Gender biases in the social networks of regional public media: the case of @CSurNoticias' Twitter

Sesgos de género en las redes sociales de los medios públicos autonómicos: el caso del Twitter de @CSurNoticias

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How to cite this article / Standardized reference

Received: 22/03/2023
Accepted: 24/04/2023
Published: 04/07/2023

ABSTRACT
Introduction: Public media are essential to offer a service of general interest to the population to have equitable access to information, culture, democratic participation, and equal opportunities. However, they continue to transmit biases and gender stereotypes that can have a great social scope, also in its digital editions, where a large part of the imbalances present in traditional media have been transferred and adapted. Methodology: This paper analyzes the representation of gender on the Twitter profile of the regional channel Canal Sur Noticias. For this, a content analysis of a total of N=754 tweets published in September and October 2022 is carried out to find out if there is an underrepresentation of women in news coverage and if gender biases and stereotypes are perceived in the sections, spheres of action, authorship, external sources and in the audiovisual content. Results: The findings reveal that women are clearly underrepresented in this social network, not only as protagonists, but also as authors and external sources, and a relegation to the background, in sections and areas of lesser weight, in addition, biases persist, and stereotypes such as gender markings, traditional roles, or sexist language in text and images. Discussion and Conclusions: This paper show an imbalance in the representation of gender on Twitter as a public channel, which adapts the same biases present in its traditional format, hindering the social advancement of women in the digital space.
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**Keywords:** Women; Media; Gender stereotypes; Digital communication; Public media; Social media; Twitter; Canal Sur.

**RESUMEN**

**Introducción:** Los medios públicos son fundamentales para ofrecer un servicio de interés general a la población permitiendo acceder de forma equitativa a la información, cultura, participación democrática e igualdad de oportunidades. No obstante, estos siguen transmitiendo sesgos y estereotipos de género que pueden tener un gran alcance social, también en sus ediciones digitales, donde se han traspasado y adaptado gran parte de los desequilibrios presentes en los medios tradicionales. **Metodología:** Se analiza la representación de género en el perfil de Twitter de la cadena autonómica Canal Sur Noticias. Para ello, se realiza un análisis de contenido de un total de N=754 tweets publicados en septiembre y octubre de 2022, con el objetivo de conocer si existe una infrarrepresentación femenina en la cobertura informativa y si se perciben sesgos de género en sus secciones, ámbitos de actuación, autoría, fuentes externas y en su contenido audiovisual. **Resultados:** Los hallazgos revelan una clara infrarrepresentación femenina en esta red social, no solo como protagonistas de las informaciones, sino también como autoras y fuentes externas, estando relegadas a un segundo plano y a secciones y áreas de menor peso, además perviven sesgos y estereotipos como las marcas de género, los roles tradicionales o lenguaje sexista en el contenido audiovisual. **Discusión y Conclusiones:** Este trabajo evidencia un desequilibrio en la representación de género en el Twitter de la cadena pública autonómica Canal Sur, que adapta los mismos sesgos presentes en su formato tradicional, obstaculizando el avance social de las mujeres en el ámbito digital.

**Palabras clave:** Mujeres; Medios de comunicación; Estereotipos de género; Comunicación digital; Medios públicos; Redes sociales; Twitter; Canal Sur.

1. **Introduction**

Public media is a fundamental information service for the general interest, as it allows the population equitable access to education, culture, and information, as well as equality of opportunities and democratic participation (Bustamante-Ramírez, 2010). They are a tool that integrates and transmits a series of values and norms that are internalized by audiences (López-Díez, 2011), influencing their opinions and their worldview, so that a sexist or stereotypical discourse transmitted by these media can have a significant social impact (Rojas-Torrijos and Jimeno-López, 2019).

