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Factors affecting the probability of sharing political  
fake news online

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## **Abstract**

Drawing on recent literature on fake news, this working paper sheds light on the demographic factors and situational predictors that influence the probability to share political fake news through social media platforms. By using a representative sample of 1,002 US adults from the Pew Research Center, the results of the logistic regression analysis revealed relationships between the probability to share political fake news online and predictor variables such as demographics (age, gender, political orientation and income), and situational factors (perception of frequency of political fake news online, previous unconsciously fake news sharing and perception of responsibility [of different agents]). The research offers evidence regarding the prototype user that contributes to the spread of misinformation and the main implications that this phenomenon entails for professional journalism.

## 1 INTRODUCTION

In the past few decades, readers' news consumption behaviour has dramatically changed (Goyanes, 2014; Shu *et al.*, 2017). The growing popularity of digital information platforms and the sharp decline in newspaper circulation and network news ratings have led many scholars to speculate that new media would eventually replace traditional sources of news and information (Meyer 2004; Ahlers 2006). In this changing media context, the power and importance of social media platforms to access or being exposed to news from different media outlets (Gil de Zuñiga, Weeks and Ardèvol-Abreu, 2017), has grown dramatically (Reuters, 2014). For instance, according to recent data from the Reuters Institute (2017), more than half (54%) of all online users across 36 countries use social media as a source of news, and more than one in ten (14%) use social media as their main source. These consumption patterns are especially remarkable in the USA, a country in which 43% of the population got news from social media in 2013 (Reuters Institute 2013), increasing up to 67% in 2017 (Pew Research Center 2017).

Although some observers have claimed social media might positively impact media brands by driving traffic (Nielsen and Schröder, 2014; Ju, Jeong and Chyi, 2014), offering consumers the possibility to interact with other readers (Shu *et al.*, 2017), the alternative hypothesis, i.e. that social media platforms are substituting media outlets (as a source), seems equally (if not more) plausible, giving rise to an ambient journalism (news is omnipresent), and a perception that news will find readers (Herminda, 2010; Gil de Zuñiga, Weeks and Ardèvol-Abreu, 2017). This rising popularity of social media platforms in terms of news consumption has also led to serious concerns among scholars and legislators around the world about their potential influence in disseminating large volumes of non-supervised journalistic content (Baum *et al.*, 2017), empowering a misinformation phenomenon, (Darnton, 2017) and thus provoking the possibility to manipulate the public's perception of reality through the viral spread of fake news (Gu, *et al.*, 2017).

The limited, but growing theoretical and empirical research on fake news have addressed different dimensions of the phenomena, such as its cross-country prevalence (Reuters Institute, 2017), the (theoretical) consequences of its spread (Gupta *et al.*, 2013) and/or the main producers' motivations for their creation and dissemination (Allcott and Gentzkow, 2017; Subramanian, 2017; Silverman, 2016; Marwick and Lewis, 2017). The literature suggests that although there is an increasing awareness of the prevalence of fake news, the extent of its impact in Europe is still very limited (Reuters Institute, 2017), the key motivations are pecuniary (Allcott and Gentzkow, 2016) but also (and increasingly) ideological (Marwick and Lewis, 2017), while the theoretical and potentially negative consequences of their spread point

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to a myriad of agents and social circumstances, such as political leaders and democratic societies (Gu, *et al.*, 2017) stock markets (Ferrara *et al.*, 2016), health policies (Fernández-Luque and Bau, 2015) citizens in crisis situations (Gupta *et al.*, 2013), and, fundamentally, readers' interpretation of reality (Cook *et al.*, 2012; Silverman, 2016).

While this growing literature has generally emphasized the centrality of fake news *producers* and how the spread of fake information leads to a growing difficulty of audiences to distinguish between professional and non-professional news content (Tandoc *et al.*, 2017) and thus making humans more vulnerable to online manipulations (Shao *et al.*, 2017), a key question still remains unanswered: what demographic and situational factors drive *consumers* to share fake news online? Specifically, given the increasing impact of fake news on the political agenda and voters' decisions (Balmas, 2014), we focus on the probability to share political fake news through social media. By addressing this gap in the literature, and based on a representative USA survey from the Pew Research Center (2017), we aim to contribute to a more nuanced understanding of this recent phenomena by empirically confirming or refuting many of the assumptions held in the media and political *phora* regarding the "who" question, offering also some indirect insights regarding the main motivations for fake news sharing.

