"Not all motherfuckers are MENA, but most MENA are motherfuckers": Hate speech

on Twitter against unaccompanied foreign minors

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Abstract

The number of unaccompanied foreign minors (Menor Extranjero No Acompañado, MENA)

in Spain has risen, which has led to them being the subject of discriminatory language and

negative stereotyping on Twitter. This study analyses the characteristics of hate speech

against MENA on the social platform Twitter and seeks to identify its triggers. A quantitative

analysis using text mining and text analytics was performed on 10,776 tweets mentioning

MENA published from January 2018 to March 2021. The study concluded that hate speech

was built around the terms criminal, rape and steal, and was characterized by use of language

that stripped these minors of the features usually attributed to children, a process which can

be described as *adultification*. Similarly, the analysis revealed that the main trigger of hate

speech was the way in which the media reported violent crimes attributed to MENA,

displaying what was perceived as positive bias towards their integration.

Keywords: Social network analysis; prejudices; hate speech; immigrants; adolescents

1. Introduction

1.1 Unaccompanied Foreign Minors in the current migration context

In Spain, the rights of unaccompanied foreign minors, also known as MENA, an acronym for menor extranjero no acompañado, are protected by numerous international treaties and regulations, the most representative being the Convention on the Rights of the Child (UNICEF 1989), and by Spanish domestic policies (Francia et al. 2021). The MENA social and demographic phenomenon has increased over the last 20 years and, therefore, the presence of these minors has grown considerably (Bravo and Santos-González 2017). Currently, there are nearly 12,300 unaccompanied minors in Spain, almost 80% of them are from Morocco or Algeria. This situation, which has presented the Spanish State with several challenges when guaranteeing adequate resources to meet their needs and fundamental rights (Gómez-Quintero et al. 2021). However, the Spanish authorities have not always been able to provide an efficient response to the difficult situation in which these minors find themselves, being unable to offer them the attention and protection they need. This situation led to a political and social debate that has put MENA in the spotlight, where they tend to be portrayed with the use of criminalizing language or from a nationalist and adult-centered perspective (Gómez-Quintero et al. 2021). Various migratory crises have coincided with the dissemination of anti-MENA hate speech on social networks (Gómez-García et al. 2021). According to the Ministry of the Interior of the Government of Spain, social networks are one of the main propagators of this kind of speech (Ministerio del Interior 2022).

1.2 Twitter and hate speech

Twitter is one of the most used social media in the world given the number of active users: 436 million a day in January 2022 (Tankovska 2022a). With a total of 8.75 million users on the same date, Spain is eleventh on the list of countries with the most active users (Tankovska 2022b). Most users tweet occasionally, while the bulk of the network activity comes from 10% of users. Twitter is a forum where celebrities, politicians and the general public debate, argue or express opinions live (Wojcik and Hughes 2019).

As a propagator of trends of opinion and a generator of debate, Twitter is also one of the main spaces for the dissemination of hate speech, defined as the public incitement to violence or hatred based on certain characteristics, such as race, color, national or ethnic origin, religion, as well as sexual orientation, gender identity, or disability (Council of Europe 2016). Moreover, Twitter's design allows posters to remain anonymous, hide behind freedom of speech (Brown 2018; Kuna 2020), and take advantage of the affordances of digital media's capacity for dissemination across borders and generations (Pérez-Curiel 2020; Zhu et al. 2020). Hate speech and hate crime have risen sharply across Europe and become a particularly serious and worrying phenomenon, both online and offline (European Commission 2021).

Paasch-Colberg et al. (2021, 173) characterize hate speech based on three elements:

- 1) the attribution of negative characteristics or behavior to an entire group of people (negative stereotyping).
- 2) the comparison of the group under attack to animals or things (dehumanization).
- 3) incitement to violence, including murder, as a justified means to eliminate the alleged threat posed by this particular group (expression of violence, aggression or murder).

Further, Castaño Pulgarín et al. (2021, 1) identify the use of aggressive, defamatory and obscene words, the display of irony, sarcasm and the conveying of denigrating comments,

among others, as some of the most frequent hate speech strategies. In a recent study, Wilhem et at. (2021, 923) categorized hate comments as those that were flagged by social media users as violating social interactions standards, which include defamation, call for violence, agitation, rumor, and conspiracy. When it concerns unaccompanied minors, such dehumanization is even more dangerous as its targets are children and adolescents separated from their families and removed from their familiar environment. The generalized use of *MENA* in the public sphere, to refer to them as a group, may contribute to this dehumanizing process, as it strips them of any associations with abandonment or childhood (Gómez-Quintero et al. 2021; Montagut and Moragas-Fernández 2020).