Technological development has led to traditional media undergoing a process of convergence and adaptation to online environments, offering new possibilities, formats, and languages to transmit their content (López-García et al., 2019, p. 9). However, for authors like Thiel-Stern (2009), these new media have missed the opportunity to revolutionize the organization and direction of the media in terms of gender equality, as they have not made significant progress. This is because managers and journalists from traditional media have taken up leadership positions in these online media. As a result, the advances aimed at offering more diverse and inclusive content have regressed, maintaining a traditional model. This phenomenon is not limited to privately-owned media but also extends to public media. Works by Mateos-de-Cabo et al. (2014) or Mayoral-Sánchez and Mera-Fernández (2017) in the Spanish digital press also support this lack of innovation in terms of gender. Authors like Ging and Siapera (2019) perceive social media as spaces dominated by men, where women are marginalized and subjected to harassment. Other authors, such as Bonet, while acknowledging some differences between traditional media and new platforms like Twitter in terms of gender discourse, observe that these spaces continue to perpetuate traditional misogynistic and sexist stereotypes (Bonet-Martín, 2020, p. 9).

In recent years, the inclusion of analog media in the digital environment has posed a real challenge for them (Edo et al., 2019, p. 29). On one hand, there is a dominance of market interests over the public interest. However, at the same time, adaptation to the digital environment is necessary due to the significant increase in the online audience, which now obtains information through the Internet. This has brought about new roles and journalistic strategies adapted to the platforms (Monge-Benito et al., 2020; Díaz-del-Campo and Fernández-Gómez, 2020; Gómez-de-Travesedo and Gil-Ramírez, 2020), with a great importance and impact of social media on society (Segado and Díaz-del-Campo, 2020).
In addition to these biases, other stereotypes are present in the text and images, such as gender markers that depict men as universal and neutral while portraying women as deviating from the masculine norm.

According to AIMC data, the presence of internet users during the third quarter of 2022 was 86.7%, with profiles consisting of 50.9% female and 49.1% male. The data for Andalusia is above the Spanish average, with 85.5% of the population having internet access, compared to the national average of 84.3%. The access to social media platforms in Andalusia has already reached 70.1% (EGM1, 2022). In this way, the regional broadcaster Canal Sur provides public service through different media channels, such as radio, television, and currently has a presence on social media platforms. Its Twitter profile reached 156,000 followers in 2022, and its specific news profile gained 74,400 followers since joining in April 2009. According to a study conducted by Latorre-Martínez et al. (2018), Canal Sur’s presence on Twitter, along with the regional channels of Madrid and Barcelona, is among the most active, coinciding with being one of the channels with the highest television ratings.

1.1. Gender imbalances in the media

Studies analyzing female representation in the media have been denouncing a clear lack of balance in terms of gender representation for decades (Mateos-de-Cabo, 2007; Domínguez-Juan, 2010; Verdú-Delgado, 2018). For instance, López-Díez (2005) found that at the beginning of the 2000s, male figures accounted for 82-85% of the coverage in the Spanish press, while female figures represented only 10-15%, which was consistent with the findings of the Global Media Monitoring Project (WACC, 2006) for Spain, where women were protagonists in only two out of every ten analyzed news stories. On the other hand, Sánchez-Alonso et al. (2009) analyzed a total of 12,551 news articles from national and local newspapers and found a mere 12.7% presence of women. The subsequent update of the Global Media Monitoring Project (2010) noted some progress in female representation as news subjects, with women being represented as politicians in 25% of cases, spokespersons in 18%, and experts in 9%, compared to the overwhelming 91% male representation. However, women still have twice as many chances of being portrayed as victims or with gender stereotypes such as homemakers (72%) and students (54%) in a general sense.

In line with this, Desmond and Danilewicz (2010) found twice as many male external sources on local American television, and Hetsroni and Lowenstein (2014) also revealed a very low proportion of women as scientific or expert sources in news coverage. Cukier et al. (2016) similarly discovered that women were less likely to be framed as experts or leaders in major Canadian news channels and were more often portrayed as victims. They were primarily cited or paraphrased rather than appearing on screen to speak for themselves, as they had less airtime compared to men (Greer et al., 2009). This trend is also evident in Flemish newspapers, where Vuyst et al. (2016) found a lack of female representation as protagonists (19.9%) and news producers (32.3%), with stereotypical descriptions associated with low-level professions and soft news. The concept of "soft news" is also recognized by authors such as Menéndez-Menéndez (2007), who observe that women are more present in areas considered feminine, such as "soft sections" like society or education, which do not have the same professional prestige as the more masculinized "hard sections" like politics or economics. Almost a decade later, Rodríguez et al. (2016) perceive the same tendency in general news outlets, finding that women are less present in prestigious sections such as economics, politics, or international affairs. The lack of female experts or professionals in these fields is particularly notable, and they establish a list of prominent political figures, with men accounting for 88% of appearances and women only 12%.

