

Fake news and its perception among Young Spaniards: the influence of socio-demographic factors

Las fake news y su percepción por parte de los jóvenes españoles: el influjo de los factores sociodemográficos



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Abstract:

Over the last five years, fake news has become a global phenomenon impacting global information flows. It is reasonable to think that young people are exposed to fake news the most, given that it is mainly disseminated through social media, and they are the main users of these applications. This study analyses young people's perception of fake news based on a representative sample of residents in Spain aged between 15 and 24 (n=1,068). We consider the frequency they receive fake news, the topics they refer to, the sources, and how they deal with them. We considered how socio-demographic factors such as gender, age, location, political ideology or educational level influence how they receive fake news. Among other findings, the results show that the higher the age and educational level, the higher the rates of verification and recognition of fake news. In addition, individuals living in large municipalities and those on the right of the ideological spectrum verify information less frequently and use less reliable sources than other young people.

Keywords:

Young people; Spain; fake news; social media; ideology.

Resumen:

Desde hace algo más de un lustro, las fake news se han convertido en un fenómeno global que incide de modo determinante en los flujos comunicativos mundiales. Dado que el canal prioritario a través del cual se difunden son las redes sociales, cabe pensar que los jóvenes, principales usuarios de estas aplicaciones, constituyen el colectivo más expuesto a ellas. En este trabajo se analiza, partiendo de un muestreo representativo de los individuos residentes en España de entre 15 y 24 años (n=1.068), la percepción que los jóvenes tienen de las fake news, atendiendo a la frecuencia con que las reciben, sus temáticas y fuentes más habituales y el modo en que se enfrentan a ellas, teniendo en cuenta cómo influyen en su recepción factores sociodemográficos como el sexo, la edad, el hábitat, la ideología o el nivel formativo. Entre otras constataciones, los resultados evidencian que cuanto mayor es la edad y el nivel formativo, mayores son las tasas de reconocimiento y verificación de noticias falsas; que es más habitual contrastar las informaciones entre los individuos que viven en grandes municipios; y que quienes se sitúan a la derecha del espectro ideológico verifican con menor frecuencia que el resto de jóvenes.

Palabras clave:

Jóvenes; España; fake news; redes sociales; ideología.

1. Introduction

Social Media have replaced the traditional media's role of providing news media globally (Newman et al., 2012; Nielsen & Schrøder, 2014; Bakshy et al., 2015; Gottfried & Shearer, 2017). In the case of Spain, the *Digital News Report.es* (Center for Internet Studies and Digital Life, 2022) shows that 23% of citizens prefer to access news content on social networks, to the detriment of the print press, radio or television. This rate reaches 47% for users aged 18 to 24, while those over 65 only access news content via social media in 9% of cases.

Young people rely the most heavily on networks for information (Marchi, 2012; Sveningsson, 2015; Kahne & Bowyer, 2017; Mihailidis & Viotty, 2017; Paskin, 2018) and access traditional media increasingly less (Vihalemm & Kõuts-Klemm, 2017; Bärtl, 2018). Access to mainstream news media content, especially among adolescents, is declining rapidly (Zhu & Procter, 2015; Thurman & Fletcher, 2017). Social media has become a substitute for television (Cunningham & Craig, 2017; Himma-Kadakas et al., 2018). The root of networks' mass appeal is due to young people's widespread feeling that the media do not address issues that are important to them (Férdeline, 2021), which Casero-Ripollés (2012) and Yuste (2015) already noted a decade ago. These authors also identified that Millennials profoundly disagreed with how they are reflected in the press.

For over five years, fake news has simultaneously become a global phenomenon that has significantly impacted the world's information flows. Given that its primary means of dissemination are social networks (Blanco et al., 2021), it is likely that young

people are the group most exposed to it (Children's Commissioner, 2017; Anderson & Jiang, 2018; Smith & Anderson, 2018), and consequently, they may be adversely affected in the medium and long term.

In this paper, we analyse young Spanish people's perception of fake news; we focus on how they deal with it and how sociodemographic factors such as gender, age, location, political ideology or educational level influence how they receive it.

