

RESEARCH


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# FACT-CHECKERS. WOMEN IN FACT-CHECKING INITIATIVES IN THE SOUTHERN COUNTRIES OF THE EUROPEAN UNION

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## ABSTRACT

**Introduction:** The rise of misinformation across various communication channels, especially those supported by the Internet and social media, has made fact-checking increasingly crucial. Consequently, media outlets have reinforced these tasks, leading to the emergence of new business and social initiatives aimed at providing certainty to the public about what is true and false in the information they receive. While many academic studies address this concerning phenomenon, analyzing everything from the structure and content of hoaxes to the attitudes of those who receive and sometimes forward them, few inquire into the individuals working in fact-checking,

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let alone the presence of women in this new work environment. This study examines fact-checking initiatives in Southern European Union countries, particularly focusing on their working conditions by quantifying the involvement of women and the roles they play. **Methodology:** The research is based on the Fact-Checking Initiative Census compiled by the Reporters' Lab at Duke University for Croatia, Slovenia, Spain, Greece, Italy, and Portugal in its 2023 update (N=20); the websites of the initiatives listed in the census; and European Union statistics from Eurostat, specifically from Eurostat labour market data. The sample selection criterion was the country where the verification initiatives are located, and the methodology being used was data analysis using descriptive statistical techniques. The data was enriched by monitoring the analyzed websites and their publications for one year. **Results:** The findings reveal that women constitute more than half of the workforce in the analyzed initiatives, significantly surpassing their representation in the overall employed population. Additionally, the presence of women in managerial positions is proportionally higher than that quantified across all businesses. **Discussion and Conclusions:** The discussion highlights how this emerging professional landscape offers opportunities to advance gender equality in journalism.

**Keywords:** fact-checking, fake news, employment, women, gender gap, European Union.

## 1. INTRODUCTION

Currently, the use of social networks as a daily source of information has come to surpass print media, radio and even television (UNESCO & IPSOS Group, 2023). This change in consumption dynamics, which is framed in the hybrid media system (Chadwick, 2017) exposes citizens to new information interlocutors, who lack the routines and professionalism of the media and journalists.

Especially since 2016 with the election of Donald Trump as president of the United States (Magallón de Rosa, 2022; Cea et al., 2023) and, subsequently, following high-intensity news events such as the pandemic (COVID), the citizenry has become aware that misinformation proliferates especially in social media. According to the Digital News Report 2023 more than half of the respondents, 56%, admit their concern about distinguishing the true from what is fake in online news, an increase of two percentage points compared to 2022 (Newman, 2023). Similarly, according to the UNESCO and IPSOS Group report (2023), an average of 53% of the world's population claims that there are more lies and biased use of facts in politics and the media today than 30 years ago.

Given this situation, it is necessary to establish mechanisms to verify the accuracy of the news, and fact-checking mechanisms are more necessary than ever.

Thus, platforms of data fact checking, born in the United States in the first decade of this century to fact-check fake statements by politicians (Graves, 2016), have spread with the aim of fighting disinformation, misperceptions and fake news in the new communication ecosystem, becoming "the most important variant of journalism in the digital age", as Bill Adair, founder of PolitiFact, assures in an interview (El

Mundo, 2019). In this sense, the Duke Reporters' Lab repository (2023) collects 424 active and 139 inactive initiatives in December 2023 in the world; and the European Digital Media Observatory [EDMO] (2023) refers to 148 active fact-checking initiatives in the European Union and the United Kingdom at that date.

This does not mean that journalism, which could be called pre-digital, did not apply professional standards and monitoring and fact-checking guidelines to ensure that its news was truthful, accurate and unbiased. In this task, the great American magazines were pioneers, most notably *The New York Time* and *The New Yorker*, which since the early twentieth century had verification departments whose task was to review the articles of journalists by locating errors, examining the sources and ensuring that all points of view were collected (Currie-Sivek & Bloyd-Peshkin, 2018). This classic form of fact-checking is often called a priori verification because it is carried out before the news is published. Interestingly, this task was carried out by women (Fabry, 2017).

The new fact-checking initiatives work in a different way: their main task is to review information or content in circulation to determine its truthfulness, which is called a posteriori or external fact-checking. They belong to reference media or arise from civil society, academic institutions or non-governmental organizations (NGOs). For Professor Amazeen, fact-checking initiatives aim to identify and proactively challenge political misinformation and, therefore, have been celebrated as a professional reform movement (Amazeen, 2019), pointing out that they could be symptomatic of the decline of journalistic institutions and should be considered as tools for democracy building (Amazeen, 2020) and indicating the possible factors involved in the birth of today's fact-checking: the decline of journalism, mass access to technology and socio-political conflicts (Amazeen, 2020).

Depending on the techniques being used, fake news detection methods in social networks can be classified into three groups: human-based techniques, AI-based techniques and blockchain-based techniques (Aïmeur et al., 2023).

Procedures using automatic methods are at an early stage, but in rapid development, and there are several lines of research seeking to improve detection and mitigation tasks. Many of them focus on the automatic detection of fake news by means of artificial intelligence techniques since, according to their researchers, it is almost impossible to detect manually the sources and authenticity of fake news in an effective and efficient way, due to its rapid circulation (Tanvir et al., 2020).

Human-based techniques rely on people's knowledge and expertise. They can take the form of distributed open collaboration, crowdsourcing, based on collective contributions from a group of people (Tchakounté et al., 2020) and data fact-checking performed manually by professionals, the fact-checkers, fact-checking (Lee et al., 2023). Although this type of fact-checking is currently challenged by journalists and researchers, it is still the one that provides the basis for data fact-checking and the subject of research to improve its reliability (Andersen & Søre, 2020; Chung & Kim, 2021), establishing models to improve its effectiveness (Amazeen, 2023).