Concretely, this paper investigates how different demographic factors (sex, age, gender, political orientation and income) and situational predictors (perception of frequency of political fake news, previous online fake news sharing [unnoticed], and perception of responsibility in preventing fake news [of members of the public, politicians and social networking sites]), affects the probability to share political fake news through social media platforms. By using a logistic regression analysis, nine main findings emerged: (1) the probability of sharing political fake news online is higher in males than females; (2) older people are more likely to share political fake news online than younger people; (3) people with lower incomes have more probability to share political fake news online; (4) democrat voters have less probability to share political fake news than independent voters (there is no statistical significance between democrats and republicans); (5) people who have a high perception of frequency of online fake news are more likely to share political fake news; (6) people who inadvertently have shared fake news have less probability to share political fake news online on purpose; (7) people who grant great responsibility to the public in preventing fake news stories from gaining attention are less likely to share political fake news; (8) people who grant great responsibility to social networking sites in preventing fake news stories from gaining attention are more likely to share political fake news stories and (9) democrat-female voters are less likely to share political fake news than male-independent voters.

## 2 LITERATURE REVIEW AND RESEARCH QUESTIONS

In order to investigate the potential influence that different demographic and situational factors might have on the probability of consumers to share political fake news via social media platforms, it is important to first understand the motivations for producing fake news and the scale of this phenomena. We first assess recent studies on fake news and address the relevance of commercial and political interests behind fake news providers, emphasizing the key role of social media platforms as central spaces of fake news amplification. From there, we turn to the consequences of the scale of online fake news and the role of professional journalism in their prevention. Finally, we look at the impact of news consumption through social networking sites and the demographics of fake news sharing.

### 2.1 Fake news online

According to Collins Dictionary the concept of “fake news” started being used on US television to describe “false, often sensational, information disseminated under the guise of news reporting”. Communication scholars have scrutinized different angles of the fake news phenomena, especially around the motivations for their production and dissemination (Allcott and Gentzkow, 2017; Subramanian, 2017) and the potential (negative) consequences of their consumption (Ferrara *et al.*, 2016; Silverman, 2016; Gu, *et al.*, 2017). In this regard, there is an academic agreement that the main motivations behind fake news production are commercial (chrematistic interest) and political (ideological) (Hirst, 2017). On the one hand, the commercial motivations refer to the creation and dissemination of fake news in order to increase the readership of a news site, and get more advertising revenues as a consequence (Allcott and Gentzkow, 2016). For instance, in the 2016 US elections one of the most important fake news providers was created by teenagers in a town in Macedonia with no ideological agenda but rather economic incentives (Subramanian, 2017; Silverman, 2016). They stated that publishing pro-Trump content generated them more advertising revenue (Marwick and Lewis, 2017).

On the other hand, the second motivation is ideological (Allcott and Gentzkow, 2017; Gu, Kropotov, and Yarochkin, 2017), based on campaigns manipulation, defamation of candidates with the intent of damaging their public image. In this case, the objective of fake news providers is to empower the candidate they favour through false information that can change the opinion of the audience (Allcott and Gentzkow, 2017; Gu, *et al.*, 2017). A clear example of this phenomenon happened on July 2016 when the website wtoe5news.com published an article alleging that Pope Francis supported Donald Trump’s presidential candidacy (Allcott and Gentzkow, 2017). The news was shared on Facebook more than one million times and many people believed that the headline was trustworthy.

According to previous studies, the scale and influence of fake news is tied to the power of social networks to disseminate it and their increasing role on news consumption; As Allcott and Gentzkow (2017: 221) point out:

On social media the fixed costs of entering the market and producing content are vanishingly small and the format of social media can make difficult to judge an article's veracity.

