progressive parties have shown a stronger commitment to feminist issues.

Table 2. Sample size[10] of positive and negative tweets by year

Year	Positive Mentions	Negative Mentions	Total Sample by Year
2018	29	432	55,016
2019	47	492	26,400
2020	829	3244	181,813
2021	510	649	214,781
2022	508	661	109,240

Source: Elaborated by the authors from the data reported above.

In 2018, very few mentions were observed, and positive messages were nearly nonexistent (see Table 2). Even so, the group with the most negative messages was PP, followed by Ciudadanos, Podemos and PSOE (see Graph 3). That year, VOX had almost no negative tweets, perhaps because they were not yet represented in the Congress of Deputies or the Senate and less known nationally. In 2019, political group mentions declined even further. Those negative to PP dropped by nearly half, as did those of Ciudadanos. Negative mentions of PSOE remained almost unchanged. However, tweets concerning Podemos and VOX increased compared to the previous year.

The most notable increase in sentimentality occurred in 2020 (see Table 2), in both negative and positive tweets, which had been almost non-existent in previous years. Among the latter, PP received the highest share of positive sentiment that year, while VOX had the least (see Graph 4). In terms of negative messages, Podemos's and Ciudadanos's data remained relatively stable while PSOE doubled its 2019 figure. In contrast, PP and VOX experienced a drop in negative tweets (see Graph 3).

On the other hand, in 2021, the number of negative tweets remained mostly unchanged for Ciudadanos and VOX. However, negative mentions of PP more than doubled, while those of the PSOE fell back to levels similar to 2019. Particularly striking was the near absence of negative mentions of Podemos, which may be due to the change in the party's leadership. Otherwise, PP retained its position as the group with the most positive mentions after having doubled its figures from 2020, while VOX continued to rank lowest, alongside PSOE (see Graph 4).

Finally, in 2022, negative mentions were evenly distributed across all political parties (see Graph 3). This time, Podemos received the highest number of such tweets, although the rest of the groups obtained similar results. Regarding positive sentiment messages, PP's figures declined, although it

10. As shown in Table 2, sample sizes vary considerably across years, so percentages instead of raw values are presented in Graph 3 and Graph 4 to provide a more comparable representation. Because of this disparity, year-to-year trends are to be interpreted with caution.

Graph 3. Total negative tweets by political grouping
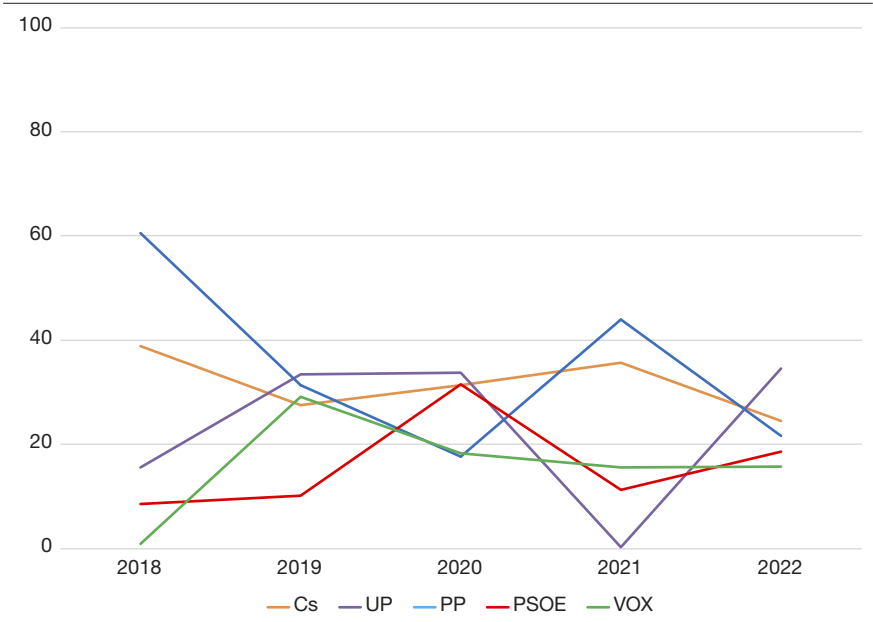
Source: Elaborated by the authors from the data reported above.