Previous research on hate speech on social media has focused on the different groups being targeted (Chetty and Alathur 2018). Some studies deal with misogynous discourses (Frenda et al. 2019; Esposito and Zollo 2021), or focus on lesbian, gay, transsexual, bisexual, intersexual, or queer groups (Cowan et al. 2005; Pickles 2020). Hate speech also targets religious beliefs, mostly being islamophobic (Vidgen and Yasseri 2020) or antisemitic (Allington 2018; Ozalp et al. 2020). Relatedly, Francisco and Felmlee (2021) and Hswen et al. (2020, 2021) studied hate speech from the perspective of ethnic origin, such as Mexicans, Hispanics, or Chinese people. In addition, hate speech has been analyzed when aimed at people with disabilities (Alhaboby et al. 2016; Burch 2018). Importantly, migrants are one of the most frequently targeted groups in hate comments (Gardiner et al. 2016) and they have been the focus of numerous studies which analyze hate speech (Chovanec 2021; Kyslova et al. 2020; Paasch-Colberg et al. 2021; Sánchez-Junquera et al. 2021; Tsakona et al. 2020). Shielded by freedom of speech, a socially accepted xenophobic and racist discourse has taken root (Kreis 2017; Nortio et al. 2021) on social media, where migrants are dehumanized through the use of criminalizing and offensive language (Calderón et al. 2020a; Paasch-Colberg et al. 2021). Consequently, hate speech on social networks has been used as a

predictor of the rise of xenophobic and racist crimes (Marchellim and Ruldeviyani 2021; Williams et al. 2020).

In Spain, Arcila-Calderón et al. (2020a, 2020b, 2021, 2022) analyzed the topics and the position of users from the messages they posted on Twitter during the migration crisis linked to the Aquarius rescue vessel. These studies showed attitudes of rejection with regard to migrants expressed through the use of offensive and humiliating language. Additionally, Frías Vázquez and Seoane Pérez (2019) and Arcila-Calderón et al. (2020a) studied the influence of the social media context on the rise of hate speech against immigrants, finding a positive correlation between the broadcasts of news related to immigration and an increase in messages on social networks against immigrants. Despite the increasing number of studies examining how social networks portray immigrants in Spain, to date, unaccompanied minors remain under-researched and appear only as a tangential issue in studies related to social media (Jaramillo-Dent et al. 2022). Interestingly, those studies that do address the phenomenon of *MENA* focus on their representation in traditional Spanish media (Gómez-Ouintero et al. 2021).

1.3 The current study

This study aims to analyze the characteristics of anti-MENA hate speech on Twitter in Spain and to identify what triggers it. Active Twitter users who write about MENA are largely in favor of repatriating them to their countries of origin and opposed to integrating them in Spain. The research questions guiding the present analysis are the following:

¹ The so-called Aquarius crisis refers to the situation that arose in June 2018 when the ship Aquarius was denied entry to Italy and Malta. The ship, belonging to the NGO SOS Méditerranée, was managed by Doctors Without Borders and was carrying more than 600 migrants rescued from the sea. The crisis ended with the intervention of the Spanish government, which allowed the ship to dock in the port of Valencia.

RQ1. How is the MENA group represented on Twitter in Spain?

RQ2. What are the forms that anti-*MENA* hate speech takes in those tweets against the integration of unaccompanied minors?

RQ3. In those tweets against the integration of unaccompanied minors, what are the factors that trigger hate speech in these anti-MENA tweets?

2. Data and method

The study applies the tenets of Corpus Assisted Discourse Studies (Partington 2004). An exploratory, descriptive, and non-generalizable text analysis was carried out (Yu et al. 2011; Kuckartz and Rädiker 2019; Plaza-Del-Arco et al. 2020). Data is retrieved directly from social media platforms such as Twitter (Greenhalgh et al., 2021; Gleason, 2013). A mixed methodology based on public data mining and sentiment analysis is used, involving the use of digital trace data in order to more effectively collect, organise and analyse generalisable samples of data representing people in virtual environments (Kimmons and Veletsianos, 2018).