1.1. Fake news, a phenomenon on the rise in the world news ecosystem

Fake news is a widespread information dysfunction that sometimes decisively affects public opinion and collective decision-making. Just over five years ago, the phenomenon began to gain media coverage (Zimdars & McLeod, 2020; Baptista et al., 2021). Competition between fake news has been demonstrated in political processes such as the 2016 Brexit referendum (Bastos & Mercea, 2017; Grice, 2017; Blanco-Alfonso, 2020), the U.S presidential elections won by Republican front-runner Donald Trump (Allcott & Gentzkow, 2017; Bakir & McStay, 2018; Bovet & Makse, 2019; Magallón, 2019a), the Catalanian referendum 1-0 in 2017 (Alandete, 2019), the 2018 Brazilian presidential elections won by Bolsonaro (Oliveira & Rossi, 2018) or the two 2019 general elections in Spain (Magallón, 2019b), among other relevant events.

Since 2016, the effects of fake news have also been demonstrated in areas such as education, economics, science and especially medicine, in this case, in the wake of the global health crisis- the coronavirus pandemic SARS-Cov-2- (Brennen et al., 2020; Masip et al., 2020; Paniagua et al., 2020; Sánchez-García, 2021; Franceschi & Pareschi, 2022; Ho, Goh & Leun, 2022).

In the scientific literature, there is still a disparity in criteria as to the limits of the phenomenon (Kapantai et al., 2020; Baptista & Gradim, 2022; García-Marín & Salvat-Martinrey, 2022): according to Tandoc et al. (2021: 111), the term is "complex and somewhat controversial due to the wide variety of ways it is used". Although there is no consensus on its definition, we understand fake news as those messages produced by the media that are created and disseminated to cause harm, confuse and misrepresent (Wardle & Derakhshan, 2017).

Fake news usually relies on journalistic codes (Lazer et al., 2018; Canavilhas, Colussi & Moura, 2019; Blanco-Alfonso, 2020; Tandoc et al., 2019; Baptista et al., 2021; Tandoc et al., 2021) that make these messages plausible and difficult to detect, so they are often spread more quickly and disseminated widely than if they were truthful information (Vosoughi et al., 2018). This can be inferred from several studies that point out the multiplicity of channels through which fake news is disseminated simultaneously (Salaverría et al., 2020; López-Martín et al., 2021; Tandoc et al., 2021; Imaduwege et al., 2022; Raponi et al., 2022).

The influence of fake news can be powerful, as Bastick (2021: 1) points out; although the effects of misinformation are "small at the individual level", the sum of these can be "enough to cause large-scale effects". Szfgvb

According to Allcot and Gentzkow (2017), there are two main reasons for producing fake news. On the one hand, fake news has economic gain since when it goes viral, it gains high advertising profits every time the parent websites are visited. On the other hand, ideologically speaking, fake news aims to discredit politicians or institutions that oppose the entity generating the message (Del Fresno-García, 2019). Gómez-Calderón et al. (2020) add a third reason, the strategic driver, as institutions or countries produce fake news to reinforce their position or weaken that of their opponents.

Fake news has become one of the research areas attracting the most attention among academics due to its overall strength and the serious challenges it poses (García-Galera, Blanco-Alfonso & Tejedor, 2019; García-Marín & Salvat-Martinrey, 2022). This is reflected by the vast repertoire of papers focused on the typology of fake news, among others (García-Galera, Del-Hoyo-Hurtado & Blanco-Alfonso, 2020), the characterisation and analysis of fake news linked to case studies (Brennen et al., 2020; Salaverría et al., 2020; López-Martín et al., 2021), the dissemination of fraudulent news content (Vosoughi et al., 2018), cognitive biases when receiving fake news (Schwarz & Jalbert, 2021; Newman & Zhang, 2021; Van-der-Linden & Roozenbeek, 2021), options to neutralise its potential adverse effects (Bosworth, 2019; Fletcher et al., 2020; Vraga et al., 2020; García-Marín & Salvat-Martinrey, 2022) or the importance of verification platforms and collaborative journalism in mitigating the influx of misinformation (Magallón, 2018; Pérez-Curiel & Velasco, 2020; López-Martín & Córdoba-Cabús, 2021), among other aspects.

It is difficult to categorically affirm citizens' capacity to identify fake news since it is primarily conditioned by their tendency to overestimate their ability to discern misleading content, known as the Dunning-Kruger effect (Gómez-Calderón et al., 2020). Age and political affiliation seem to influence how fake news is interpreted and reactions to it: thus, according to Guess et al. (2019), users identifying as conservatives or extreme right-wing and those over 65 are more likely to share this type of content on their social networks (Guess et al., 2019).