Recent data on the relationship between social networking sites and the scale of fake news indicates that 41,8% of the fake news websites traffic comes from social media, while traditional and top news sites only represent 10% of the total share traffic (Allcott and Gentzkow, 2017). Some observers link the viral diffusion of digital fake information to the rise of social bots (Shao *et al.*, 2017). Ferrara *et al.* (2017: 1) observe a massive increase in 'social media accounts controlled by computer scripts that try to disguise themselves as legitimate human users'. Such fake accounts, on Facebook or Instagram, but especially on Twitter, post content, interact with each other and legitimate users via social connections, making humans more vulnerable to online manipulations (Shao *et al.*, 2017). According to the Pew Research Center, 74% of Twitter users got news there, whereas between 9% and 15% of active accounts on Twitter are bots (Ferrara *et al.*, 2017). In Russia, 45% of Twitter activity is managed by highly automated accounts (Woolley, and Howard, 2017).

The scale of fake news is growing rapidly because the access barriers to information consumption have almost disappeared and social media sites have become open, free and unrestricted platforms for news sharing and consumption (Allcott and Gentzkow, 2017). In today's media environment, information is free-floating on the Internet (Sundar, 2008) and traditional gatekeepers like professional editors journalists are largely absent (McGrew *et al.*, 2017; Cook *et al.*, 2012). This phenomenon gives people a huge responsibility to critically self-evaluate the reliability of online information (McGrew *et al.*, 2017), generating a growing difficulty for the audience to distinguish between journalistic and non-journalistic news content and thus to calibrate the difference between false and correct information (Tandoc *et al.*, 2017). According to recent market research, 64% of Americans say fabricated news stories causes them a great deal of confusion relating to the basic facts of current issues and events (Pew Research Center 2016). This might lead them to make decisions against their own interests (McGrew *et al.*, 2017). In this context of news uncertainty, there is academic consensus on the continued importance of professional journalism and fact-checking in order to reduce the probability of audiences being influenced by misinformation (Amazeen, 2017).

At the same time, trust and confidence amongst citizens in traditional mass media is continuously decreasing (Goyanes and Vara-Miguel, 2017; Allcott and Gentzkow, 2017). This lack of trust in mainstream media could explain the increased demand for news from non-



traditional sources (Allcott and Gentzkow, 2017). A study from Reuters shows that among 36 countries just one-third of the respondents felt that they could trust news media (Reuters Institute, 2017). People prefer news sources that support their existing views [selective exposure] (Cook *et al.*, 2012), which reflects that humans are biased information-seekers (Baum *et al.*, 2017). Because of this process, audiences perceive partisan content as more interesting and informative than content which contradicts their own ideas (Coe *et al.*, 2008). Social networks like Facebook or Twitter are ideologically segregated and users tend to read and share news articles aligned with their ideological position (Bakshy *et al.*, 2015). In addition to this, readers trust the sharer more than who produces the article – regardless of whether the article is produced by a real news organization or a fictional one (Media Insight Project 2016). When people see a post from a trusted person they feel more likely to recommend the news source to friends (Media Insight Project 2016), and when the information comes from an unfamiliar or an opposition source it will usually be ignored (Baum *et al.*, 2017).

People who use more time-consuming media, are not only older and tend to have a higher educational level, they also have more accurate beliefs about news (Allcott and Gentzkow, 2017). On the other hand, young social media users' news consumption can be defined as "incidental", because for them, news comes to them undifferentiated from entertainment information they find on Internet while they are surfing on social networks (Gil de Zuñiga *et al.*, 2017). On the other hand, emotions are important in how people respond to incorrect political misinformation (Weeks, 2015). Unlike angry people who process information in a partisan manner, people with anxiety reduce the reliance on partisanship (Weeks, 2015). People share information that will evoke an emotional response in the receiver, regardless of whether the information is true or not (Cook *et al.*, 2012). As a result, newsreaders might contribute consciously or unconsciously to the spread of fake information by sharing news that might have a larger impact on their online social connections (Barthel *et al.*, 2016).

When it comes to ideology, Democrats are more prone to distinguish true from fake articles than Republicans whose 'trust and confidence' in traditional mass media is sharply decreasing (Allcott and Gentzkow, 2017). The escalation of the Republicans' discredit towards traditional media is reflected on the current president of the U.S., Donald Trump, who claimed 146 times in his Twitter personal account that mainstream media is a source of fake information and news manipulation (Hirst, 2017). In this case, the term fake news refers to news he does not like. During the US elections 2016 campaign, people who supported Trump used to visit fake news websites more than Hillary supporters (Guess *et al.*, 2018) and on Facebook, there were about three times more fake pro-Trump articles than pro-Clinton ones (Allcott and Gentzkow, 2017). In addition, Republicans (39%) have slightly more probabilities to use social media to repost content related to political matters than Democrats (34%) (Rainie *et al.*, 2012).