In the new communication environment, not only do professionals test the information in search of its truthfulness, but a different fact-checking framework is established. These platforms, whose “particular business model is based on turning an additional aspect of journalism (fact-checking) into a market niche different from that of the media and its routines” (Pérez-Curiel & Casero-Ripollés, 2023, p. 90), and behind which lie different approaches: journalistic, social service and the market (Kim & Buzzelli, 2022).

This paper is focused on human fact-checking, specifically that carried out by fact-checkers through organizations set up for this purpose, either as companies providing this service or as part of broader structures. Moreover, many fact-checkers see their role as not simply complementing traditional journalism, but also correcting some of its shortcomings, with a focus on media literacy and civic engagement, independence and transparency (Singer, 2018; 2021).

A reference element to learn about the reality of global fact-checking initiatives is the Duke Reporters' Lab, a journalistic research center at Duke University's Sanford School of Public Policy created in 2011. Originally focused on supporting investigative journalism with tools, techniques and research, it now focuses on fact-checking and trust in the media (Cohen, 2011). It is funded by the Knight Chair and Knight Foundation, the Google News Initiative, the Facebook Journalism Project and Craig Newmark.

The Duke Reporters' Lab compiles existing fact-checking initiatives around the world since 2014, making up the international fact-checking community. The database generated is managed by the DeWitt Wallace Center for Media & Democracy at Duke University and offers textual information and geographic location. It is freely accessible and widely used in academic research (Duke Reporters' Lab, 2023). It only includes fact-checking initiatives whose primary mission is news and information, and they have a set of requirements which include: reviewing statements from all parties; vetting claims and reaching conclusions; transparently identifying their sources and explaining their methods; and disclosing their funding and affiliations (Adair & Stencel, 2016). The database is kept up to date periodically, as a census, with an annual summary report issued on the behavior of global fact-checking sites, both active and inactive.

Despite the increase in academic research generally focused on disinformation and information disorders and specifically on fake news, these analyses mainly study the hoaxes themselves, how they are disseminated, how they are detected, what role citizens play in this process or what their organizational structure is. However, there are not many works that focus on the people who perform the fact-checking and whether they are women or men, trying to see the gender distribution model that this new journalistic activity tends to follow and how this branch of labor activity is shaping up (Funke, 2019; Montiel & Teruel, 2024; Macharia, 2021; Zippia, 2023).

In March 2023, the Reuters Institute published its research *Women and media leadership in 2023: evidence from 12 markets* (Reuters Institute, 2023), which included 240 media outlets in South Africa, Kenya, Hong Kong, Japan, South Korea, Finland, Germany, Spain, the United Kingdom, the United States, Mexico and Brazil. Its findings show that most leaders are men and only 22% of senior management positions in the media are held by women, even though women represent 40% of practicing journalists. The percentage of women in management positions differs significantly among countries, from 5% in Mexico to 44% in the United States.

The European Union meanwhile in its *Report on Gender Equality in the Media in the Union* (European Parliament, 2018), highlights that:

although women in this field at university level constitute a significant proportion of the workforce, they are under-represented in management and senior positions; it believes that media services, both public and private, have a responsibility to ensure equality between women and men and to prevent any discrimination; it calls on the Member States to develop a policy of encouraging them to reduce barriers to women's access to management and leadership positions in media organizations. (Motion for a resolution to the European Parliament - item 1)

It also stresses the under-representation of women in public media, both in high-level strategic and operational positions and on boards of directors.

Furthermore, conducting studies that make international comparisons between states with political, cultural or geographical relations, such as those belonging to the European Union, is considered particularly necessary (Ilyash et al., 2023). Comparative analysis of EU social policy and institutions is important for assessing the efficiency of welfare states and for harmonizing social policy objectives in governance in the region (Vandenbroucke, 2017).

## **2. OBJECTIVES**

The general objective of this paper is to analyze the data fact-checking initiatives in the south of the European Union: Croatia, Slovenia, Spain, Greece, Italy and Portugal. In order to characterize them, organizational variables such as their location, year of creation, affiliation and membership in international organizations that ensure the accuracy of the information will be observed, and the structure of their workforce will be analyzed in depth in order to quantify and qualify the presence of women.

Therefore, the specific objectives (SO) are as follows:

SO1. To know the fact-checking initiatives that are active in the countries of the South of the European Union (Croatia, Slovenia, Spain, Greece, Italy and Portugal).

SO2. To quantify the number of men and women working in these initiatives and to determine the tasks - journalistic and managerial - carried out by both gender.

SO3. To observe whether the fact-checking initiatives offer better possibilities to achieve labor equality for women journalists. An analysis of both the overall participation of women and their performance in senior roles is proposed, and comparison with the general labor market data for each of the countries.

With this quantification process, the aim is to mitigate, to some extent, the absence of sex-disaggregated data, which is essential in the pursuit of gender equality, as highlighted by UN Women (United Nations Entity for Gender Equality and the Empowerment of Women, 2018).

### 3. METHODOLOGY

The starting point for this research, regarding the presence and characteristics of fact-checking organizations, is the Duke Reporter's Lab annual census of 2023, corresponding to six countries: Croatia, Slovenia, Spain, Italy, Greece and Portugal (N=20).

Initiatives from France are not included because this country has characteristics that make it closer to the Central European space (Hallin & Mancini, 2013). Cyprus and Malta could not be included because there is no data fact-checking initiative reported in the Duke Reporter's Lab census in their territory.

These secondary data are complemented with primary data obtained directly from the websites of the initiatives themselves, classifying those they offer in their personnel section, according to their sex and the type of work they carry out.