2.1 Data collection and selection criteria

Using the Twitter v2 API, we collected 10,776 tweets (totaling 383,659 words) excluding their retweets that contained the search terms *MENAS* and *menores* and posted from Spain, as well as the public metrics of retweets, replays, and likes. Data are just textual and do not include any other semiotic elements included in tweets. Requests were made monthly between January 2018 and March 2021. Punctuation marks and unnecessary characters were removed from the JavaScript Object Notation (JSON) encoding of the Twitter API.

2.2 Framework

Our approach combined data mining (Kimmons and Veletsianos 2018), corpus linguistics (McEnery and Hardie 2011), content analysis (Neuendorf 2017) and sentiment analysis (Liu 2012). Data mining enables "the use of qualitative data to generate detailed and rich descriptions of phenomena, as well as the use of quantitative data to draw generalizable conclusions" (Kimmons and Veletsianos 2018, 494). Furthermore, methodological synergy results when researchers combine content analysis with corpus linguistics and text mining (Bowker 2008). As established by Lutzky and Kehoe (2022, 225), "[c]orpus linguistics offers a methodological toolkit that can be applied to a wide range of research questions across the field of linguistics and beyond". This method is particularly useful because text mining shares some of the aims of certain qualitative methods, for example, content analysis and grounded theory (Yu et al. 2011). The text mining technique performed using the software Sketch Engine was considered adequate for this study due to its ability to process natural languages and its exploratory nature. Specifically, this software was used to identify grammatical relationships and collocation patterns (Baker et al. 2013) to determine any tendency for words to coexist through the "logDice" index (Gablasova et al. 2014), and to measure the relevance of keywords with the "keyness" parameter (Gabrielatos 2018; Firoozeh et al. 2020), using the Sketch Engine "Spanish Web 2018" reference corpus, which contains 16 billion words.

For the analysis of the content of tweets an application using the Python 3.0 programming language was used. It automatically assigned each of the analyzed tweets to one of nine categories as Boolean's variables (Table 1); categories were inductively established without

previous hypotheses; they were based on the most frequent words of the sample that resulted from the Sketch Engine analysis (Aurrekoetxea-Casaus 2020), namely, childhood and adolescence; politics and ideology; economy; public safety; education; localization; religion and ethnic group; national identity; human rights and solidarity. These categories are consistent with the findings of research by Lawlor and Tolley (2017) and Sánchez-Junqueras (2021). Next, we conducted a qualitative analysis of content.

The sentiment analysis of each tweet was performed using the API Natural Language by Google Cloud (Luo et al. 2019). The software identified the predominant emotional evaluation in each of the tweets (negative, neutral or positive) with numeric values between -1 and 1. The tweets were classified manually by the authors as tweets for the integration and permanence of *MENA*, tweets against it, and tweets offering neutral information (Arcila Calderón et al. 2020a; Erdogan-Ozturk and Isik-Guler 2020). For statistical descriptive and correlational data analysis, IBM SPSS Statistics v 26 software was used.

2.3 Procedure

To answer the first research question, from the inductively obtained categories through qualitative analysis, a descriptive statistical analysis of the sample in relation to the attitude towards the integration and permanence of *MENA* in Spain was carried out. Then, the LogDice index of the words appearing in the structure "MENA is a..." was calculated with Sketch Engine. Finally, an emotional sentiment analysis was performed using the Natural Language API.

To answer the second research question, a sub-corpus of 1,270 tweets was compiled with tweets that were classified as being against the integration of *MENA* in Spain and that obtained a negative result in the sentiment analysis of the Natural Language API (Sub-corpus

A). Using Sketch Engine, particularly the "keyness" parameter, those words related to hate speech against *MENA* were identified, as were, subsequently, the syntactic patterns from "logDice" index. Those metadata associated with the public metrics of the Twitter v2 API were included in the study.

To answer the third research question, an emotional, chronological analysis of the attitude towards *MENA* regarding the categories integration and citizen security was carried out. Similarly, Sketch Engine's "keyness" parameter was used to determine the triggers of hate speech in three specific periods. Spanish Web 2018 (16,951,839,897 words) was used as a reference corpus for calculating keyness parameters.

It is important to note that research based on data posted to Twitter is particularly challenging from an ethical perspective due to their partial free availability (Williams et al. 2017). Even if users' posts are made available to third parties, and by accepting Twitter's terms of use users legally consent to this (Twitter Inc., 2020), in the course of this research authors' anonymity was maintained, potentially sensitive personal information was excluded, and retrieved data are used for research purposes only. Also, following the ethical criteria established by Franze et al. (2020) we made sure that those tweets that are used as examples have not been deleted from the platform.