On the other hand, the latest report from the Global Media Monitoring Project (WACC, 2020) shows a significant improvement in representation, with 40% of news reporters being women and 42% in the case of digital news. However, the study still highlights that "women and women's voices are surprisingly absent in news coverage worldwide" and proposes codes of conduct to address this discrimination and the prevailing stereotypes.

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This is because women continue to be portrayed in some media outlets in a stereotypical manner, linked to the domestic sphere, child-rearing, and as companions to male profiles (Guerrero-Salazar, 2009, p. 44; Muñoz-Muñoz & Salido-Fernández, 2018; Litchfield & Kavanagh, 2019). According to Tamarit-Rodríguez et al. (2011), professional routines contribute to the lower visibility of women in the public sphere. Furthermore, when women do appear as protagonists in news stories, they are often portrayed as victims, weak, and sensitive, expressing emotions and being designated with excessive confidence or in association with others. They are assigned secondary and traditional roles and confined to the domestic sphere (Marañón et al., 2018). Sexist language is also employed, such as referring to women using diminutives, their first names, or the term “girls” (Guerrero Salazar, 2009). Additionally, gender markers are used, where the male collective is represented as generic and neutral, while women are depicted as a variety of this generic male (Delorme & Testard, 2015; Ravel & Gareau, 2016).

According to Baxter (2018), even media outlets that adopt a feminist orientation construct female leadership in a reductionist or sexualized manner. This is due to the existence of discursive structures based on gender biases that persist in these media and extend to spaces of power where women are starting to be present. This phenomenon also extends to the online environment, as authors such as Franquet-Calvet et al. (2006, p. 12) begin to observe that “the representation of women in online media follows the same patterns as traditional media, renouncing the capacity for innovation or differentiation.” In this regard, authors like Litchfield and Kavanagh (2019) and Salido-Fernández and Muñoz-Muñoz (2021a, 2021b) find the same biases as traditional media but now adapted to online media, with a significant underrepresentation of women, especially as authors and protagonists of news stories. Women are also presented with infantilization, trivialization, and the persistence of gender stereotypes in both text and images (Muñoz-Muñoz & Salido-Fernández, 2022). Among studies with a gender perspective specifically applied to Twitter, the research conducted by Marañón et al. (2018) stands out. They analyzed the political campaigns on Twitter of female candidates for Governor of Mexico in 2015, revealing the presence of personalized and emotional frameworks and the reinforcement of stereotypes about their private lives. The work of Adá-Lameiras (2019) in Spanish-specialized sports media is also noteworthy, as it similarly finds that women experience discrimination and the presence of sexist stereotypes.

Studies focusing on regional media from a gender perspective are scarce. It is worth mentioning the work of Navarro and McDonald (2016) on the news programs of Canal 9 in Valencia, where they found biases such as not using women’s full names, grammatical dissonances, and the presence of male-dominated profiles of power such as politicians, scientists, or experts, while women were portrayed as victims, witnesses, inexperienced, and associated with domestic and emotional spheres. In the specific case of Canal Sur, the research by Ana Jorge-Alonso (2004) stands out, which found that men predominantly hold positions of responsibility within the channel, influencing the predominantly male image it presents, regardless of the relative equality in the number of male and female reporters. The Audiovisual Council of Andalusia (2008) conducted a study on national and regional channels, including Canal Sur, and found a significant gender imbalance in news coverage, with 96.6% of coverage focused on men and only 3.4% on women, particularly in the news and sports sections. In another study, the Audiovisual Council of Andalusia (CAA, 2014) reported that women accounted for only one-third of news coverage and were often associated with traditional roles such as caregivers or educators, while news related to science, technology, or sports was predominantly presented and commented on by men. The work of Pérez Calero (2015) on Canal Sur Noticias news programs is also noteworthy. It found that these programs did not sufficiently reflect women’s presence in society, perpetuated gender stereotypes, and maintained an imbalance in certain areas such as politics or economics, where men were more present, while women were mainly featured in private spheres and portrayed with familiarity and closeness, indicating a lack of inclusive language. In its latest report on the public channel Canal Sur, the Audiovisual Council of Andalusia (CAA, 2021) revealed that female participation still did not reach one-third of the total, with women accounting for 28.3% compared to 71.7% for men.