In cases where this information was not available on the pages, the individual authorship of the verifications for the last year (January-December 2023) was collated. This work of analysis and observation, not only of statistical data but also of qualitative review, gives a singular added value to this research. Finally, when necessary, the companies themselves have been contacted personally to obtain detailed information. This enriches the research and reduces sampling errors.

It should be noted that, in order to refine the data, a number of restrictive criteria have been established. When two fact-checking initiatives share personnel, as in the case of Pagella Politica and Facta in Italy or Viral Check and Poligrafo in Portugal, personnel are counted only in the provider initiative. In the case of companies with a broader purpose than fact-checking, such as Newtral in Spain, the personnel working in checking is counted.

In the case of AFP-Factual, of France-Presse Agency, the locations in the different countries have been considered, although they share resources and personnel with the parent company, thus creating a network. For the purposes of membership in the international verification networks, the general membership of the Agency is considered in each of them.

Slovenia, where its headquarters is located, is assigned the Razkrinkavanje/Oštro initiative, which investigates issues of public interest to the inhabitants of the Adriatic region (Slovenia, Croatia and Italy) and its surroundings.

Although the census lists the Italian initiative La Voce.info as active, it is not included in the analysis as its fact-checking publications, strictly speaking, are occasional, with only 3 fact-checkings in 2023.

The coding manual has taken into account previous work on this subject in Ibero-America (Montiel & Teruel, 2024). The initiatives selected took into account the following: country and city of their headquarters; year of creation; linkage, understanding as such their organization and financing and for which different typologies were established according to whether they are integrated within media groups and the media; or if they are independent from private initiatives or the associative fabric; or if they are part of non-governmental or non-profit organizations; or if they depend on academic institutions, following the typology of the Duke Reporters' Lab.

In order to systematize the tasks performed by people working in data fact-checking initiatives, three categories have been established: production/administration, drafting and technical support, with a complementary task, that of training.

A variable with two categories was also defined to determine the degree of relationship with managerial responsibilities. Managerial positions are understood to be those held by people who hold a Management, Executive Management, General Management, New Technologies Management, or a relevant position of leadership, coordination or a position of responsibility, Presidency, Vice-Presidency, General Secretariat.

Finally, the gender ratio of people working in data fact-checking initiatives has been contrasted with that of the general labor market using European Union statistics in the sections Employment and activity by gender and age ([Eurostat], 2023a) and Employment by sex, age, professional status and occupation ([Eurostat], 2023b).

The methodological technique used is the case study as an analysis of the specificities of each of the fact-checking initiatives under study, with their corresponding contingency tables and relationships between variables.

To quantify the inequality between men and women, together with the proportional distribution, the feminization index will be used, i.e. the representation of women in relation to men (number of women/number of men) (Instituto de la Mujer, 2023).

All data are updated to December 2023 or to the year indicated by the source being used.

## **4. RESULTS AND DISCUSSION**

### **4.1. General description of the initiatives**

The base study sample comprises 20 active verification initiatives collected in the 2023 census of the Duke Reporters' Lab in the geographic scope of study. Out of these, 2 are located in Croatia, 1 in Slovenia, 7 in Spain, 2 in Greece, 4 in Italy and 4 in Portugal.

The relationship of the media initiatives with the most relevant European or international networks in the field of fact-checking has been analyzed, i.e. whether they are signatories of the Code of Principles of the International Fact-Checking Network (IFCN, 2023), are part of the fact-checking community of the European Digital Media Observatory (EDMO, 2023) and whether they belong to the EFCSN Fact-Checking Consortium (EFCSN, 2023) (Table 1).

**Table 1**

*Sample of active fact-checking initiatives broken down by characteristics*

Country	Name	Headquarters	Affiliation	Creation	IFCN	EDMO	EFCSN
Croatia	AFP Provjera činjenica (Fact Check)	-	Media	2018	yes	yes	yes
	Faktograf	Zagreb	NGO	2015	yes	no	yes
Slovenia	Razkrinkavanje	Ljubljana	NGO	2019	yes	yes	yes
Spain	AFP Comprovem	Barcelona	Media	2023	yes	yes	yes
	AFP Factual (Spain)	Madrid	Media	2017	yes	yes	yes
	EFE Verifica	Madrid	Media	2019	yes	yes	no
	Infoveritas	Madrid	Independent	2022	yes	no	yes
	Maldita.es	Madrid	Independent	2014	yes	yes	yes
	Newtral	Madrid	Independent	2018	yes	yes	yes
	Verificat	Barcelona	Independent	2019	yes	yes	yes
Greece	AFP (Greek and Cyprus) Fact Check	Athens	Media	2021	yes	yes	yes
	Ellinika Hoaxes (Greek Hoaxes)	Thessaloniki	NGO	2012	yes	yes	yes
Italy	Bufale	Marnate - Varese	Independent	2014	no	no	no
	Facta	Milan	Independent	2020	yes	yes	yes
	Open	Milan	Media	2021	yes	no	no
	Pagella Politica	Milan	Independent	2012	yes	yes	yes
Portugal	Fact Checks do Observador	Lisbon	Media	2015	yes	no	no
	Polígrafo	Lisbon	Independent	2018	yes	yes	yes
	Público's Prova dos Factos	Lisbon	Media	2016	exp.	yes	no
	Viral Check	Lisbon	Independent	2021	yes	no	no

**Source:** Duke Reporter's Lab, IFCN, EDMO, EFCSN (2023). Elaborated by the authors.

The oldest initiatives are Ellinika Hoaxes, Greece and Pagella Politica, Italy, both from 2012 and the most recent one, AFP edition of Catalonia, AFP Comprovem, from 2023. Initiatives are gradually being taken on board, with an average of 2 each year. The sustainability and longevity of many of them can be noted. Half of them have been active for five years or more, while the Reporter's Lab itself points out that the average life of an active data verification site is less than six years.