3. Results and analysis

3.1 *MENA* representation on Twitter Spain

The statistical descriptive analysis of the sample (Table 1) indicates that the representation of *MENA* on Twitter Spain is mainly associated with issues of public safety and the geographical locations where *MENA* are more present (categories 4 and 6). Even though

MENA are minors, there is little reference to education or human rights (categories 5 and 9) in their representation. In addition, opinions regarding whether MENA should stay in Spain are quite mixed; in those tweets advocating for their repatriation, there is an increase in references to public safety, whereas those in favor of their integration refer to solidarity and human rights. The Cramer V coefficient² shows an association of the attitude towards MENA with category 4 public safety (0.285), and a slightly smaller one with the categories of ethnic group or religion (0.168), national identity (0.121), and politics and ideology (0.112).

Regarding the attitude of Twitter users about the integration of *MENA*, a significant majority was in favor of the repatriation of these minors to their country of origin, whereas slightly more than one-third of users tweeted for *MENA* to remain in Spain.

Table 1. Analysis by topic and attitude towards the integration of MENA

	Tweets		Attitude towards the integration of MENA						
Category			Against		Neutral		For		
	Fi	%	Fi	%	Fi	%	Fi	%	
1	1.901	17.64	1.053	55.39	36	1.89	812	42.71	
2	3.169	29.41	1.673	52.79	113	3.57	1.383	43.64	
3	1.589	14.75	903	56.83	74	4.66	612	38.51	
4	4.418	41.00	3.241	73.36	70	1.58	1.107	25.06	
5	378	3.51	209	55.29	23	6.08	146	38.62	
6	4.340	40.27	2.667	61.45	292	6.73	1.381	31.82	
7	976	9.06	817	83.71	23	2.36	136	13.93	
8	885	8.21	678	76.61	9	1.02	198	22.37	
9	774	7.18	231	29.84	38	4.91	505	65.25	
Total	10.776	100.0	6.167	57.23	694	6.44	3.915	36.33	

Note. Categories: 1 childhood and adolescence, 2 politics and ideology, 3 economy, 4 public safety, 5 education, 6 localization, 7 religion and ethnic group, 8 national identity, 9 human rights and solidarity.

This positioning against the integration of *MENA* in the analyzed tweets and the connections with issues of public safety are consistent with the data obtained by the text mining analysis.

 $^{^2}$ The Cramer V coefficient indicates the relationship between two or more variables. A value of 0 indicates that there is no relationship, and a value of 0.3 and above is considered significant in the social sciences.

The structure *Mena es un*... ('Mena is a...') was searched in the data using Sketch Engine. The "logDice" index was calculated as a standard measurement on a scale of a maximum of 14 for the attributes of the structure *Mena es un*.... ('Mena is a...')0 in the sample. The analysis reveals objective descriptive terms such as *menor* 'minor' (12.84), *niño* 'child' (11.04), *extranjero* 'foreigner' (11.30) or *inmigrante* 'immigrant' (10.47).

Nonetheless, there were also negative terms such as *delincuente* 'offender' (11.53), *agresor* 'aggressor' (11.45), *detenido* 'arrested' (11.36) or *problema* 'problem'.

The analysis of the terms in the sample that appear as modifiers of the groups with the nucleus *MENA* offers similar results. Adjectives that seem to have a greater tendency to cooccur with *MENA* refer to the ethnic or geographic origin of *MENA*, such as *magrebi* 'Maghrebi' (11.860), *marroqui* 'Moroccan' (10.210), or *argelino* 'Algerian' (8.860) (Example 1). However, they also include insults and negative attributes such as *puto* 'fucking' (10.300), *violador* 'rapist' (9.780), *conflictivo* 'conflictive' (8.780) or *ilegal* 'illegal' (8.440) (Example 2). The value of "logDice" for the prefix *ex*- 'former' (10.860) is interesting where it relates to *MENA* as it is located in a morphological sphere and not in a syntactic one, which means that it is integrated into the noun, *exMENA*, and questions the nucleus of the acronym, which no longer refers to minors, but to adults who pretend to be minors or who are no longer minors (Example 3).

(1) Los MENA son los moros que entran en España y dicen que son menores de edad? Los que todos los días salen en los medios robando y violando? Joder, pues que alegría, no? 'Are MENA Moors who enter Spain and say they are underage? Those people who appear in the media every day stealing and raping? FFS, what a joy, eh?'