2. Objectives

Considering the existing literature, this study aims to examine the gender representation in Canal Sur’s news program on the Twitter platform, in order to determine whether the gender imbalances observed in traditional formats persist in their digital spaces or if they present a more equitable gender representation. To address this objective, the following research hypotheses are formulated:
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H1. Women are underrepresented on Canal Sur Noticias' Twitter platform.

H2. Men are more prominently featured in "hard" sections such as politics, economy, or sports, while women are more prevalent in "soft" sections such as events or culture.

H3. Men have a stronger presence in regional and national news, whereas women are more visible in local news.

H4. Women are less likely to be authors and external sources of news, particularly in significant sections like politics or sports.

H5. Canal Sur Noticias' Twitter page perpetuates gender biases and stereotypes in its news content through the use of gendered language, traditional gender roles, and sexist expressions.

3. Methodology

To conduct this research, the Twitter profile @CSurNoticias of the regional news channel Canal Sur was studied during the months of September and October 2022. All tweets published during the first two weeks of September (September 1st to 14th, 2022) and the last two weeks of October (October 15th to 31st, 2022) were collected to obtain a neutral and varied sample. In total, N=754 tweets were collected, recorded, systematized, and analyzed using content analysis (Krippendorff, 1990), which will also allow for a qualitative understanding of gender representations (Bryman, 2016). The statistical analysis program IBM SPSS Statistics was used for the study, where an analysis form was created and 14 different variables were coded, and classified into mutually exclusive and exhaustive categories, following the work of Billings and Eastman (2003), but adapting them to the specific objectives of this research (Wimmer and Dominik, 2011). The variables included the news identifier, date, gender of the protagonist (1=female, 2=male, 3=mixed, 4=not specified), section to which the news belongs (1=politics, 2=events, 3=society, 4=environment, 5=economy, 6=sports, and 7=culture), and geographical scope of the information (1=local, 2=regional, 3=national, or 4=international). The authorship (1=male, 2=female, 3=mixed, 4=agency, 5=media, 6=not specified) and the presence of external sources, i.e., who has a voice in that news (1=professional profiles, 2=politicians, 3=witnesses, 4=not specified) were also collected, along with the gender of these external sources (1=male, 2=female, 3=mixed, 4=institutional, or 5=not specified), as well as the citation procedure (1=indirect quotes or 2=direct quotes). Additionally, variables were established focusing on images (whether there is the presence of photographs or videos), in which case the gender of the image's protagonist was recorded (1=female, 2=male, 3=mixed, 4=not discernible). Finally, variables were included regarding the presence of stereotypes, such as whether they were found in the text (1=gender markers, 2=sexist language, 3=traditional female and male roles, 4=negative references to women, 5=absence of women, or 6=women as victims) and in the images, whether the photograph was appropriate to the text (1=appropriate, 2=inappropriate, 3=neutral), as well as the stereotypes found (1=absence of female images in news about women, 2=traditional roles, e.g., showing women caregiving or cleaning, and 3=degrading or inappropriate images, e.g., crying).

Descriptive statistics were performed, providing frequency tables, percentages, means, and cross-tabulations. The presented data mainly focus on differences between genders, including women, men, and mixed news, while excluding irrelevant information under the category "not specified".