There are 9 of them qualified as independent, among which 4 in Spain, 3 in Italy and 2 in Portugal; 8 are associated with the media, found in all countries except Slovenia; while 3 are linked to Non-Governmental Organizations, in Croatia, Slovenia and Greece. None of the initiatives under study is considered to belong to the category of academic institutions, one of those included in the Duke Reporters' Lab census.

Almost all (17) are part of the International Fact-Checking Network and are signatories to its code of principles. Fourteen are members of the Fact-Checking Community of the European Digital Media Observatory and 14 are also associated with the European Fact Checking Standards Network. These data highlight the interest in being present in those organizations that show an active commitment to the fight against disinformation.

## 4.2. People

The census of the initiatives studied is composed of 254 people, of which 115 are men and 139 are women. The number of people dedicated to fact-checking is quite variable, both between countries and between initiatives. Spain stands out, where Maldita.es alone employs 48 people, and Portuguese initiatives linked to the media, such as Prova do Factos de Publico, with 40 people, or Fact Check do Observador, with 32, but it should be noted that in these two cases the entire editorial staff can take on fact-checking tasks. On the other hand, the national initiatives linked to AFP-Factual have only 1 or 2 people with a strong networking role (Table 2).

In the total number of personnel analyzed, 54.7% were women and 45.3% men. Looking at each country, it can be seen that women are predominant in most of them, with Croatia standing out, except for Italy and especially Greece. If Greece and Italy are excluded, the percentages of men and women for the remaining countries are 39.3% and 60.7%, respectively. These results are consistent with those estimated for the United States, where 67.4% of the fact-checkers are women and 32.6% are men (Zippia, 2023).

**Table 2**

*Personnel in active fact-checking initiatives by country and gender*

Country	Total	Men	Women	Percentages		Feminization rate
				Men	Women	
Croatia	17	5	12	29.4	70.6	2.4
Slovenia	15	5	10	33.3	66.7	2.0
Spain	92	36	56	39.1	60.9	1.6
Greece	13	12	1	92.3	7.7	0.1
Italy	30	20	10	66.7	33.3	0.5
Portugal	87	37	50	42.5	57.5	1.4
<b>Total</b>	<b>254</b>	<b>115</b>	<b>139</b>	<b>45.3</b>	<b>54.7</b>	<b>1.2</b>

**Source:** Duke Reporters' Lab (2023) and websites. Elaborated by the authors.

Independent initiatives are those that account for the greatest number of people, practically half of the total, followed by the media, around a third, and NGOs, the rest. The percentages of men and women are very similar, although in all cases the percentage of women is higher, as is the weight of the different categories of involvement (Table 3).

**Table 3**

*Personnel in active fact-checking initiatives by affiliation and gender*

Affiliation	Total	Men	Women	Percentages		Feminization rate
				Men	Women	
<b>Media</b>	92	40	52	43.5	56.5	1.3
<b>Independent</b>	121	56	65	46.3	53.7	1.2
<b>NGO</b>	41	19	22	46.3	53.7	1.2
<b>Total</b>	254	115	139	45.3	54.7	1.2
<b>Vertical percentages</b>						
<b>Media</b>	36.2	34.8	37.4			
<b>Independent</b>	47.6	48.7	46.8			
<b>NGO</b>	16.1	16.5	15.8			
<b>Total</b>	100	100	100			

**Source:** Duke Reporters' Lab (2023) and websites. Elaborated by the authors.

The tasks performed by people working on data fact-checking initiatives have been classified into three types: *Production/Management*, *Editorial Staff* and *Technical Support*.

- **Production/Management:** Executive and journalistic management, general management, head of media, press, communication, training, coordination, human resources, management, accounting, etc.
- **Editorial Staff:** Editors, journalists, reporters, fact checkers, etc.
- **Technical Support:** Management of audiovisual media, graphics, web editing, maintenance of technological infrastructure, etc.

The largest number of people carry out editorial tasks, more than three quarters, followed by production/management and finally technical support. And this distribution is similar for men and women. The rates of feminization are equivalent to those of the total population under study except for those in technical support tasks. Although their number is small, 7 people, their distribution shows the traditional gap between women and technological occupations (Table 4); women and girls are 25% less likely than men to know how to take advantage of digital technology for basic purposes, 4 times less likely to know how to program computers and 13 times less likely to apply for an ICT patent (UNESCO, 2023).

**Table 4**

*Personnel in active fact-checking initiatives by gender and task*

Type of task	Total	Men	Women	Percentages		Feminization rate
				Men	Women	
<b>Production/management</b>	47	21	26	44.7	55.3	1.2
<b>Editorial staff</b>	196	87	109	44.4	55.6	1.3
<b>Technical Support</b>	11	7	4	63.6	36.4	0.6
<b>Total</b>	254	15	139	45.3	54.7	1.2
<b>Vertical Percentages</b>						
<b>Production/management</b>	18.5	18.3	18.7			
<b>Editorial staff</b>	77.2	75.7	78.4			
<b>Technical Support</b>	4.3	6.1	2.9			
<b>Total</b>	100.0	100.0	100.0			

**Source:** Duke Reporters' Lab (2023) and websites. Elaborated by the authors.

In several initiatives, especially independent ones, training is mentioned as a specific task. Of the people surveyed, 8 are dedicated to it as trainers, coordinators or training managers, five of whom are women. The situation is similar to the one mentioned above with the technical support tasks, the number of cases is very small, and it would be daring to draw general conclusions, but the data seem to replicate the greater dedication of women to teaching.