According to the “Eurobarometer Standard 96. Public Opinion in the European Union” (European Commission, 2022), while 70% of E.U. inhabitants claim to find false information on the Internet frequently, only 62% feel prepared to detect it (the figures are even less encouraging in Spain, 81% and 54%, respectively). Therefore, we are facing a large-scale collective challenge, which can only be addressed through sustained media literacy work, the best tool for training citizens to be critical of media messages (Caldeiro & Aguaded, 2015). In this sense, the national and international secondary and university education initiatives are timely (cf. Auberry, 2018; Musgrove et al., 2018; Ranieri, 2018; Kaufman, 2019; Cebrián, 2019; y Valverde et al., 2022).

1.2. Young people faced with fake news

Social networks are a natural channel for young people to socialise and learn about their environment, making them privileged agents –albeit unwittingly– in spreading fake news. As Incibe (2019) highlights, they do not hesitate to share content if it grabs their attention, sometimes extensively, without assessing whether the information is reliable or even knowing it is not. Fake news is highly persuasive for young people. Wineburg et al. (2016) conducted interviews with Stanford undergraduates and concluded that most trust fake sources and content more than mainstream media news.

According to several authors (Hargittai et al., 2010; Wineburg & McGrew, 2016; McGrew et al., 2017; McGrew et al., 2018), although young people are digital natives, it does not guarantee that they can identify fake news and several experiments confirm this. Leeder (2019) worked with a sample of students between 19 and 24 who had to identify fake news among a set of online texts that included true news items. This work demonstrated how difficult it is to detect them, as the rate of incorrect answers was 40%. According to this author, fake news can be identified depending on the time taken to evaluate them, analyse the websites or accounts where they appear, and contrast information with an alternative source, which users do not usually do.

Over the last five years, young people's perception of fake news has been extensively analysed. In many cases, studies have worked with biased samples made up exclusively of university students, who are considered more prepared to identify and dismiss hoaxes. In fact, on average, García, Sanjuán and Maza (2021) estimate that 53.9% of university students have a medium or high level of ability to detect fraudulent content. There is a wide gap in compulsory education among students; according to credibility tests the group has undertaken, fake news is rarely doubted (cf. Leu et al., 2007; Loos et al., 2018; Pilgrim et al., 2019; Dumitru, 2020).

In Spain, we generally work with sparsely representative convenience samples, so the proportion of fake news recognition varies. Martín-Herrera and Mocaletto (2021) find that 73.7% of young people consider themselves somewhat prepared to detect this type of content, while Mendiguren et al. (2020) found that it was 80% (in both cases, the respondents are university students). Other equally recent studies (Pérez et al., 2021; Pérez et al., 2021; Pérez and Pedrero, 2021; De Vicente et al., 2021) find significantly lower rates of identifying fake news, between 57% and 59%.

Young Spaniards' sources for fake news are clear: mainly WhatsApp and Facebook, and to a lesser extent, Twitter and Instagram, in other words, only social networks (cf. Pérez et al., 2021; Resende et al., 2019; Herrero et al., 2020; Mendiguren et al., 2020). Regarding the most frequent fake news topics, politics monopolised a large part of this content, although it alternated with paradoxical information and supposed news related to events, culture and health (Pérez & Pedrero, 2021; Tejedor et al., 2021)¹. Some studies investigate the reasons young people detect fake news; among those are the social alarm they generate, the attractiveness of their headlines, the surprising nature of the content, their media source, or, often, the lack of logic in the story (De Vicente et al., 2021; Tejedor et al., 2021).

Finally, once young people detect false content, they discard it, share it and verify it depending on the case. The latter behaviour is optimal but not as widespread as desirable. As far as we know, the use of fact-checking services is still incipient: in Spain, for example, 61.1% of young people are unaware of them, and the remainder have only used them once (Pérez & Pedrero, 2021). Also, in De Vicente et al. (2021), the rate of respondents who claim to check for possible fake news by default is less than 40%. In contrast, Catalina et al. (2017), Catalina et al. (2019), and Gómez-Calderón et al. (2020) find that verifying dubiously credible news is almost as widespread as its reception (90% of incidences) among young users aged under 24. The disparity of the samples we work with explains the lack of agreement between some results and others, as in the case of the ability to detect fake news.