Despite the relevance and theoretical ramifications of the literature on fake news, research on the demographic and situational factors that might influence news consumers' probability to share political fake news online is scarce. Past studies have mainly examined the prevalence of the phenomena (Reuters Institute, 2017), the motivations for fake news creation (Allcott and Gentzkow, 2017; Marwick and Lewis, 2017) and the effects of fake news dissemination on society, political leaders, stock markets, etc (Silverman, 2016; Ferrara *et al.*, 2016; Gu *et al.*, 2017). However, given the increasing impact of fake news on the political agenda and voters' decisions (Balmas, 2014) and the relevance of social media platforms in the amplification of the misinformation phenomenon, this study focuses on the consumer impact on fake news dissemination and analyses the demographic and situational factors behind the reach of political fake news. Therefore, this study explores the following research questions (RQ):

- RQ1. How do demographics (sex, age, gender, political orientation and income), affect the probability to share political fake news online?
- RQ2. What is the interaction between political orientation and gender?
- RQ3. How does the perception of frequency of political fake news online affect the probability to share them?
- RQ4. How does previous online fake news sharing (unnoticed), affect the probability to share political fake news online (on purpose)?
- RQ5. How does the perception of responsibility of 1) members of the public, 2) government, politicians and elected officials and 3) Facebook and Twitter, in trying to prevent fake news affect the probability to share them online?

### 3 METHODOLOGY

The analysis in this study is based on a Pew Research Center survey conducted Dec. 1 through Dec. 4, 2016, among a national representative sample of 1,002 adults, 18 years of age or older, living in the continental United States<sup>3</sup>. The results of the study carried out by the Pew Research Center (Journalism & Media) are descriptive. That is, only descriptive statistics are used to explore the general situation of U.S. fake news without advancing any inferential analysis. The analysis performed and the results obtained and exposed here are new, except for the descriptive (raw) data in relation to the dependent variable itself.

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<sup>3</sup> To have more information about the methodology consults the following web:  
<http://www.pewresearch.org/methodology/u-s-survey-research/>

The model constructed is based on a binomial logistic regression, analyzing the probability of sharing political fake news as a dependent variable. Logistic regression tests the probability of a dichotomous event occurring—in this case, sharing or not political fake news. The predicted proportion of activities follows the logistic model of  $\ln P/(1 - P) = \beta X_i$ , where  $P$  is the probability of sharing political fake news. All predictor variables were introduced five different blocks: demographics, frequency of political fake news, unnoticed fake news, perception of responsibility, and interaction between politics and gender.

### 3.1 Variables and Measurements

*Dependent variable:* The dependent variable, the probability to share political fake news, was measured by asking participants the following question: “Have you ever shared a political news story online that you thought at the time was made up? (0) No and (1) yes.

*Independent variables:* Data for the demographic variables (i.e., gender, age, income, education and political orientation) were collected using standard survey measurements. The perception of frequency of political fake news was measured by asking participants the following question: “How often do you come across news stories online that you think are almost completely made up”, on a four-point Likert scale, ranging from 1) never, 2) hardly ever, 3) sometimes and, 4) often. Unnoticed fake news sharing was measured by asking participants the following question: “Have you ever shared a political news story online that you later found out was made up? (0) No and (1) yes. The perception of responsibility was measured by asking participants the following question: “As you may have heard, there have recently been some instances of so called “fake news stories” circulating widely online. How much responsibility does each of the following have in trying to prevent made up stories from gaining attention” a) members of the public, b) the government, politicians, and elected officials, c) social networking sites like Facebook and Twitter, and search sites like Google, on a four-point Likert scale, ranging from: 1) no responsibility at all, 2) not much responsibility, 3) a fair amount of responsibility, 4) a great deal of responsibility.