With respect to management positions, the results obtained show a homogeneous distribution of men and women and practically equal distribution in both categories (Table 5).

**Table 5**

*Staff in active fact-checking initiatives by gender and responsibility*

Responsibility	Total	Men	Women	Percentages		Feminization rate
				Men	Women	
<b>Manager</b>	57	26	31	45.6	54.4	1.2
<b>Not Manager</b>	197	89	108	45.2	54.8	1.2
<b>Total</b>	254	115	139	45.5	54.5	1.2
<b>Vertical Percentages</b>						
<b>Manager</b>	22.4	22.6	22.3			
<b>Not Manager</b>	77.6	77.4	77.7			
<b>Total</b>	100.0	100.0	100.0			

**Source:** Duke Reporters' Lab (2023) and websites. Elaborated by the authors.

Although the universe of people with responsibility is small, only 57 people with an equal distribution between men and women, 46% vs 54%, there is a great deal of variability between countries: from Slovenia where all the management personnel collected is female, to Greece, where there are no women at all, or Italy where only 11% are women; Croatia and Spain also present a higher percentage of women, 75% and 63% respectively, while Portugal keeps gender parity with 43% of women.

According to the European Institute for Gender Equality [EIGE], 2023, the proportion of women in decision-making positions in public broadcasters was estimated at 32% for CEOs, 39% for executives and 37% for non-executives.

### 4.3. General employment and fact-checking

To put the labor market reality of these initiatives into context, statistics provided by Eurostat, the statistical office of the European Union, were used. These data come from the European Union Labour Force Survey and provide demographic estimates of the main characteristics of the labor market. Thus, a proprietary analysis is carried out based on European primary and secondary sources.

The series on Employment and activity by gender and age (Eurostat, 2023a) breaks down people who are part of the labor force and employed people. Employed individuals are selected by choosing the age cohort from 15 to 64 years.

The Employment by occupational gender, status and occupation series (Eurostat, 2023b) is used to find out the managerial responsibility of women. In this series, the following is selected: the age cohort 15 to 64 years of age, the professional status of employee and as occupation the main group manager, category 1, according to the International Standard Classification of Occupations, ISCO-08 of the International Labor Organization.

#### 4.3.1. Employed women

Except in Portugal, in all the countries under study the number of women, between 15 and 64, who are part of the employed population is lower than that of men, although the percentages can be considered close to parity, 40-60. The lowest percentages of employed women are found in Greece and Italy, 42% (Table 6).

**Table 6**

*Employment by gender, in thousands (2022)*

Country	Total	Men	Women	Percentages		Feminization rate
				Men	Women	
Croatia	1,670.7	894.6	776.1	53.6	46.5	0.9
Slovenia	966.6	523.7	442.9	54.2	45.8	0.9
Spain	20,082.3	10,792.4	9,289.9	53.7	46.3	0.9
Greece	4,030.2	2,321	1,709.2	57.6	42.4	0.7
Italy	22,412.5	12,884.4	9,528.1	57.5	42.5	0.7
Portugal	4,699.3	2,340.4	2,358.9	49.8	50.2	1.0
Total	53,861.6	29,756.5	24,105.1	55.3	44.8	0.8

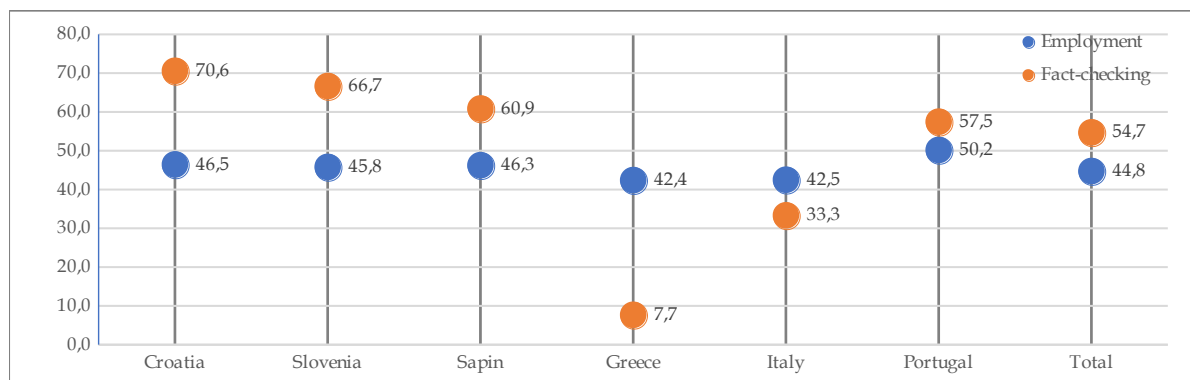
**Source:** Eurostat. Elaborated by the authors.

A comparison between women in active fact-checking initiatives (Table 2) and women employed in the different countries (Table 6) shows that in most of them the weight of women is greater in fact-checking than in total employment (Figure 1).

Greece and Italy again behave differently and, although they have lower percentages of female participation in employment, they still have a higher percentage of female participation in the personnel performing fact-checking tasks.

**Figure 1**

*Percentage of women: General Employment and Fact-Checking*



**Source:** Eurostat, Duke Reporters' Lab (2023) and websites. Elaborated by the authors.

#### 4.3.2. Women in managerial positions

In all the countries under analysis, the percentage of women in managerial positions in the general labor market is considerably lower than that of men. The total percentages would be 67.4% men and 32.6% women, which would give an average feminization index of 0,5. Croatia has the lowest percentage, 22%, and Portugal the highest, 38.5%.