- (2) Ahora que es tendencia, aprovecho para decir que los MENA son un gran problema para nuestro país. Violan, roban, agreden... Que sean menores no quiere decir que no se les pueda expulsar. Hemos de devolverlos con sus padres a sus países.
 'Now that they're trending, I want to say that MENA are a big problem in our country.
 They rape, they steal, they attack... Being minors doesn't mean they can't be expelled.
 We should send them back to their parents in their own countries.'
- (3) Lo d los MENA y EXMENAS, robando, agrediendo y violando es insoportable. Alguien tiene q hacer algo"
 - 'All this with MENAS and EXMENAS, stealing, attacking, and raping is unbearable. Someone's gotta do something about it'

Regarding the emotional content of the entire sample, sentiment analysis determined that positive emotions are the most frequent in tweets for integration (39.4%). In tweets against integration, however, there isn't any dominant emotion no prevalence of emotional content. If text analytic results are examined by category, they show that 42% of tweets in category 4 (public safety) associated *MENA* have negative emotional content. If we consider that the 47.5% of these tweets were liked and the 39.3% of them were retweeted If the number of likes that was received by 47.5% of the tweets is considered, there would be a significant increase of the emotionally negative representation. In fact, while each tweet received an average of 15.81 "likes", those projecting an attitude against *MENA* received an average of 40.14 "likes" and those tweets against this group were retweeted 25.83 times on average, compared to the average 16.15 times the other sample tweets were retweeted.

3.2 Anti-*MENA* hate speech on Twitter in Spain

In order to analyze the characteristics of hate speech, those tweets against the integration of unaccompanied migrant minors and which presented a negative emotional content scoring between -0.2 and 0.7 were selected. This resulted in 1,270 tweets (11.78% of the sample). Considering their nature, They were analyzed using text mining techniques. First, keywords were identified using Sketch Engine and those representing hate speech against *MENA* with an elevated "logDice" value were selected. The resulting terms were *delincuente* 'offender' (10.71), *robar* 'to steal' (11.01), and *violar* 'to rape' (11.06). Consequently, the most representative structure concerning anti-*MENA* hate speech in the analyzed sample is "a MENA is a criminal who steals and rapes".

Syntactic patterns were analyzed for each of these terms in order to identify the characteristics of hate speech in the study. The noun *delincuente* 'offender' referring to minor migrants (Figure 1) appears preferentially modified by adjectives such as *drogadicto* 'drug addict' (10.47), *moro* 'Moorish' (9.53) or *extranjero* 'foreigner' (9.15), and acts as an object for verbs such as *ser* 'to be' (10.5), *emigrar* 'to emigrate' (9.71), or *expulsar* 'to expel' (9.71).



Figure 1. Syntactic patterns of the word *delincuente* 'offender' in anti-MENA hate speech.

Regarding the verb *robar* 'to steal' (Figure 2), results show a high tendency to appear with the subject *MENAS* (11.34) or *MENA* (11.01), and also with *inmigrantes* 'immigrants' (10.24), or *chusma* 'scum' (10.14). The objects allegedly stolen vary in nature, even if there is a strong link with *móvil* 'mobile' (13.41), to which should be added *teléfono* 'telephone' (9.95). Also very characteristic of the hate speech is the frequency of the term *robar* 'to steal' together with other terms such as *violar* 'to rape' (12.22), *agredir* 'to attack' (12.19), *acojonar* 'to scare the life out of someone'] (10.24), *intimidar*' 'to intimidate' (10.24), etc.

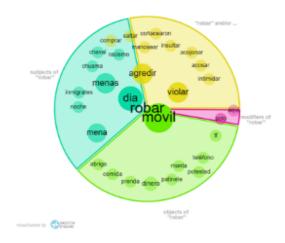


Figure 2. Syntactic patterns of the word *robar* 'to steal' in anti-MENA hate speech.

Finally, the verb *violar* 'to rape' only appears with *MENA* as a subject, and it is linked to other verbs expressing violence, such as *agredir* 'to attack' (12.04), *pegar* 'to hit' (11), *meter* 'to strike' (11) or *matar* 'to kill' (10.82). Another important aspect of the hate speech is that those syntactic patterns which use the verb *violar* 'to rape' are created using a very limited number of words from the sample, which leads to simple messages with a tendency to repeat the same content.