4. Results

4.1. Women are underrepresented in the Twitter profile of @CSurNoticias.

In general, we find a female underrepresentation in the total number of news published on the Twitter profile of Canal Sur, as women represent only 11.8% of the protagonists, while men account for almost half, with 48.9%. Additionally, there is a presence of 5.4% of news stories featuring both genders and a significant proportion, up to 33.8%, of news articles where no gender is specified as the protagonist. This includes news about institutions, regional or national organizations, political party statements, or collectives where no gender takes on a leading role (Fig. 1).
4.2. Politics and sports continue to be spaces of exclusion for women

As shown in Figure 2, there is a clear male majority in almost all sections of the media on Twitter. In this regard, the largest percentage difference is observed in the Sports section, where men account for 94.7% of the total, with 72 news stories, compared to only 2.6% for women. It is worth noting that out of the only two news stories found about women's sports, one of them is related to two players accusing their coach of sexual abuse. This means that it is not purely a piece of sports-related news but rather a negative and non-sports-related event such as a harassment accusation. The next section with significant differences between genders is Politics, where men account for 77.5% of the total, with 154 news stories, compared to only 18.1% for women, with just 36 news stories. Differences are also found in the Economy section, with 63% male representation and 11.1% female representation, as well as in Culture, which is also predominantly male with 70.8% compared to 20.8% female representation.

In other sections with less prominence such as Environment, it is noteworthy that all the representation is male, while in sections like Crime, although still predominantly male, there are fewer percentage differences between genders, with 60% male (57 news stories) and 33.6% female (32 news stories). There is hardly any presence of other sections such as Health, Science, or Education, but these show lesser differences, especially Education, which is the only section where female representation is slightly higher, although very limited (2 compared to 1).

4.3. Regional and national news with a masculine focus

The scope of the news, as expected from a regional media outlet, is predominantly focused on the autonomous region, representing 61.1% of the total, followed by a distant national scope at 20.4%. Taking these data into account, we find (Fig. 3) a significant difference between genders in all cases. Starting with local news, there is a 30% difference in the percentage of female and male news, with women accounting for 29.8% and men for 59.6%. In the case of international news, the difference increases to 40% in favor of men, with 64.4% for men and 24.4% for women. Regarding national news, there is a difference of nearly 53%, with 73.5% male representation and 20.6% female representation. Lastly, the regional scope shows the greatest differences, as well as being the block with the highest number of news articles (305 in total). Men dominate with 77.7% representation, while women only account for 14.1%, resulting in a 63% difference between the two.
4.4. Authorship and external sources in Canal Sur’s Twitter news

4.4.1. The news lacks clear authorship

News published on the Twitter profile of Canal Sur Noticias does not indicate their authorship in 70.7% of the total, which amounts to 533 pieces of information. Following this main category, there is male authorship, accounting for 12.1% with 91 news articles written by male journalists, followed by female authorship at 9.5% with 72 news articles authored by women. There were also news articles with shared authorship, amounting to 2.1% with a total of 16 articles, and those in which the responsibility for the information is attributed to the media organization, comprising 5.6% with 42 articles. Due to the large number of news articles without clear authorship, it is not possible to determine significant differences between the sexes in this case. However, the available data suggest a tendency towards balance, albeit with a male majority (Fig. 4).

If we combine the gender of the author with the geographical scope, we find that women cover local news to a greater extent than men, with 19.6% compared to 8.8% for men, and also international news, with 14.1% compared to 11.3%. On the other hand, the news with the greatest weight in this media, the regional news, is mostly covered by men, with double the percentage, 14.0% for men compared to 7.9% for women, and there are also higher, although with fewer differences, percentages for national news, with 8.6% of male authors and 5% of female authors.

Regarding the sections, we find differences in the news about Politics, with 16.2% coverage carried out by male journalists compared to 8.8% by women, and in Sports, with 13.0% by men and no female authors. Male writers also have a higher presence in Culture, with 13.8% compared to 7.7% for women, and in Science, with 21.4% compared to 7.1% for women. However, in the Crime section, female writers have a higher proportion, with 13.7% compared to 9.2%, as well as in the Environment section, with 13.2% for women and 11.8% for men. They also dominate in Employment news, with 15% for women, and in Education, with 33.3%, which are more feminized areas compared to Politics or Sports. Therefore, we can see that female journalists are more likely to cover "soft" sections such as crime, environment, or education, while male authors mainly cover politics, science, and sports, although it is noteworthy that they also have a stronger presence in other sections like culture.