2. Method

The literature review was a starting point for this study; it was primarily designed to determine fake news' impact on young Spaniards aged between 15 and 25, according to how they perceived it. Regarding the research subgoals, the authors set out to determine how often fake news is received on social networks and instant messaging applications (O1), identify the most common source (O2) and analyse young people's reactions to this unreliable information, how often they use alternative

¹ In other countries, alongside politics there are issues such as sport (caso de Portugal; cf. Figueira & Santos, 2019; Sobral & De Morais, 2020) or violence (Colombia: Carballo & Mallorquín, 2020).

sources to contrast the information and the nature of the entities they use to verify the contents (O3). This was done by considering respondents' sociodemographics to detect any significant divergences in the records. Ultimately, the aim was to identify factors affecting young audiences' perception of fraudulent information and reaction to establish effective deactivation strategies.

The questionnaire technique was applied to achieve the proposed objectives, the Spanish population aged between 15 and 24 was taken as the universe, which is 4 831, 504 people on 1 January 2021 (INE, 2021). The starting point was a national sample proportional to the strata of the population under study. Estimating weighting coefficients were applied since it was impossible to reach reasonable quotas for gender, age and province. The confidence level was set at 95% with a limit of 1 066 surveyed (1,068 were obtained, 100.1% of the total), and the margin of error was +/-3%.

The weighting coefficients were applied to the initial sample, which consisted of 52.2% women, and 47.8% men, with an average age of 21.8 (ME=22; DT=2,05), grouped into intervals between 15 and 19-year-olds (14.3%) and between 20 and 24 (85,7%). Most had completed secondary education, corresponding to higher levels of ESO (Third and Fourth year in the Spanish education system). Baccalaureate or Higher Vocational Training (50.2%). Table 1 shows the sample distribution according to gender, educational level and autonomous community.

Table 1. Distribution of the sample

Level of education	Total	Men	Women
No studies ²	0.7%	1.0%	0,5%
First Grade	0.7%	0.6%	0,7%
Second Grade. 1st cycle	3.5%	4.5%	2,5%
Second Grade. 2nd cycle	50.2%	51.5%	49,0%
Third Grade. 1st cycle	12.6%	15.3%	10,2%
Third Grade. 2nd cycle	23.9%	20.9%	26,6%
Third Grade (Master)	7.9%	5.9%	9,7%
Third Grade (Doctorate)	0.6%	0.4%	0,7%
Provinces			
Andalusia	18.4%	9.7%	8.6%

2 The educational levels are as follows: No studies= has not completed primary education; First Grade= completed primary education, Second Grade 1st cycle= 1st and 2nd ESO (Year 7 and 8); Second Grade 2nd Cycle=completed until Year 10 (ESO), intermediate vocational training or Baccalaureate; Third Grade 1st Cycle= technical engineering, high school diploma or higher vocational training; Third Grade 2nd Cycle= Bachelor's degree, degree or higher engineering.

Aragon	3.1%	1.3%	1.8%
Asturias, Principality of	2.2%	0.7%	1.5%
Balearic, Islands	1.9%	0.7%	1.2%
Canary Islands	4.1%	2.3%	1.8%
Cantabria	1.2%	0.5%	0.7%
Castilla y León	5.1%	2.2%	3.0%
Castilla – La Mancha	4.1%	2.0%	2.2%
Catalonia	16.4%	7.9%	8.5%
Community of Valencia	10.8%	5.1%	5.6%
Extremadura	2.5%	1.1%	1.4%
Galicia	5.7%	2.4%	3.3%
Madrid, Community of	14.3%	7.5%	6.8%
Murcia, Region of	3.5%	1.7%	1.8%
Navarra, Comunidad Foral de	1.6%	0.9%	0.7%
The Basque Country	4.1%	1.4%	2.7%
Rioja, La	0.7%	0.2%	0.5%
Ceuta	0.1%	0.1%	-
Melilla	0.2%	0.1%	0.1%

Source: prepared by the authors

The questionnaire consisted of ten questions, with single and multiple choice questions, and was provided online by a demoscopic company between 27 October and 6 November 2021. It was carried out through a random distribution system among people with previously defined profiles and characteristics from a research panel.

For the descriptive and inferential analyses, we worked with the SPSS statistic software (V25.0), which allowed us to check the association between independent and dependent variables of the study³ based on the data matrix generated with the records obtained. Pearson's chi-square test statistic (X^2) was calculated to decide whether the variables were statistically independent or there was a relationship between them, applying Yates continuity correction (X^2_y) if there was a degree of freedom. Subsequently, the corrected standardised residuals were analysed to obtain a detailed record of the associations (when chi-squared was significant). This analysis allowed us to specify the direction of the association and detect the values that would contribute most to the value of the statistic. Finally, we evaluated the intensity or magnitude of the relationship (Effect, Size, E.S.), which was assessed by selecting the appropriate statistic according to the measurement level of the variables- nominal, ordinal, metric or interval-.