**Table 7**

*People to be employed in managerial positions (manager), in thousands*

Country	Total	Men	Women	Percentages		Feminization rate
				Men	Women	
<b>Croatia</b>	68.5	53.4	15.1	78.0	22.0	0.3
<b>Slovenia</b>	39.9	25.7	14.2	64.4	35.6	0.6
<b>Spain</b>	850.2	551.1	299.1	64.8	35.2	0.5
<b>Greece</b>	114.2	78	36.2	68.3	31.7	0.5
<b>Italy</b>	802	572.6	229.3	71.4	28.6	0.4
<b>Portugal</b>	278.5	171.3	107.2	61.5	38.5	0.6
<b>Total</b>	2,153.3	1,452.1	701.1	67.4	32.6	0.5

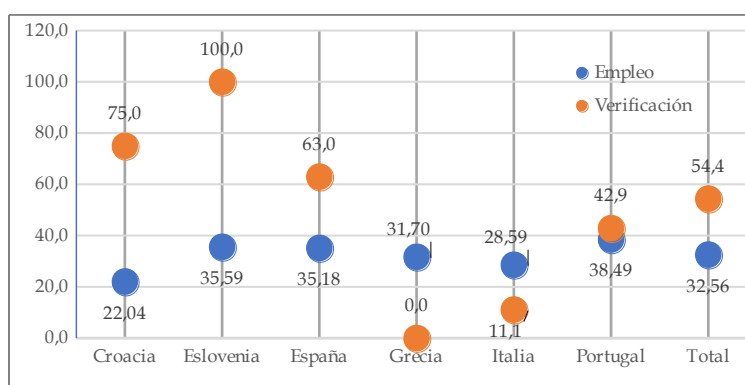
**Source:** Eurostat. Elaborated by the authors.

A comparison of the percentages by country of women with managerial responsibilities in active fact-checking initiatives (Table 5) with those corresponding to women in positions of responsibility in general (Table 7) shows that in most of them women's share is greater in fact-checking than in general employment (Figure 2). The exceptions are Greece and Italy.

If in the total employed population it is possible to estimate a percentage difference between genders of 10 percentage points in favor of men, while in people working in fact-checking initiatives this total percentage difference is 9 percentage points in favor of women, in the case of managerial positions this difference reaches 35 percentage points in the total employed population while in the case of personnel accounted for in the fact-checking initiatives under analysis it is again 9 percentage points in favor of women.

**Figure 2**

*Percentage of women in managerial positions: Employment and Fact-checking*



**Source:** Eurostat, Duke Reporters' Lab (2023) and websites. Elaborated by the authors.

## 5. CONCLUSIONS

The general objective of this research was to study the data fact-checking companies active in the southern countries of the European Union -Croatia, Slovenia, Spain, Greece, Italy and Portugal- from a gender perspective. On the basis of the data provided in the previous section, it is considered that the analytical work developed in this article has been adequate to achieve this. It is considered important to carry out comparative studies between these countries because they help to understand the impact of global factors on the socioeconomic development of nearby nations from a geopolitical point of view.

For this purpose, the Duke Reporters' Lab global census of 417 active initiatives in 2023 has been used, from which 20 initiatives with this geographic location have been selected using a proprietary categorization tested and used in similar studies and cross-checked with the data provided by the initiatives. The results have been further strengthened by observing these websites for one year to check the frequency of their publications and their authorship and, finally, they have been contacted to obtain information on their staff that was not publicly available.

Regarding Specific Objective 1 (SO1) -to know the data verification initiatives active in the countries of the South of the European Union- it can be seen that 9 of them can be qualified as independent, while 8 are linked to the media and 3 to NGOs, 45%, 40% and 5%, respectively, while the global data provided by the Reporter's Lab puts these percentages at around 23% for those operating independently, 60% for those

affiliated to media organizations and 12% linked to NGO. These differences may be due to the entrepreneurial approach that, in the first world, fact-checking initiatives have had, creating a new journalistic market niche. The evolution of the number and consistency of these companies will have to be watched as the trend seems to be the widespread adoption of data fact-checking by journalists, other researchers and experts both independent and affiliated with government groups, which has expanded the number of people doing fact-checking, but has created less need for specific organizations dedicated to this task.

Over three-quarters of these initiatives are affiliated with European and international fact-checking organizations (IFCN, EDMO and EFCSN) and are signatories to their codes of good practice, showing an active commitment to the fight against disinformation. This result is in line with the indicators of the first specific objective of this research –aimed at establishing similarities between the countries under study– and makes it possible to affirm the existence of shared protocols in the south of the European Union. However, some differences have been found between the states, as detailed in the results section.

With regard to the second specific objective (SO2) - aimed at studying the representation of each gender in journalistic and management tasks in the fact-checking initiatives - the most important data found is that more than half of the personnel under study were women, 54% as opposed to 46%. This result is strongly undermined by the behavior of two of the six countries: Italy, with only 36% of women working in active fact-checking initiatives, and above all Greece, with only 8% of female presence. Thus for the rest of the countries, the percentages of men and women are 39% and 61%, which contrasts with total employment where 55% of the employed population are men compared to 45% of women.

It can be seen that more than half of the managers of these verification initiatives are women, a percentage that coincides with the total number of women employed in these initiatives. This suggests that women are occupying the proportion of space that corresponds to them in terms of numbers and skills, and even in their daring to lead innovative work paths, despite the fact that underrepresentation in leadership positions at a general level is still a barrier that has been pointed out in all scenarios (Lima-Souza et al., 2021).

These results are aligned with figures from Ibero-American countries (Montiel & Teruel, 2024) that account for 57% women and 43% men in the staff of active fact-checking initiatives in these countries. These data indicate that the new work spaces do not carry the sexist biases of traditional environments, offering women new lines of professional development without the traditional barriers (Dhiman, 2023) and the journalistic profession a necessary balance. As stated in the third specific objective, comparing the figures found with those of Eurostat, the new professional opportunities provided by these initiatives, except in Greece and Italy, represent a scenario of greater equality for women.