Graph 4. Total number of positive tweets by political grouping
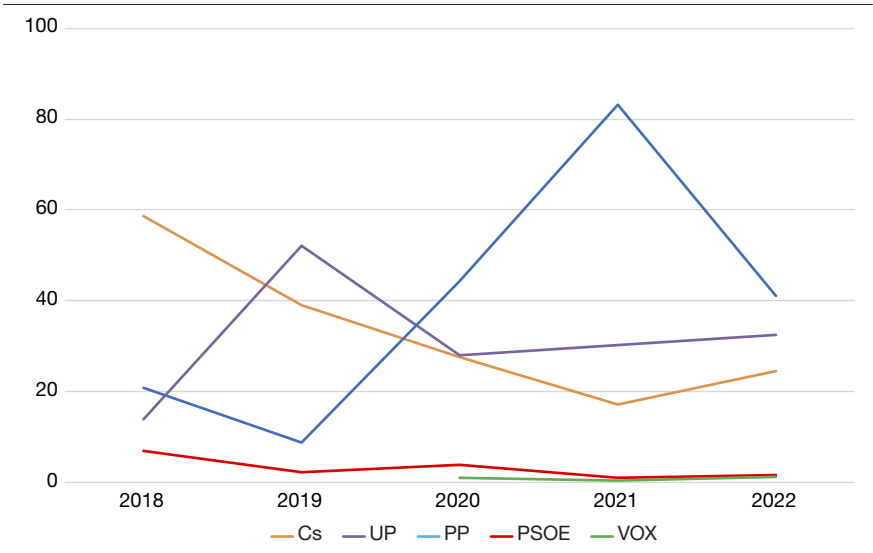
Source: Elaborated by the authors from the data reported above.

remained the party with the most favorable mentions, followed by Podemos and Ciudadanos. PSOE and VOX, consistent with previous years, continue to receive very few positive tweets (see Graph 4).

Figure 4. Examples of tweets[11] with the hashtags studied

@Capitan20Trueno

#8March2022 is the day in defence of EQUALITY (@IgualdadGob) Now they only need to give @ionebelarra a wheelchair and get paid the same as @PabloEchenique.

If in @PODEMOS ARE NOT ABLE to see this, they have a problem.

11:17 a. m. 19 Mar. 2022

@freelanceandalu

the @populares join @vox_es to attack all women in our country on #8March2022 in order to take away their rights.

10:01 a. m. 9 Mar. 2022

@JLuGC1

It's not about women's rights #8March2022 #8M #InternationalWomensDay it's only about lefties.
@desdelamoncloa @PSOE @podemos #DisGovernmentOfSpain #tiempoderojos hunger and lice

12:25 p. m. 9 Mar. 2022

@pspvprocs

8M demonstration in #Castelló
@SocialistesVal @PSOE #8March2022 #8M2022 #Feminism #socialismisfeminism

12:01 a. m. 9 Mar. 2022

Source: Twitter.

3.4. Political representatives reduce their legislative messages during the campaign, but the gender issue remains

Lastly, we expected MPs to increase the number of tweets about gender-related legislation during the campaign period (H4), as previous research had shown for other issues. The analysis confirmed that Spanish representatives discussed gender measures in 0.23% of their tweets during the campaign,

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11. <https://x.com/Capitan20Trueno/status/1505126346216939521>; <https://x.com/freelanceandalu/status/1501483335943606279>; <https://x.com/JLuGC1/status/1501519588151996420>; <https://x.com/pspvprocs/status/1501332427725160449>.

while they did so in 0.29% of them outside of this period[12]. However, when looking at messages that dealt with legislation in general (see example in Figure 5), 2.93% of tweets posted during the campaign period did address such topics, versus 5.52% in non-election times. Therefore, the findings prove that tweets about legislation decrease in the run-up to the elections. However, messages referring to gender-related regulations specifically remain stable in proportion, so they have a relatively higher representation over the total.

Figure 5. Examples of tweets on legislation, gender-related by MP Susana Ros[13] and unrelated by MP Oskar Matute[14], both during an election campaign

@susana_ros

The State Pact against Gender Violence was born as a result of a PSOE Proposition of Law. In 2011-2015 we proposed it and the PP laughed. If they have done it now, it is because it had lost its absolute majority and has had no choice. #PedroWinsAgain #TheDecisiveDebate

11:51 p. m. 23 Apr. 2019

@OskarMatute

Hi there! Seeing the rigour of the PSOE, we will still get out of NATO before we get out of the yoke of the LOMCE. And if you let us make a Basque education law?