3. Results

The findings below emphasise the relationships identified between the study's dependent and independent variables, which proved significant in many cases.

3.1. Frequency of receiving fake news and the most common topics

The data shows that Spanish adolescents and young people between 15 and 24 believe they frequently receive fake news through social networks where they have an account (table 2). Only 6.6% of the surveyed express that they are not exposed to this type of content, as opposed to the vast majority (93.4%) who say they receive it at least several times a month, and in almost half the cases (46.7%), weekly.

Table 2. Frequency of receiving fake news

	Frequency	Percentage
Several times a day	71	6.6%
Every day	150	14.0%
Several times a week	264	24.7%
Once a week	352	22.0%
Several times a month	226	21.2%

3 There were seven independent variables: interviewees' age, sex, province, location, level of education, occupation and political ideology.

Never	122	11.4%
Total	1.068	100.0%
Mean = 3.71; Standard deviation = 1.41		

Source: prepared by the authors

According to the chi-square test of independence, both the educational level (TE=0.226) and the respondents' age (TE=0.105) seem to influence the frequency with which they receive fraudulent information. In this sense, we can affirm that young people with secondary or tertiary studies [χ^2 (35, N=1.068) = 54,693, $p < 0.05$] and those in the 14 to 19 age bracket [χ^2 (5, N=1,068) = 11,738, $p < 0.05$] are the most exposed to fake news based on their own perception.

Respondents usually receive fake news related to political issues (29.6%). This is followed by information on public figures' activities (20.6%), events (16.7%), health (11.8%), economy (7.45), sports (5.1%), video games (4.4%), culture (4.2%) and others (0.1%).

The chi-square test statistic reveals a significant association between the fake news topics and the respondents' sex (TE=0.268). Once the corrected standardised residuals were analysed, we found that the proportions are divergent [χ^2 (8, N=946) = 67.712, $p < 0.05$] except for economics and health: men receive more political (33.1%) sports (8.3%) and video game (7.4%) content, and women, more content about Society (26.7%), events (19.4%) and culture (5.6%) (Table 3).

Table 3. Fake news topics, according to respondents

	Sports	Society	Politics	Economics	Culture	Events	Health	Videogames	Others	Total
Men	8.3%	13.9%	33.1%	8.1%	2.7%	13.6%	13.0%	7.4%	0.0%	100%
Women	2.2%	26.7%	26.5%	6.8%	5.6%	19.4%	10.8%	1.8%	0.2%	100%
χ^2 (8, N=946) = 67,712, $p < 0.05$										

Source: created by the authors

3.2. Sources of fake news

Spanish youth aged between 15 and 24 say that they receive fake news mainly through social networks such as WhatsApp (25.9%) and Twitter (21.6%), although they also obtain it from general media (19.9%). To a lesser extent, this content comes from YouTubers or influencers they follow (10.7%), social networks other than those already mentioned, such as Instagram or Facebook (9.6%), family and friends (6.1%) and online videos (5.5%).

The chi-square test shows a significant dependence between the source of the fake information and the educational level (TE=0.249), ideological stance (TE=0.157) and gender (TE= 0.137). Regarding the educational level of respondents (table 4), the individuals with first-degree studies perceive more fake news in the general media (50% of responses). At the same time, those enrolled in a doctoral program state that this type of content originates on social networks (60%).

Table 4. The source of fake news according to respondents' educational level

	Media	WhatsApp	Twitter	YouTube	YouTubers/ influencers	Family or friends	Other social network	Total
No studies	0.0%	50.0%	0.0%	50.0%	0.0%	0.0%	0.0%	100%
First Grade	50.0%	33.3%	0.0%	0.0%	16.7%	0.0%	0.0%	100%
Second Grade. 1st cycle	18.5%	18.5%	11.1%	14.8%	18.5%	0.0%	18.5%	100%
Second Grade. 2nd cycle	19.9%	25.4%	21.4%	5.5%	11.9%	5.5%	10.4%	100%
Third Grade. 1st cycle	19.5%	22.0%	22.0%	7.6%	10.2%	11.0%	7.6%	100%
Third Grade. 2nd cycle	19.1%	28.0%	24.2%	3.8%	8.9%	7.6%	8.5%	100%
Third Grade (Master)	20.5%	29.5%	21.8%	2.6%	7.7%	10.3%	7.7%	100%
Third Grade (Doctorate)	40.0%	20.0%	0.0%	0.0%	0.0%	0.0%	40.0%	100%
$\chi^2 (42, N=946) = 58,596, p<0.05$								