4.4.2. Prevalence of external sources of male political figures and direct quotes

Regarding external sources in the news, that is, who is given a voice in the information, we find that the majority are political figures, accounting for 48.5% and a total of 168 news articles with their statements. This is followed by professionals or experts, representing 22.5%, and journalists, accounting for 20.0%. Testimonies from witnesses or victims have a smaller presence, with 7.2%.
If we analyze these data according to the gender of the sources (Fig. 5), we find that, in general, men are external sources in 69.0% of the news articles, while women represent 26.6%. Looking at each category, we see that political figures account for 78.5% of men and 19.0% of women. The category of professionals or experts is composed of 83.3% men and 11.5% women. On the contrary, testimonies from witnesses and victims are predominantly female, with 72% female sources and only 16% male sources. There is more balance in the news articles where journalists are the external sources, with 49.2% male and 44.9% female sources.

Within the external sources, it is worth noting whether the way they express themselves is directly from their own voice, through direct speech acts, if their words are paraphrased, which would be indirect speech acts, or if there is no presence of their speech. In this regard, as shown in Table 1, according to the gender of the external sources, we find that men have a much greater presence in direct speech acts, accounting for 75.5%, compared to 20.9% for women. In the case of indirect speech acts, men also have a greater presence, with 46.9% compared to 20% for women. News that does not include speech acts is more balanced for both genders, although less common, with 7.8% for men and 5.3% for women.

Table 1. Speech acts of the protagonists of the news according to gender.

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Male</th>
<th>Mix</th>
<th>Institutional</th>
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<tr>
<td>Nº</td>
<td>%</td>
<td>Nº</td>
<td>%</td>
<td>Nº</td>
</tr>
<tr>
<td>Direct</td>
<td>38 (20.9)</td>
<td>132 (75.5)</td>
<td>4 (2.2)</td>
<td>7 (3.8)</td>
</tr>
<tr>
<td>Indirect</td>
<td>32 (20.0)</td>
<td>75 (46.9)</td>
<td>4 (2.5)</td>
<td>29 (18.1)</td>
</tr>
<tr>
<td>Not included</td>
<td>22 (5.3)</td>
<td>32 (7.8)</td>
<td>8 (1.9)</td>
<td>35 (8.5)</td>
</tr>
</tbody>
</table>

Source: Author’s own work.

4.5. Presence of gender biases and stereotypes

4.5.1. Gender markers represent the main bias in the text

If we carefully examine the content of the news, out of the total number of analyzed news articles (N=754), approximately 30.5%, which is 230 articles, contain some form of bias or gender stereotype in their textual content, while 69.5% (524 articles) do not exhibit such biases.

If we analyze the types of stereotypes found (Fig. 6), out of the total number of news articles with stereotypes, the majority of them are gender markers (56%). The general use of generic masculine language has not been included here, as the percentage would be much higher, given the lack of inclusive language in these media outlets. For example, news articles referring to "citizens," "Andalusians," or "politicians" have not been classified as instances of generic masculine language since all the information conforms to this pattern. Only cases have been included where the use of generic masculine language could potentially mislead the audience if the gender of the protagonist is not specified. For instance, referring to "Betis" or "the Spanish national team" and automatically assuming it refers to male sports, as well as mentioning "Spain" or "the Junta of Andalusia" and representing them as male-dominated entities.
In the second place, we find the "absence of women" in news articles featuring women as protagonists (16%) and in those where men, acting as politicians, experts, or spokespersons, are given a voice. Thirdly, we have the presence of women as victims or witnesses (9%), with news articles portraying "women as victims" or mothers of victims, while men are portrayed as professionals, police officers, psychologists, or experts who provide an explanation of the situation. In news articles about gender-based violence, the full name of the victim is mentioned, while the identity of the perpetrator is not revealed, referring to them as the partner or ex-partner. The use of sexist language also accounts for 9%, including the use of diminutives like "Pepi," "Conchi," or "Malú" when referring to women, as well as greater familiarity and infantilization, and expressions like "the girls" to refer to young women. Additionally, news articles have been found where women hold political positions but are not mentioned by their full names.