11:38 p. m. 23 Apr. 2019

Source: Twitter.

4. Discussion and conclusions

This study not only provides an exploratory look at citizens' demands for gender-related public policy on Twitter, but also examines the active communication of MPs about these legislative measures. By analyzing tweets posted between 2017 and 2023, we now have a better understanding of how feminist legislative demands are voiced in this digital space and the role institutions play in shaping that conversation.

The first hypothesis proposed that neither citizens demand legislative measures from public institutions within the 8M hashtags, nor do political representatives use them to announce gender-related laws. Previous studies suggested that citizens tend to focus on other forms of activism, such as organizing actions and calling for mobilization (Calvo et al., 2020; Syed & Silva, 2023), so they were not expected to make legislative demands. This hypothesis has been confirmed, as only 0.36% of the messages posted by citizens were

12. Only descriptive data are included as we are not able to test whether the differences are significant, given that the timeframe is too irregular and cannot be standardized.
13. <https://x.com/susana_ros/status/1120807495017082881>.
14. <https://x.com/OskarMatute/status/1120804165540818950>.

related to gender measures. Likewise, MPs mentioned these policies in only 0.29% of their tweets.

Although citizens now have more opportunities to raise issues of public interest with digital platforms (Acosta & Lassi, 2020; Gagrčin, 2024), politicians primarily use Twitter to broadcast their one-way messages (Liberia-Vayá et al., 2024). This is because this social network effectively attracts media attention (Spierings et al., 2019; Keller, 2020), helping to reinforce their agenda (Guerrero-Solé, 2018). Therefore, MPs tend to address gender issues for media visibility (Iranzo-Cabrera et al., 2023), which may discourage citizens from proposing legislative demands, as they understand that they will most likely not be considered. We conclude that Twitter is not a channel used to call for legislative changes, as it remains an elite-driven space that does not foster true deliberation (Ferro-Santos et al., 2024).

However, not all parties deal with gender to the same extent. Left-wing groups mentioned this type of legislation more frequently than right-wing ones (ten MPs compared to five, shown in Graph 1). Still, it is important to notice the ideological diversity within the sample, since some are approached similarly across political lines (Cabeza Pérez et al., 2023). This study identifies left-wing parties as generally more receptive to women's interests, but citizens may also seek support from right-wing parties when it has MPs advocating for those policies (Evans, 2016).

Furthermore, the predominance of women discussing gender issues is clear. There were thirteen female deputies compared to only two male, as shown in Graph 1, which suggests that women politicians are more active in defending women's interests (Kroeber, 2023). This may not necessarily reflect a lack of interest from men, but rather the fact that citizens treating politicians differently based on gender, often placing greater value on women's engagement with these concerns more than on men's (Schöll et al., 2023).

The second hypothesis suggested that the public shares more positive messages under the 8M hashtags because this tool is part of the feminist movement's repertoire of action (Rovira-Sancho & Morales-i-Gras, 2022) to raise awareness (Idoiaga Mondragón et al., 2022). However, sentiment analysis revealed that negative tweets have outnumbered positive ones every year under study, even though the gap has gradually narrowed since 2018.

It seems that although these hashtags can help draw attention to women's issues, the early stages of the movement showed very little positive sentiment, likely due to the sadness and anger that often dominate many feminist campaigns (Nau et al., 2023) which focus on violence and discrimination. In addition, one could think that the rise of anti-feminism (Bernárdez-Rodal et al., 2020) in recent years, seen as a backlash against the movement (Tarrow, 2022), may have contributed to the hijacking of these hashtags (Bradshaw, 2022) to dilute the impact of feminist protest.

Nevertheless, it has become clear that harsh sentiments such as hatred do not foster positive dialogue (Iranzo-Cabrera et al., 2024), which may have led feminist citizenry to use other strategies. Constantly using negative discourse

is counterproductive, both discouraging the population from proposing ideas, and making politicians less likely to listen to such destructive messages. The convergence of positive and negative tweets in the last year analyzed indicates that positive messages are growing faster, pointing to a shift towards a favorable environment for discussing legislative proposals that can bring both sides closer together.