Therefore, the results of this comparative work in six southern European countries are in line with previous research in different geopolitical environments -Ibero-America- since similar results are achieved. These data allow, on the one hand, to validate the methodology used and, on the other hand, to affirm the potential of fact-checking initiatives as environments for advancing towards equality for women journalists, within the different roles of this profession. In the light of these results, it is worth considering a similar future work for different environments, such as Northern Europe, which would allow for an international comparison of great academic value.

It should be pointed out, as limitations of the research, that there are initiatives not included in the Duke Reporters' Lab and that it is advisable to regularly contrast the information on their staff published on their websites, since some of the positions show a frequent change of personnel.

## 6. REFERENCES

- Adair, B., & Stencel, M. (2020). *How We Identify Fact-Checkers*. Reporters' Lab. <https://reporterslab.org/how-we-identify-fact-checkers/>
- Aïmeur E., Amri, S., & Brassard, G. (2023). Fake news, disinformation and misinformation in social media: a review. *Social Network Analysis and Mining*, 13(30), 1-36. <https://doi.org/10.1007/s13278-023-01028-5>
- Amazeen, M. A. (2019). Practitioner Perceptions: Critical Junctures and the Global Emergence and Challenges of Fact-Checking. *International Communication Gazette*, 81(6-8), 541-561. <https://doi.org/10.1177/1748048518817674>
- Amazeen, M. A. (2020). Journalistic interventions: The structural factors affecting the global emergence of fact-checking. *Journalism*, 21(1), 95-111. <https://doi.org/10.1177/1464884917730217>
- Amazeen, M. A. (2023). The misinformation recognition and response model: an emerging theoretical framework for investigating antecedents to and consequences of misinformation recognition. *Human Communication Research*, 50(2), 218-229. <https://doi.org/10.1093/hcr/hqad040>
- Andersen J., & Søe, S.O. (2020). Communicative actions we live by: the problem with fact-checking, tagging or flagging fake news-the case of Facebook. *European Journal of Communication*, 35(2), 126-139. <https://doi.org/10.1177/0267323119894489>
- Cea N., Fernández Torres M. J., & Teruel Rodríguez, L. (2023). Tratamiento del fenómeno de la desinformación en la prensa española. Un análisis de su evolución. *Estudios sobre el Mensaje Periodístico*, 29(4), 881-891. <https://doi.org/10.5209/esmp.88087>
- Cohen, S. (16 de mayo de 2011). *The Reporter's Lab*. Internet Archive. Wayback Machine. <https://shre.ink/rxEc>



- Currie-Sivek, S., & Bloyd-Peshkin, S. (2018). Where Do Facts Matter? *Journalism Practice*, 12(4), 400-421. <https://doi.org/10.1080/17512786.2017.1307694>
- Chadwick, A. (2017). *The hybrid media system: Politics and power* (2<sup>a</sup> ed.). Oxford Studies in Digital Politics. New York. <https://doi.org/10.1093/oso/9780190696726.001.0001>
- Chung, M., & Kim, N. (2021). When I learn the news is false: how fact-checking information stems the spread of fake news via third-person perception. *Human Communication Research*, 47(1), 1-24 <https://doi.org/10.1093/hcr/hqaa010>
- Dhiman, B. (2023). Opportunities and Challenges for Women Journalist in Media Industry: A Critical Review. *TechRxiv*. <https://doi.org/10.2139/ssrn.4422097>
- Duke Reporters' Lab. (2023). *Fact-Checking*. <https://reporterslab.org/fact-checking/>
- EL MUNDO. (25 de julio de 2019). Bill Adair: "El 'fact checking' es lo más importante del periodismo en la era digital". <https://shre.ink/rxVV>
- European Digital Media Observatory (2023). Map of Fact-checking Activities in Europe. <https://edmo.eu/map-of-fact-checking-activities-in-europe/>
- European Fact-checking Standards Network. (2023). *Association*. <https://efcsn.com/association/>
- European Institute for Gender Equality. (2023). The proportion of women and men in decision-making posts in public broadcaster organisations. [https://eige.europa.eu/gender-statistics/dgs/indicator/bpfa\\_j\\_offic\\_j1\\_wmid\\_media\\_pbrc\\_exec/metadata](https://eige.europa.eu/gender-statistics/dgs/indicator/bpfa_j_offic_j1_wmid_media_pbrc_exec/metadata)
- Eurostat. (2023a). *Employment and activity by sex and age-annual data*. [https://doi.org/10.2908/LFSI\\_EMP\\_A](https://doi.org/10.2908/LFSI_EMP_A)
- Eurostat. (2023b). *Employment by sex, age, professional status and occupation*. [https://doi.org/10.2908/LFSA\\_EGAIS](https://doi.org/10.2908/LFSA_EGAIS)
- Fabry, M. (24 de agosto de 2017). Here's How the First Fact-Checkers Were Able to Do Their Jobs Before the Internet. *Time*. <https://time.com/4858683/fact-checking-history/>
- Funke, D. (2019). *Men outnumber women in U.S. newsrooms. It's no different among fact-checkers*. Poynter. <https://shre.ink/rxEd>
- Graves, L. (2016). Boundaries not drawn: Mapping the institutional roots of the global fact-checking movement. *Journalism Studies*, 19(5), 613-631. <https://doi.org/10.1080/1461670X.2016.1196602>