4.5.2. Traditional gender roles as the most prevalent bias in the images

Out of the total of news articles with images (n=753), 86.7% of them did not exhibit gender biases, while biases were present in 13.3% of the total. These biases can be grouped into three main categories. Firstly, there were "inappropriate female images" present to a lesser extent, accounting for 14.1% of the total. These images depicted women that did not correspond to the content of the text, often accompanying negative or controversial news of a generic nature. The inclusion of a female photograph in such cases could lead readers to associate it with the news. This category also includes images that are degrading, although they were found to a lesser extent and only in relation to women. For example, there were images capturing a moment when the protagonist made a face or had a strange facial expression, opening their mouth or displaying discontent. Additionally, there were images where women appeared sad, crying, or on the verge of tears. Secondly, there were images depicting traditional gender roles, accounting for 38.4% of the total. These images portrayed various groups, such as occupational roles, where women were still depicted as caregivers, cleaners, nurses, or victims. For instance, several news articles about the Day of the Dead showed only women placing flowers on graves and cleaning them, or taking care of babies in news about diapers, while men were illustrated in sectors such as agriculture or in roles like truck drivers, police officers, or athletes. Finally, the most prevalent bias observed was the absence of photographs of women in news articles specifically about women, accounting for 47.5% of the identified news articles. In these cases, the main protagonist(s) of the news were women, but the accompanying image depicted a man offering a statement as a political figure, expert, or journalist, despite the content focusing on a female profile (Fig. 7).
5. DISCUSSION AND CONCLUSIONS

As revealed by the results of the study conducted on the Twitter profile @CSurNoticias of the regional channel Canal Sur, the five hypotheses proposed are confirmed to varying degrees. Firstly, there is a clear underrepresentation of women in the news, with only 11.8% compared to 48.9% of men, consistent with previous studies that have found a lack of female presence in both national media (López Díez, 2005; Mateos-de-Cabo, 2007; Rodríguez et al., 2016) and in the Canal Sur regional channel (Jorge-Alonso, 2004; CAA, 2012; Pérez-Calero, 2015).

The second hypothesis is also confirmed, as certain sections are more masculinized than others. Although almost all sections have more news focused on men, it is noteworthy that Sports show the highest difference between the sexes, with up to 92%. This is consistent with findings from previous studies (Salido-Fernández and Muñoz-Muñoz, 2021a; 2021b; Muñoz-Muñoz and Salido Fernández, 2022). Politics follows with a difference of nearly 60%, Economy at 52%, and Culture at 50%. There are sections that are closer in terms of gender representation, such as Health, which still maintains a difference of almost 41%, and Crime, with a difference of 26%. On the other hand, sections with less weight, like Education, show a slight female majority, in line with findings from other studies that discuss "soft" sections for women and "hard" sections for men, such as Menéndez-Menéndez (2007), Rodríguez et al. (2016), or Vuyst et al. (2016).

On the other hand, men have a greater presence than women in all geographical areas of the news, including local, regional, national, and international. However, there are fewer differences between the sexes in the local sphere (30%), followed by the international sphere (40%), although they have less weight in the media. On the other hand, greater differences are found in the national sphere (53%), and especially in the regional sphere, which is the most prominent due to being a regional channel, where the differences between news about women and men reach up to 63%. Therefore, the third hypothesis is confirmed, indicating a greater presence of men in the news, especially at the regional and national levels, and a better balance in local news. This finding differs from what Salido Fernández and Muñoz-Muñoz (2021b) found, which showed a greater presence of men in international news and women in national news.