The third hypothesis proposed that tweets about left-wing representatives would be more positive than those about right-wing ones, given that progressive parties have historically been more aligned with feminist demands (Evans, 2016; Santana & Aguilar, 2019; Bernárdez-Rodal et al., 2020). However, the study found that conservative politicians actually received more positive sentiment. This outcome could be linked to the fact that the progressive parties were in government in Spain for most of the period studied, which comes with a political cost (Hjermitslev, 2020). Additionally, the coalition nature of the government means there are different stances towards feminism and gender policies based on political affiliation, which leads to disagreements that can fuel criticism.

Looking at Graph 3, there is a clear increase in PSOE's negative tweets in 2020, the year the new coalition government (PSOE-Podemos) was formed. This change in the Executive may also explain the drop in negative tweets from the two main opposition parties (PP and VOX), as well as the small rise in positive messages from PSOE. Furthermore, 2020 was marked by the COVID-19 crisis, which could have influenced the sentimentality of politics in general and, especially, the controversy surrounding the 8M demonstrations (Juárez Rodríguez et al., 2021). This uproar would have affected the government and might explain the decline in positive tweets about Podemos, since it held the Ministry of Equality at that time.

In 2021, PSOE continued to be at the bottom in terms of positive tweets. If we consider these data along with their decrease in negative tweets, it suggests that the socialists had stabilized their government after a year in office, leading to less public attention. Similarly, PP remained the main opposition party, which explains why it generated the highest levels of positive and negative sentiments compared to other parties. Ciudadanos also experienced a drop in positive mentions, although Podemos managed to maintain their positivity, possibly due to the change in the party's leadership.

That year, Pablo Iglesias stepped down from his positions in the government and in Podemos to run in the regional elections of the Community of Madrid, leaving Ione Belarra as the new national leader. Pablo Iglesias was known for generating strong reactions across the political spectrum, so his departure may have reduced the number of mentions of Podemos on social media and softened the blow they might have suffered with their government partner (Hjermitslev, 2020). In 2022, PSOE continued to receive almost no positive tweets, so it seems that they were more affected by the political cost. Podemos were particularly hit that year, facing an increase in negative tweets criticizing its management of the Ministry of Equality (Iranzo-Cabrera et al., 2024).

Finally, the fourth hypothesis explored whether political representatives might increase their messages about gender legislation during election campaigns. Guerrero-Solé (2018) and Liberia-Vayá et al. (2024) found that politicians use social networks to communicate ideological positioning, but López-Meri & Casero-Ripollés (2017) argued that they typically highlight legislative proposals only as elections approached. In contrast, this study has shown that Spanish MPs do not tweet more frequently about laws during campaigns over, although the proportion of tweets focused on gender-related public policies remains stable, making them a more prominent share of the total. This suggests that parliamentary groups pay greater attention to gender issues during those days, in line with their electoral programs (Cabeza Pérez et al., 2023).

This research has clarified that MPs do not use Twitter to discuss gender-related legislation, nor do citizens demand such measures. While social media allow the population greater opportunities to engage with the political agenda (Barberá et al., 2019), our study confirms that Twitter is not only an inadequate space for interaction between representatives and the public (Liberia-Vayá et al., 2024), but also shows that neither group independently engages with gender-related legislation topics there. Thus, Twitter may not serve as a platform for this type of political participation. Future research will need to determine whether other spaces are being used for this purpose.

Nevertheless, this study faces a limitation rooted in the reality it uncovers: Twitter is not a platform for discussing gender-related legislative issues. Although political opportunity theory indicates that support from political elites is crucial to the success of social movements (Meyer & Minkoff, 2004), we have not been able to prove that including these measures in representatives' online agenda contributes to transforming the social landscape. Gender has been addressed so sporadically that its potential to support citizens' demands is considerably constrained.

In this regard, we acknowledge that RoBERTuito's sentiment analysis may not fully capture the subtleties of highly specialized feminist discourse, particularly if such content is underrepresented in its training data. The challenges in categorizing sexism in detail, as observed in tasks such as EXIST 2022 (Rodríguez-Sánchez et al., 2022), suggest that caution is required when interpreting nuanced sentiments within complex discourse. Despite these limitations, RoBERTuito's specialization in Twitter language and its fine-tuning make it a valuable resource for research. Looking ahead, the next step would be to identify which media channels could enable both citizens and political power to engage in dialogue and reach agreements on gender-related public policies.

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