## 4 RESULTS

### 4.1 Descriptive statistics

The sample of 1,002 U.S. residents included slightly more women (51,3%) than men (48.7%), with an age range between 18 and 99 (M = 47.22; SD = 18.22). Most participants (50,7%) declared they “often” came across news stories online that they think were almost completely made up, 27,1% declared “sometimes”, 8,4% “hardly ever” and a negligible 10,4% declared they “never” came across political fake news. With regard to the dependent variable, 13.8% of the total sample declared they shared political fake news, while the vast majority, that is, 85.5% of participants declared they never shared political fake news online. The correlation analysis revealed some important associations. Interesting to note, for example, are the negative associations between age and fake news frequency and public responsibility, while a positive statistically association with government responsibility. On the other hand, our correlation analysis revealed a statistically significant and positive association between education and fake news frequency, public responsibility and SNS responsibility. The same patterns are applied with regard to income.

	Age	Educ.	Inc.	Fake News Freq	Resp. (1)	Resp. (2)	Resp. (3)
Age	1	-,010	,008	-,092**	-,060**	,097**	,031
Education	-,010	1	,507**	,114**	,148**	-,031	,048**
Income	,008	,507**	1	,190**	,115**	,001	,088**
FN Freq.	-,092**	,114**	,190**	1	,171**	,143**	,227**
Resp. (1)	-,060**	,148**	,115**	,171**	1	,268**	,234**
Resp. (2)	,097**	-,031	,001	,143**	,268**	1	,330**
Resp. (3)	,031	,048**	,088**	,227**	,234**	,330**	1

**Table 1.** Correlations between quantitative variables

### 4.2 Probability to share political fake news online: Logistic regression analysis

The logistic regression analysis results revealed the relationship between the probability to share political fake news and some predictor variables ( $p < .05$ ) The first model (demographics), accounted for 4.4% or 2.5% of the variance in the probability to share political fake news (Nagelkerke  $R^2$  and Cox & Snell  $R^2$ ), the second model (perception of frequency of political fake news), accounted for 4.7% or 2.7% of the variance, the third model (unnoticed fake news), accounted for 23.5% or 13.3% of the variance, the fourth model (perception of responsibility), accounted for 24.1% or 13.6% of the variance, and the fifth model (interaction

between politics and gender), accounted for 24.1% or 13.6% of the variance. These findings thus suggest considerable explanatory power.

With regard to the first research question, which addressed the association between demographic variables and the probability to share political fake news; age, gender, income, education and political orientation were entered in the first block of the analysis. The logistic regression results revealed a statistically significant association ( $p < .05$ ) with gender, age, income, and political orientation. Therefore, the probability of sharing political fake news ( $p < .05$ ;  $\beta = -.695; .499 e^x$ ) was higher in males than females. The logistic regression also identified age as a statistically significant and positive predictor; that is, the probability of sharing political fake news ( $p < .05$ ;  $\beta = .013; 1,013 e^x$ ) increases with age. However, income was a negative predictor ( $p < .05$ ;  $\beta = -.073; .930 e^x$ ), in such a way that people with lower income have more probability to share political fake news. Finally, the regression analysis revealed a significant and negative association between political orientation and the probability to share political fake news. Specifically, democrat voters ( $p < .05$ ;  $\beta = -.237; .789 e^x$ ) have less probability to share political fake news than independent voters (there is no statistical significance between democrats and republicans).

The second research question asked whether the perception of frequency of online fake news would predict the probability to share political fake news. In addition to gender ( $p < .05$ ;  $\beta = -.701; .496 e^x$ ), age ( $p < .05$ ;  $\beta = .014; 1,014 e^x$ ), and income ( $p < .05$ ;  $\beta = -.081; .923 e^x$ ), the perception of online fake news frequency ( $p < .05$ ;  $\beta = .125; 1,133 e^x$ ) was a significant predictor. Hence, the increasing perception of online fake news increases the probability to share political fake news. The third research question asked whether previously unnoticed fake news sharing would predict the probability to share political fake news. In addition to gender ( $p < .05$ ;  $\beta = -.800; .449 e^x$ ), age ( $p < .05$ ;  $\beta = .011; 1,011 e^x$ ), income ( $p < .05$ ;  $\beta = -.072; .931 e^x$ ), and politics ( $p < .05$ ;  $\beta = -.296; .744 e^x$ ), unnoticed fake news sharing ( $p < .05$ ;  $\beta = -2,210; .110 e^x$ ), was a significant and negative predictor of political fake news sharing online. Therefore, people who have inadvertently shared fake news have less probability to share political fake news online.