The fourth hypothesis, which suggested a lower presence of women in authorship and external sources, is also confirmed. Women are less represented as authors, accounting for 9.5% compared to 12.1% of men, as previously indicated by the GMMP (WAAC, 2015; 2020). However, significant differences are not observed, partly because the gender of the author is not disclosed in a large proportion of news articles (71%). Furthermore, women have a higher presence as authors in news articles about Crime, Environment, and Employment, while they are absent in Sports, as found in previous studies (Salido-Fernández, 2022). They are also represented in low proportions in Politics or Science, as indicated by previous authors (Vuyst et al., 2016). In the case of external sources, men represent the majority, accounting for 69.0% compared to only 26.6% of women. Furthermore, men are primarily external sources such as politicians (78.5% compared to 19.0% of women) and experts (83.3% compared to 11.5% of women) (Desmond and Danilewicz, 2010; Navarro and McDonald, 2016). On the other hand, women significantly outnumber men as external sources associated with witnesses and victims (72.0% women compared to 16.0% men). In other words, women represent victimized and less educated groups, as perceived by López-Díez (2005) or "That the Twitter profile of Canal Sur News reflects a gender representation similar to that of the television channel itself and other traditional media, with female underrepresentation and biases in its content."
Guerrero-Salazar (2009). Additionally, men have a higher percentage of both indirect and direct speech acts, meaning they are given voice without paraphrasing their words, accounting for 75.5% compared to only 20.9% of women, who have much less voice (Cukier et al., 2016; Greer et al., 2009).

Lastly, the fifth hypothesis regarding the presence of gender biases and stereotypes in these news articles is also confirmed. We found that up to 30.5% of the text contained gender biases and stereotypes, primarily based on gender markers (56%) (Delorme and Testard, 2015; Ravel and Gareau, 2016). This is followed by the absence of women in news articles about women (16%) and, in third place, the presence of sexist language and victimization of women (9%) (Guerrero-Salazar, 2009; Cukier et al., 2016). In the case of images, a lower presence of stereotypes is observed (13.3%), mainly represented by the absence of images of women in news articles about themselves (47%), followed by traditional female roles (38.0%), such as women cleaning or cooking, associated with domestic service (López Díez, 2005). Lastly, inappropriate images that depict emotions, such as women crying, are also present (Marañón et al., 2018).

In conclusion, the research reveals that the Twitter profile of Canal Sur News reflects a gender representation similar to that of the television channel itself and other traditional media, with female underrepresentation and biases in its content. It is evident that there is a significant lack of female news articles, which diminishes their presence in the overall audiovisual content of the media. Additionally, biases are observed, with prestigious sections associated with men and less prestigious sections for women. There are also fewer female authors, particularly in these "hard" sections such as politics and sports. Women are less represented as external sources in the news, and when they do appear, they are more likely to represent profiles and groups with lower levels of education, such as witnesses or victims, while men are more frequently featured as experts or political figures, and their voices are directly quoted. In addition to these biases, other stereotypes are present in the text and images, such as gender markers that depict men as universal and neutral while portraying women as deviating from the masculine norm. Traditional roles are also depicted, with women often shown in caregiving, cleaning, or victim roles, while male profiles are associated with political positions, police, and other masculinized groups. Lastly, sexist language is observed, using diminutives and employing a more familiar and infantilizing tone when referring to women.

In this way, we can see that gender biases and stereotypes persist in these new digital media platforms, including public-owned outlets like Canal Sur, where they have adapted and perpetuated the same patterns as traditional media. It is, therefore, crucial to review formats and content from a gender perspective, as they continue to prioritize men in the news. Although these biases may not be overt stereotypes, they still condition and skew the information transmitted to the audience, systematically relegating women to secondary and less relevant roles. Consequently, gender training for journalists and media professionals is essential to facilitate the necessary changes in these media outlets. This training should pay special attention to new digital media and social networks, which increasingly serve as the primary sources of information, particularly for digital natives.

Future lines of research could involve expanding the obtained results by conducting studies focused on Andalusian radio or television, allowing for comparisons with these other formats. The study could also be adapted to examine gender representation in other regional or national public media outlets such as RTVE (Radio televisión Española) to determine whether inequality persists or if these new formats have undergone a transformation towards more balanced gender media coverage.

6. References


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Revista Latina de Comunicación Social, 82 https://doi.org/10.4185/rlcs-2024-2061
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