Source: prepared by the authors

The data corroborates the differences in young people's ability to identify the source of fake news in relation to those who position themselves ideologically and those who do not share a specific ideology or show no interest in politics [$\chi^2 (6, N=946) = 23,257, p<0,05$]. In this sense, those identifying with specific ideas seem to receive more fake news from the media (20.9%). In comparison, those who are "apolitical" are more likely to receive it through social networks such as Instagram or Facebook (21.6%).

The main gender differences (table 5) lie in how misleading information is received via Twitter, YouTubers, and other social networks [$\chi^2 (6, N=946) = 17.881, p<0.05$]: women appear to receive more fake news from influencers (12.6%) and other social media (11.8%), while men more often identify Twitter as a source of misinformation (25.7%).

Table 5. Source of fake news according to the respondents' sex

	Media	WhatsApp	Twitter	YouTube	YouTubers/ influencers	Family and friends	Other social network	Total
Men	20.6%	25.7%	25.7%	6.3%	8.5%	6.0%	7.2%	100%
Women	19.2%	26.1%	17.8%	4.8%	12.6%	7.6%	11.8%	100%
								$\chi^2 (6, N=946) = 17,881, p<0,05$

Source: created by the authors

3.3. Verifying fake news

Many young Spaniards between 15 and 24 say they check news from social networks if they suspect their reliability (79.6%). In 35.4% of the cases, they corroborate them “sometimes” and “usually” in 26.6% and “always” in 17.6%. At the other end of the spectrum are those who do not verify anything (20.4%): 14% say they do “rarely”, while 6.4% never do so.

This is significantly influenced by ideological position (TE=0.314), educational level (0.294), place of residence (TE=0.169) and age (TE=0.131). The data show that individuals that lean to the right or extreme-right contrast information only sporadically. On the other hand, respondents with a left-wing ideology have an opposing attitude, as they check possible fake news regularly or always (Table 6).

Table 6. Frequency of contrasting information according to respondents' ideological position

	Never	Rarely	Sometimes	Usually	Always	Total
0 (extreme left-wing)	12.9%	6.5%	32.3%	22.6%	25.8%	100%
1	0.0%	2.9%	32.4%	29.4%	35.3%	100%
2	3.2%	6.4%	31.2%	36.0%	23.2%	100%
3	3.4%	14.1%	30.2%	34.9%	17.4%	100%
4	6.0%	11.9%	40.5%	26.2%	15.5%	100%
5	4.2%	18.3%	38.7%	21.8%	16.9%	100%
6	2.7%	12.2%	47.3%	18.9%	18.9%	100%

7	3.1%	20.0%	41.5%	24.6%	10.8%	100%
8	7.0%	17.5%	35.1%	29.8%	10.5%	100%
9	8.3%	0.0%	66.7%	16.7%	8.3%	100%
10 (extreme right-wing)	12.5%	13.6%	36.2%	28.0%	17.7%	100%
$\chi^2 (40, N=789) = 77,753, p<0.05$						

Source: created by the author.

Furthermore, the chi-square test statistic and the corrected standardised residuals analysis reveal that the higher the level of education, the more frequently suspicious information is checked (Table 7). This evidence is reinforced by significant combinations such as having no studies, never checking information, being enrolled in a doctoral programme, and constantly checking. Similarly, age has an impact on the frequency of checking [$\chi^2 (4, N=1,068) = 18.623, p<0.05$]; thus, most young people aged between 20 and 24 years check information more frequently than those between 15 and 19.

Table 7. Frequency of contrasting information according to the educational level of respondents

	Never	Rarely	Someti- mes	Usually	Always	Total
No studies	37.5%	25.0%	12.5%	12.5%	12.5%	100%
First Grade	42.9%	0.0%	57.1%	0.0%	0.0%	100%
Second Grade. 1st cycle	27.0%	10.8%	35.1%	16.2%	10.8%	100%
Second Grade. 2nd cycle	6.3%	16.6%	36.6%	24.1%	16.4%	100%
Third Grade. 1st cycle	5.9%	9.6%	30.4%	33.3%	20.7%	100%
Third Grade. 2nd cycle	2.4%	12.5%	38.0%	29.4%	17.6%	100%
Third Grade (Master)	4.8%	9.5%	31.0%	32.1%	22.6%	100%
Third Grade (Doctorate)	0.0%	33.3%	0.0%	16.7%	50.0%	100%
$\chi^2 (28, N=1.068) = 92,549, p<0,05$						