The fourth research question asked whether the perception of responsibility of different social stakeholders in trying to prevent fake news could predict the probability to share political fake news. In addition to gender ( $p < .05$ ;  $\beta = -.805; .447 e^x$ ), age ( $p < .05$ ;  $\beta = .010; 1,010 e^x$ ), income ( $p < .05$ ;  $\beta = -.068; .934 e^x$ ), politics ( $p < .05$ ;  $\beta = -.327; .721 e^x$ ), and unnoticed sharing fake news ( $p < .05$ ;  $\beta = -2,24; .106 e^x$ ), public responsibility ( $p < .05$ ;  $\beta = -.132; .876 e^x$ ), and social networking sites responsibility ( $p < .05$ ;  $\beta = .161; 1,174 e^x$ ), were found to be significant predictors of political fake news sharing.

**Table 2.** Logistic regression analysis. \*  $p < 0,05$ ; \*\*  $p < 0,01$

	Model 1		Model 2		Model 3		Model 4		Model 5	
	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)
Gender	-,695**	,499	-,701**	,496	-,800**	,449	-,805**	,447	-,630**	,528
Age	,013**	1,013	,014**	1,014	,011**	1,011	,010**	1,010	,010**	1,010
Education	-,016	,984	-,016	,984	-,017	,983	-,011	,989	-,005	,995
Income	-,073**	,930	-,081**	,923	-,072**	,931	-,068*	,934	-,071*	,931
Politics (1)	-,001	,999	,021	1,021	-,017	,983	-,027	,973	-,040	,961
Politics (2)	-,237*	,789	-,212	,809	-,296*	,744	-,327*	,721	-,122	,885
FN Freq			,125*	1,133	-,031	,969	-,059	,943	-,065	,937
Unnoticed FN					-,2210**	,110	-,224**	,106	-,223**	,107
Resp. Pub							-,132*	,876	-,136*	,873
Resp. Gov							-,009	,991	-,005	,995
Resp. SNS							,161**	1,174	,161**	1,17
Gend(1)*Pol(1)									-,005	,995
Gend(1)*Pol(2)									-,511*	,553
Nagelkerke R <sup>2</sup>	,044		,047		,235		,241		,243	
Cox & Snell R <sup>2</sup>	,025		,027		,133		,136		,137	
Chi <sup>2</sup>	66,89**		4,26*		306,9**		9,76*		3,625	
Log likelihood	2146,0		2141,8		1834,8		1825,0		1821,4	
No. of observations	1.002		1.002		1.002		1.002		1.002	

With regard to public responsibility, the logistic regression analysis revealed a statistically significant and negative relation with political fake news sharing. Therefore, people who grant great responsibility to the public in preventing fake news stories from gaining attention are less likely to share political fake news. However, when it comes to social networking sites, the logistic regression revealed a statistically significant but positive association, in such a way that people who grant great responsibility to social networking sites in preventing fake news stories from gaining attention are more likely to share political fake news stories.

The fifth research question asked whether the interaction between gender and political orientation could predict the probability to share political fake news online. In addition to gender ( $p < .05$ ;  $\beta = ; e^x$ ), age ( $p < .05$ ;  $\beta = ; e^x$ ), income ( $p < .05$ ;  $\beta = ; e^x$ ), unnoticed fake news sharing ( $p < .05$ ;  $\beta = ; e^x$ ), and social ( $p < .05$ ;  $\beta = ; e^x$ ), and social networking sites responsibility ( $p < .05$ ;  $\beta = ; e^x$ ), the interaction between gender(1) and politics (1), were found to be a significant predictor of the probability to share political fake news online ( $p < .05$ ;  $\beta = ; e^x$ ). Therefore, democrat-female voters are less likely to share political fake news than male-independent voters.

## 5 CONCLUSION

This paper investigates how different demographic factors (age, gender, political orientation and income) and situational predictors (perception of frequency of political fake news, previous online fake news sharing [unnoticed], and perception of responsibility in preventing fake news [of members of the public, politicians and social networking sites]), affect the probability to share political fake news through social media platforms. First, our research addresses the relevant role of demographic variables in explaining the variance of political fake news sharing. Results of the logistic regression analysis provides strong evidence regarding the key role of age, gender, income and political orientation in the spread of political misinformation online. In this regard, the probability of sharing political fake news online is higher in males than females, despite the fact that women use social media more than men (Krasnova *et al.*, 2017). In addition, our analysis also reveals that sharing political fake news increases with age, despite the fact that young people are the majority of internet users (McGrew *et al.*, 2017). People tend to show an increasing interest in news as they get older. For younger users, topics like domestic politics, international politics and economy are seen as less interesting (Costera, 2007), which might explain why older people are more likely to share political fake news online.