Some examples of tweets representing anti-MENA hate speech are:

- (4) No todos los hijos de la gran puta son menas, pero la mayor parte de los MENA si son unos hijos de la gran puta. Menor es un crío pequeñajo, estos dichosos menas ya tienen pelos en los huevos, no son tan pobrecitos menores.
 - 'Not all motherfuckers are MENA, but most MENA are motherfuckers. A minor is a small child, these fucking MENA have hairs on their balls and are not poor little kids.'
- (5) Han violado a una joven entre dos,mientras uno la violaba el otro lo ha grabado.¡Que animales!,no me digas más,¿Un policía?¿Militar? No,han sido dos MENAS.

 'Two of them have raped a young woman. While one was raping her, the other was filming it. Animals! Don't tell me a policeman? A soldier? No, it was two MENAS'.
- (6) Lo d los MENA y EXMENAS, robando, agrediendo y violando es insoportable. Alguien tiene q hacer algo.
 - 'All this with MENAS and EXMENAS stealing, attacking, and raping is unbearable. Someone's gotta do something about it.'

These examples clearly reflect the hate speech features described by Paasch-Colberg et al. (2021): the attribution of negative characteristics, roles or behaviors on the basis of the group membership (negative stereotypes, example 4), the comparison of humans with animals, inanimate things or inhuman beings (dehumanization, example 5), and the justification of or incitation to physical violence (expression of violence, aggression or murder, example 6).

Apart from syntactic patterns analyzed above, the vocabulary included in these structures has extremely pejorative and stigmatizing connotations when associated with childhood, particularly those terms referring to the semantic field of sexual assault and murder.

3.3 Triggers of anti-MENA hate speech on Twitter in Spain

To establish the triggers of anti-MENA hate speech, variations in the number of tweets against their integration in Spain were analyzed. That analysis included tweets from January 2018 to March 2021. Those tweets with negative emotional content are included in category 4, i.e., public safety (Figure 3).

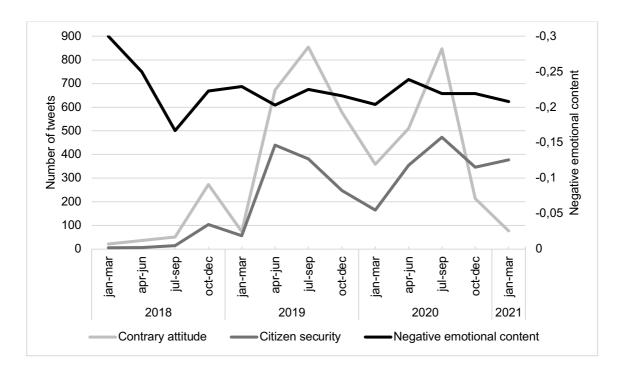


Figure 3. Anti-MENA hate speech on Twitter (January 2018- March 2021).

Results show three periods during which the three analyzed factors – namely, contrary attitude, citizen security and negative emotional content – experienced an increase: October to December 2018 and during the summer months of June to September 2019 and 2020. In order to identify the anti-*MENA* hate speech triggers on Twitter, 2,706 tweets posted in the selected periods and including the content that appears in Figure 3 (274 in 2018, 1,237 in 2019, and 1,195 in 2020, which represents 25.11% of the sample), were selected.

Text mining analysis shows that *MENA* appear as subjects of verbs associated with very serious crimes, for example, *violar* 'to rape', *robar* 'to steal', *estrangular* 'to strangle', *apedrear* 'to stone' (Figure 4). This trend can also be noticed in the analysis of the whole sample, but it is notably exacerbated in these texts. The result of the text mining analysis is consistent with an expected increase in category 4, public safety, which increases from 41% for the complete sample to 61.5% in the designated periods. The trend is even more noticeable in category 8, national identity, which increases from 8.2 % of tweets in the whole sample to 16.2 % of tweets in the periods analyzed in Figure 3. Results show that public safety and national identity are the categories linked to anti-*MENA* hate speech triggers.

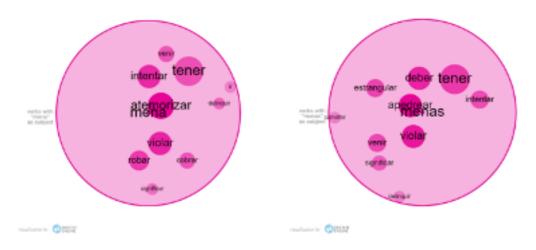


Figure 4. Verbs to which *MENA/S* acts as a subject in those periods in which hate speech increases.