- Hallin, D., & Mancini, P. (2013). Comparing media systems' between Eastern and Western Europe. En P. Gross y K. Jakubowicz (Eds.), *Media Transformations in the Post-Communist World: Eastern Europe's Tortured Path to Change* (pp. 15-32). Lexington Books.
- Ilyash, O. I., Lupak, R. L., Smoliar, L. G., Khaustova, V., & Boiarynova, K. O. (2023). A Composition of Comparative characteristics of Social Policy of European Countries. *Business Inform*, 5(544), 24-32. <https://doi.org/10.32983/2222-4459-2023-5-24-32>
- Instituto de la Mujer. (2023). *Indicadores de género. Tipología*. Junta de Andalucía. <https://shre.ink/rxEn>
- International Fact-Checking Network. (2023). *Verified signatories of the IFCN code of principles*. <https://www.ifcncodeofprinciples.poynter.org/signatories>
- Kim, B., & Buzzelli, N. (2022). The Logics of Fact-Checking Website Operations. *Digital Journalism*. 1-24. <https://doi.org/10.1080/21670811.2022.2089707>
- Lee, S., Xiong, A., & Seo, H. (2023). "Fact-checking" fact checkers: A data-driven approach. *Harvard Kennedy School (HKS) Misinformation Review*. <https://doi.org/10.37016/mr-2020-126>
- Lima-Souza, E. C. P., Mota-Santos, C. M., & Carvalho Neto, A. (2021). De Operárias a Abelhas Rainhas: obstáculos que impactam a carreira das jornalistas. *E-Compós*, 24. <https://doi.org/10.30962/ec.2224>
- Macharia, S. (Ed.). (2021). *Who Makes the News?: 6th Global Media Monitoring Project*. Global Media Monitoring Project. <https://whomakesthenews.org/gmmp-2020-final-reports/>
- Magallón de Rosa, R. (2022). De las fake news a la polarización digital. Una década de hibridación de desinformación y propaganda. *Más poder local*, 50, 49-65. <https://doi.org/10.56151/maspoderlocal.120>
- Montiel, M. F., & Teruel, L. (2024). Iniciativas de verificación de datos en el ámbito latinoamericano. Un análisis sexo/género. *Doxa Comunicación. Revista Interdisciplinar de Estudios de Comunicación y Ciencias Sociales*, 38. <https://doi.org/10.31921/doxacom.n38a1953>
- Newman, N. (2023). *Overview and key findings of the 2023 Digital News Report*. <https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2023/dnr-executive-summary>
- Parlamento Europeo. (2018). *Informe sobre igualdad de género en los medios de comunicación en la Unión*. [https://www.europarl.europa.eu/doceo/document/A-8-2018-0031\\_ES.html](https://www.europarl.europa.eu/doceo/document/A-8-2018-0031_ES.html)

- Pérez-Curiel, C., & Casero-Ripollés, A. (2023). La lucha contra la desinformación en la sociedad post-pandemia: un reto para el periodismo y más allá. *Espejo de Monografías de Comunicación Social*, 11, 83-98. <https://doi.org/10.52495/c4.emcs.11.p98>
- Reuters Institute. (2023). *Mujeres y liderazgo en los medios informativos en 2023: evidencias de 12 mercados.* <https://shre.ink/rxwe>
- Singer, J. B. (2018). Fact-checkers as entrepreneurs: Scalability and sustainability for a new form of watchdog journalism. *Journalism practice*, 12(8), 1070-1080. <https://doi.org/10.1080/17512786.2018.1493946>
- Singer, J. B. (2021). Border patrol: The rise and role of fact-checkers and their challenge to journalists' normative boundaries. *Journalism*, 22(8), 1929-1946. <https://doi.org/10.1177/1464884920933137>
- Tanvir, A. A., Mahir, E. M., Huda, S. M. A., & Barua, S. (2020). A Hybrid Approach for Identifying Authentic News Using Deep Learning Methods on Popular Twitter. En *Threads. 2020 International Conference on Artificial Intelligence and Signal Processing (AISP)* (pp. 1-6). IEEE. <https://doi.org/10.1109/AISP48273.2020.9073583>
- Tchakounté F., Faissal A., Atemkeng M., & Ntyam A. A. (2020). A reliable Weighting Scheme for the Aggregation of Crowd Intelligence to Detect Fake News. *Information*, 11(6). <https://doi.org/10.3390/info11060319>
- UNESCO. (2023). *Acceso y participación de las mujeres en los avances tecnológicos.* <https://www.unesco.org/es/artificial-intelligence/gender-equality>
- UNESCO, & IPSOS Group (2023). *Survey on the impact of online disinformation and hate speech.* <https://shre.ink/rxNK>
- United Nations Entity for Gender Equality and the Empowerment of Women. (2018). *Turning Promises into Action: Gender Equality in the 2030 Agenda for Sustainable Development.* UN Women Headquarters Office. <https://shre.ink/rxNX>
- Vandenbroucke, F. (2017). Comparative social policy analysis in the EU at the brink of a new era. *Journal of Comparative Policy Analysis: Research and Practice*, 19(4), 390-402. <https://doi.org/10.1080/13876988.2016.1168618>
- Zippia. (2023). *Fact Checker Demographics and statistics in the US.* <https://www.zippia.com/fact-checker-jobs/demographics/>

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- Quian, A. (2023). (Des)infodemia: lecciones de la crisis de la covid-19. *Revista de Ciencias de la Comunicación e Información*, 28, 1-23. <https://doi.org/10.35742/rcci.2023.28.e274>
- Sánchez González, M., Sánchez Gonzales, H. M., & Martos, J. (2022). Innovación editorial en redes sociales de los verificadores hispanos de la #CoronavirusFactCheck Alliance: contenidos y visión de sus responsables. *Revista Latina de Comunicación Social*, 80, 135-161. <https://doi.org/10.4185/RLCS-2022-1535>

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