Source: created by the authors

These results are similar to the ones regarding the respondents' location (Table 8). Individuals residing in more populated municipalities tend to frequently turn to alternative sources if they suspect the veracity of the news item; in fact, 24.5% of young people aged 15 to 24 residing in cities of more than 100 000 inhabitants confirm that they "always" verify unreliable content. This percentage drops to 11.9% in populations with less than 10 000 inhabitants.

Table 8. Frequency of contrasting information according to the size of respondents' location

	Never	Rarely	Sometimes	Usually	Always	Total
Less than 10.000 inhabitants	8.2%	19.4%	40.3%	20.1%	11.9%	100%
10.001-20.000 hab.	6.6%	16.8%	39.8%	21.3%	15.6%	100%
20.001-50.000 inhabitants.	5.7%	12.0%	34.7%	31.0%	16.7%	100%
50.001-100.000 inhabitants.	5.6%	14.0%	29.8%	32.6%	18.0%	100%
Más de 100.000 inhabitants.	6.6%	10.4%	33.0%	25.5%	24.5%	100%
$\chi^2 (16, N=1.068) = 30,608, p<0,05$						

Source: created by the author

3.4. Sources used to verify fake news

Specialised websites are the most used resource to check the information that young people consider unreliable (60.3% of incidents). To a lesser extent, they use general media (25.6%), family and friends (7.5%) and YouTubers or influencers (6.6%). The chi-square test indicates that this variable is significantly affected by the individual's educational level (TE=0,277), political ideology (TE=0,255) and gender (TE=0,109). Table 9 shows respondents who have no studies or are taking the initial education stages regularly rely on YouTubers, influencers, family, and friends to check information. In contrast, those with a higher level of education (baccalaureate, undergraduate, master's, and doctorate degrees) prefer to visit specialised websites.

Table 9. Sources of contrasting information according to the respondents' level of education

	The Media	Specialised Websites	Youtubers or influencers	Family or Friends	Total
No studies	20.0%	0.0%	40.0%	40.0%	100%
First Grade	0.0%	25.0%	75.0%	0.0%	100%
Second Grade. 1st cycle	29.6%	44.4%	14.8%	11.1%	100%
Second Grade. 2nd cycle	25.3%	61.2%	5.6%	8.0%	100%
Third Grade. 1st cycle	18.1%	64.6%	11.0%	6.3%	100%
Third Grade. 2nd cycle	28.5%	62.2%	3.2%	6.0%	100%
Third Grade (Master)	31.1%	53.8%	6.3%	8.8%	100%
Third Grade (Doctorate)	16.7%	50.0%	33.3%	0.0%	100%
					$\chi^2 (3, N=1000) = 11,963, p<0,05$

Source: created by the authors

On the other hand, the respondents' ideological positioning seems to influence how the news is checked [$\chi^2 (30, N=754) = 49.030, p<0.05$]. Thus, despite detecting numerous differences between groups, the analysis of corrected standardised residuals reinforces the association between right-wing individuals and the verification of questionable content through family and friends.

Gender also seems to influence this variable (table 10). The frequency with which men and women turn to YouTubers and family and friends to verify possible fake news differs significantly, as these two channels are more common among young men.

Table 10. Sources of contrasting information according to respondents' sex

	The media	Specialised websites	Youtubers or influencers	Family or friends	Total
Men	23.8%	58.1%	8.7%	9.4%	100%
Women	27.2%	62.3%	4.7%	5.8%	100%
$\chi^2 (3, N=1000) = 11,963, p<0,05$					

Source: created by the authors

3.5. Ability to recognise fake news

Finally, young Spaniards generally consider themselves capable of detecting fake news (table 11). On a scale of 1 to 5, with 1 being “minimum ability” and 5 “maximum ability,” only 10.6% of respondents chose lower scores (values 1 and 2). On the other hand, 46.4% consider that they are more than sufficiently able in this area (values 4 and 5).