Keywords of the 2,706 tweets selected from the entire sample were compared using the "keyness" parameter of Sketch Engine applied to a Spanish reference corpus of more than 17,553 million words. The results of the keyword analysis were unexpected as there were hardly any terms related to criminal activities with *MENA* as a subject. However, an increase of 92.20% was observed in the "keyness" value for keywords referring to some mainstream

media, such as television programs, and journalists seem to be mainly in favor of the acceptance of *MENA* in Spain (Table 2).

Table 2. Comparison of the "keyness" value as a trigger of anti-MENA hate speech

V	C1.41.	Designated periods	% Increase	
Keywords	Complete sample	sample		
El Diario	84,300	191,100	126.69%	
ABC	100,900	175,700	74.13%	
La Sexta	73,900	150,800	104.06%	
Antena 3	94,900	150,500	58.59%	
La Sexta noticias	30,200	76,100	151.99%	
Elisa Beni	34,400	76,100	121.22%	
La Razón	38,500	76,000	97.40%	
Newtral	57,200	75,900	32.69%	
Ana Pastor	44,800	75,900	69.42%	
Ok Diario	30,100	62,500	107.64%	
Espejo Público	40,600	59,400	46.31%	
El Intermedio	13,500	42,700	216.30%	
El Confidencial	36,600	40,600	10.93%	
Objetivo la Sexta	15,600	34,400	120.51%	
Diario de Sevilla	21,900	26,000	18.72%	
Sexta Noche	9,300	17,700	90.32%	

There are two fundamental differences between the tweets from Sub-corpus A in order to identify anti-*MENA* hate speech triggers (tweets occurring during the three specified time periods) and those comprising the whole sample. First, in the Sub-Corpus A that analyses anti-*MENA* hate speech, minors are exclusively linked to serious crimes.

Furthermore, authors of tweets such as those set out below perceive media companies as

taking a positive stance towards integration or acceptance of *MENA* and as presenting biased information by portraying *MENA* as children, by not mentioning that offenders are *MENA* or by protecting their privacy. Others criticize the silence from the part of feminist activists in the media when *MENA* are involved in attacks towards women, among other contentions. The following examples show the relationship between anti-*MENA* hate speech and its triggers. Example 7 makes explicit reference to certain television programs or individuals who have publicly defended the *MENA* and who are accused of covering up the issue. Examples 8 and 9 openly criticize media coverage of the MENA, both on television and in the written press.

- (7) @ObjetivoLaSexta @_anapastor_@laSextaTV @carmencalvo_¿Hablaréis de los

 DELINCUENTES INMIGRANTES? Seguro q NO Como estos 4 PAGA-PENSIONES. Nos

 gastamos 7.000 euros al mes para mantener a cada MENA. ¿Las asociaciones

 FEMINISTAS manifestándose? Protegiéndolos Las mujeres que vivimos en los barrios

 estamos SOLAS!.
 - '@ObjetivoLaSexta @_anapastor_@laSextaTV @carmencalvo_Will you ever talk about IMMIGRANT CRIMINALS? Surely not like these 4 pension-payers. Are FEMINIST associations demonstrating? Protecting them. We, the women who live in those neighborhoods, are alone.'3
- (8) Nunca han protestado yo nunca los ví por la tele además los moros que vienen aquí la mayoría son MENORES LLAMADOS MENAS esa chusma roba, viola, y dan palizas

³ "@ObjetivoLaSexta is a TV program in Spain directed and presented by the journalist Ana Pastor (@_anapastor), and broadcast by La Sexta (@laSextaTV). Both the channel and the program are considered progressive and have positioned themselves in favor of the Spanish Socialist Government during the MENA

crisis. Carmen Calvo (@carmencalvo) is a socialist politician who was Deputy Prime Minister at that time.

acaso no vistes la noticia de que unos marroquis le dieron patadas en su vientre a una chica embarazada EN ESPAÑA CLARO.

'They have never complained I've never seen them on the telly also the Moors who come here are mostly MINORS CALLED MENAS that scum steal, rape, and give beatings, didn't you see the news when some Moroccans kicked a pregnant girl in the stomach IN SPAIN OF COURSE'.

(9) Señalar y publicar imágenes de personas sin su permiso es delito. A ver si tenéis cojines de hacer los mismo, de publicar las fotos de los HIJOS DE PUTA MENAS QUE VIOLAN, AGREDEN Y ASESINAN A INOCENTES POR ROBAR EN ESPAÑA. Tenéis algún convenio con esos menores, sois unos Biden?

'To point to and publish images of people without their consent is a crime. Let us see if you have the balls to do the same, to publish the pictures of those MENA MOTHERFUCKERS WHO RAPE, ATTACK AND MURDER INNOCENTS IN ORDER TO STEAL IN SPAIN. Do you have an agreement with those minors, are you Bidens?'.