People with low incomes are also more likely to share political fake news. Previous studies suggest that educated people earn more money than people that have not accessed the school system (Diener and Biswas-Diener, 2002) where education increases people's capacities to

differentiate fact from fiction and, also, offer people better means to counterargue inconsistent information (Allcott and Gentzkow, 2017). When it comes to ideology, democrat voters are less likely to share political fake news than independent voters. However, there is no statistical difference in the probability to share political fake news between democrats and republicans, despite the fact that democrats have somewhat less probability (34%) to repost news related to political affairs that were previously posted by other people on social media than republicans (39%) (Rainie *et al.*, 2012).

Results of the logistic regression reveal that the increasing perception of online fake news increases the probability to share political fake news. Nowadays, information on the internet is replacing professional journalism and expert advice (Cook *et al.*, 2012) and about 40% of the fake news websites traffic comes from social media platforms (Allcott and Gentzkow, 2017). In addition, people who get news from social media read information that is ideologically aligned (Allcott and Gentzkow, 2017) and many are unaware of the effects of social media manipulation (Glenski, and Weninger, 2016). Furthermore, 64% of Americans affirm that fake news has generated them a great deal of confusion about basic facts, and 24% of U.S. citizens affirm that this phenomenon has provoked them some confusion (Barthel *et al.*, 2016). In a context where fake news is easily spread and consumed through the most important social networks, the perception of their scale positively affects people's sharing behaviour.

Our analysis suggests that people who inadvertently share fake news have less probabilities to share political fake news online. For many people it is complicated to recognize that a piece of information is false until they receive a correction (Cook *et al.*, 2012). Warnings seem to be effective because they induce people in a temporary state of scepticism, increasing their capacities to differentiate between true and false information (Cook *et al.*, 2012). Therefore, people who grant great responsibility to the public in preventing fake news stories from gaining attention are less likely to share political fake news. However, when it comes to social networking sites, the logistic regression revealed a statistically significant but positive association, in such a way that people who grant the responsibility to prevent fake news stories from gaining attention to social networking sites are themselves more likely to share political fake news stories. Finally, our statistical analysis shows an interaction between political orientation and gender. To this regard, democrat-female voters are less likely to share political fake news than male-independent voters.

In conclusion, the central theoretical implications emanating from the observations made in this article include (1) a shift in the point of view behind fake news dissemination, from the importance of producers to the relevance of consumers, (2) the significance of demographic and situational factors in explaining political fake news sharing behaviour, and (3) the increasingly decisive/complex role of traditional and new media to control the journalistic flow



on the Internet, where a combination of digital tools and consumers' behaviour, might challenge the *ethos* of journalism and the veracity of information online. In this context, professional journalism and fact-checking are increasingly important to mitigate, control and discover political fake news online and to lessen their potential damage to democratic societies.

## 6 LIMITATIONS

Several limitations of the current analysis are noteworthy. First, it is worth noting that with respect to political 'fake news' the American context is different to other countries. There are particular historic, social and other factors, especially in the current highly polarised US political and media context that appears to make misinformation more effective than in other demoi. Second, the dataset being from the high point of political polarisation just after one of the most divisive presidential campaigns ever, should be taken into account when generalizing the findings. Third, the cross-sectional nature of the survey data does not allow us to identify with certainty the direction of the causal patterns underlying the correlations that we found. Therefore, we cannot rule out the possibility that the causal orders are reversed. More robust causal claims would be warranted by longitudinal or experimental rather than cross-sectional survey data and more work is needed to disentangle the causal mechanisms behind the correlations presented here. Thus, the relationships theorized in this working papers should be interpreted with caution. Future research may adopt a longitudinal design to draw causal inferences with greater confidence. Furthermore, all variables were measured using a single item, which prohibits reliability assessments. As with any survey, we also relied on self-reported measures of online behavior, which required subjective assessments of the frequency of fake news sharing.

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