Table 11. Respondents' ability to identify fake news

	Frequency	Percentage
1 (minimum ability)	28	2.6%
2 (low ability)	85	8.0%
3 (medium ability)	460	43.1%
4 (highly ability)	397	37.2%
5 (maximum ability)	98	9.2%
Total	1.068	100.0%
Mean = 3,42; Standard deviation = 0,863		

Source: created by the authors

The results of the chi-square test statistic show associations between the ability to perceive misleading content and respondents' ideology (TE=0,277) and gender (TE=0,168). Examination of corrected standardised residuals shows that the strength of the association is determined by young people with a clear extreme-right-wing position and their perceived high ability to detect hoaxes [$\chi^2 (40, N=789) = 60.330, p<0.05$]. The analysis also shows that the male segment of the population

values their discernment of fake news more positively than the female segment [$\chi^2(4, N=1,068) = 29.968, p < 0.05$], since 54% of men consider themselves “highly skilled” at identifying them, compared to only 39.4% of women.

4. Discussion and conclusions

There can be little doubt that fake news is a crucial ingredient- unnoticed, unwanted, but ubiquitous- in the population’s media diet. In this research, the authors have tried to obtain an accurate X-ray of adolescent and young Spaniards’ perception of their exposure to fake news based on a broad and representative sample.

They frequently receive fake news via social networks and instant messaging applications (O1). Almost all respondents receive misleading information (93.4%) at least once a month, and two-thirds receive it weekly. The phenomenon is therefore perceived to be widespread.

The incidence differs according to some independent variables: the results reveal that the higher the level of education, the more often fake news is received. Perhaps this is because those with appropriate cognitive tools question messages’ veracity to a greater extent than those with a lower level of education, so they are more aware of being misinformed.

Secondly, the aim was to identify the predominant topics and origin of fake news (O2) received by young Spaniards. It was in this order, politics, and Society –information about social figures–. This is in line with Vosoughi et al. (2018), Catalina et al. (2019), Mendiguren et al. (2020), Pérez and Pedrero (2021), and Tejedor et al. (2021), who determined that the most frequent subject of fraudulent content circulating on the Internet by far, is politics.

In this aspect, the analysis of independent variables reveals differences according to the respondents’ sex: there are subjects with a more significant impact among women (Society, and to a lesser extent, news and culture), and other topics whose impact is higher than in male audiences (particularly politics, and to a lesser extent sports and videogames).

The social networks Whatsapp and Twitter are identified as the primary source of fake news by a significant segment of young Spaniards, which partially coincides with the results obtained by Resende et al. (2019), Herrero et al. (2020), Mendiguren et al. (2020) and Pérez et al. (2021), who ranked Facebook as the second most common channel for disseminating fake news. The media closely follows social media, likely explained by the declining credibility of traditional newspapers and broadcasters, whose content is increasingly distrusted by post-Millennials.

Finally, we set out to characterise young people’s behaviour when dealing with false information (O3). As Catalina et al. (2017) y Catalina et al. (2019) showed, verifying unreliable news in this population segment seems almost as widespread as its reception since it reaches 80% of the sample, and this is especially true among those who are older, more educated and live in densely populated areas, which seems logical. Ideology also emerges as a significant variable: individuals who declare themselves right-wing check less frequently than those on the centre-left and left.

The overall rate obtained here coincides with Mendiguren et al. (2020) and Martín-Herrera and Mocaletto (2021) but not with Pérez et al. (2021), Pérez et al. (2021), Pérez and Pedrero (2021) and De Vicente et al. (2021). Still, as our research is based on a national survey applied to a representative sample of the young population, it seems logical that there are divergences regarding the results obtained by studies that work with a smaller number of individuals.

Specialised websites and conventional media are the most frequently consulted for verifying questionable content. Again differences can be detected in this section according to educational level. Thus, young people with a lower education level opt for influencers and family and friends as a source of verification, while more educated individuals prefer to consult specialised websites. The same verification channels that we consider non-professional (YouTubers and the personal environment) are also more frequent among men than women and those on the right of the political spectrum than those who identify with the center-left or the left.

Finally, it is clear to the authors that an eminently quantitative study like the one presented here does not cover key aspects. Therefore, with a view to future research, it would be advisable to delve into the psychological mechanisms that fake news activates in young people, the traits that allow them to be detected, and the skills needed to recognise and discard them.

In this sense, to nullify the persuasive capacity of fraudulent information and to hamper its massive dissemination, it is necessary to promote (this is understood by almost all professionals and academics who have addressed this issue) the population's media literacy. This is the only way to prevent fake news from continuing to taint public debate and degrade the scaffolding of our democracies, perhaps irreversibly.

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