4. Discussion and conclusions

The combination of data mining, content analysis and sentiment analysis applied to the corpus of tweets obtained has allowed us to identify the characteristics of anti-*MENA* hate speech in Spain. After the identification of the most relevant grammatical relations and collocation patterns, the content analysis established nine categories. Finally, sentiment analysis identified a sub-corpus formed by tweets against the integration of *MENA* in Spain, which allowed us to identify the triggers of anti-*MENA* hate speech.

The answer to the first research question (RQ1. How is the unaccompanied minor group represented on Twitter in Spain?) is that unaccompanied minors in Spain are associated with the commission of crimes, ranging from the very fact of illegally entering the country to committing serious crimes of violence such as rape and murder. Paasch-Colberg et al. (2021) reached similar conclusions regarding the immigrant population and refugees in Germany. Conversely, references to human rights, education, protection, and other childhood-related rights are scarce in the analyzed sample. This study confirms previous research, which established the threat to personal safety as one of the main antecedents to unfavorable attitudes towards immigrants in Spain (Arcila-Calderón et al. 2020b; Arcila-Calderón et al. 2021; Sánchez-Junquera et al. 2021). Another recurring feature in the representation of unaccompanied minors is that their status as children is glossed over, especially in those tweets expressing unfavorable attitudes towards their stay and integration in Spain. This adultification clearly comes close to the incitement of hatred, which the social network itself seeks to eradicate (Twitter 2022). This is consistent with Moreno Márquez's (2012) study on the Basque Country, which confirms that MENA are more often seen as immigrants who must be sent back rather than minors who should be legally protected.

The conclusions reached regarding the second research question (RQ2. What are the forms that anti-MENA hate speech presents in those tweets against the integration of unaccompanied minors?) show that the language linked to anti-MENA hate speech was only present in more than 10% of those tweets against their stay in Spain, which makes hate speech a rare occurrence in the corpus. However, through "likes" and "retweets" that small percentage was shared more than the rest of the sample comparatively and, therefore, could be socially and politically overrepresented, as suggested by Wich et al. (2020). A limitation of the study should be highlighted, namely that hate speech in the tweets for the integration of

MENA was not analyzed, even if they occasionally contain very aggressive language against opposing ideologies.

Three terms summarizing anti-MENA hate speech on Twitter in Spain were identified: delincuente 'offender', violar 'to rape', and robar 'to steal'. The syntactic patterns associated with these words reveal stigmatizing and dehumanizing language that could be classed as adultificating, as it deprives minors of the characteristics associated with childhood and attributes adult-related characteristics to them. This result coincides with Gómez-Quintero et al. (2021) and confirms that unaccompanied minors receive much the same treatment in digital media as do adults.

Due to research ethics and restrictions imposed by the API, the authors of the tweets cannot be identified. Nevertheless, in future analysis the percentage of active users who used language similar to anti-*MENA* hate speech could be established in relation to the total number of participants in these threads.

Finally, anti-MENA hate speech triggers (RQ3. What factors trigger hate speech in these tweets?) have been identified in three periods of time under scrutiny during which there was a simultaneous increase in references to crime, requests to repatriate those minors to their countries of origin (which is contrary to Spanish and international law), and of negative emotional content. Our study identifies references to violent crimes committed by MENA in those news media that are positioned in favor of MENA's integration or that demand respect for those minors' rights as the main trigger of hate speech.

These data would be consistent with previous studies which suggest that a rise in hate speech against refugees correlated with an increase in information about migratory crises (Arcila-Calderón et al. 2020a) or political decisions that are very controversial in the eyes of the public (Frías and Seoane 2019). In addition to issues directly related to migrant minors in Spain, hate speech could also be triggered by the rejection of ideologies and policies

associated with certain media outlets, such as left-wing or feminist ideologies and policies in favor of the integration of these minors.

Thus, the present study lays the foundations for the analysis of those events related to minors in the designated periods identified as triggers of hate speech, and also to analyze the type of treatment and approach they were given by the media, TV programs, and the professionals set out in Table 2.

Our study has shown that hate speech against *MENA* in Spain is characterized by the use of a language that criminalizes these minors and deprives them of the attributes of childhood, in a process known as adultification. Similarly, the triggers of hate speech are closely related to the mainstream media, which are perceived as favorable to the integration of these minors into the Spanish society.

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