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Who Shares Fake News Intentionally and Unintentionally on Social Media? The Case of Facebook Users in Poland

Abstract: By exploring users' engagement in communication and their social media literacy (SML), this study examines who shares fake news on Facebook intentionally and unintentionally. A two-phase online survey has been conducted among 1,000 active Facebook users in Poland. We found that users engaged in communication on multiple social media platforms tend to share fake news intentionally. There is a negative relationship between SML score and intentional sharing. However, those with higher functional consumption scores (the dimension of SML) tend to share fake news intentionally. Men are less likely to share fake news unintentionally. The cross-tabulation of classes and variables related to social media use revealed that users with lower level of salary, education and occupational status are most likely to share fake news both intentionally and unintentionally.

Keywords: fake news, Facebook, news sharing, media literacy, media consumption.

Introduction

The current technological revolution has created conditions conducive to the spread of fake news on an unprecedented scale. As social media—the "new mass media" (Ardèvol-Abreu et al. 2020) and the "backbone of (…) daily information environment" (Lelkes et al. 2017: 5)—has become a key source of news, consumed both consciously (Kalogeropoulos et al. 2017; Vaccari 2013) and incidentally (Boczkowski et al. 2018), the amount of fake news exploded. The ease with which social media news consumers can share information with others distinguishes it from traditional mass communication experiences (Rampersad and Althiyabi 2020). User suggestions and recommendations on social media are powerful tools for information consumption and spread. However, such tools are partially responsible for misinformation and disinformation on social media platforms (Ardèvol-Abreu et al. 2020: 3).

Moreover, social media content can be disseminated without significant third-party filtering, fact-checking or editorial review. A single user without a large number of followers or reputation can in some cases reach as many readers as Fox News, CNN, or the New York Times (Allcott and Gentzkow 2017). In this way, fake news easily penetrates communication networks, begins to circulate in them and is passed on. The vast amount of

information, both fictional and real, that is available to citizens, and the very short time in which they click or don't click, like or don't like, retweet or don't retweet are technological features that seem to distract them from thoughtful evaluation of the news (Chambers 2020: 150).

Therefore, social media have become one of the most important algohritmic environments in which the processes that co-determine the essence of modern society take place. Due to the immense popularity of social media, especially among young people, the fake news spread there has become a serious threat to democratic societies. As Sinan Aral (2020: 53) aptly notes: "technological innovation int the fabrication of falcity is advancing at a breakneck pace." Fake news creates new and reinforces existing social divisions, undermines trust in politicians and public institutions, and has a negative impact on the conduct of political campaigns. The rise of fake news in the contemporary information ecosystem undermines the consensual and deliberative nature of the public sphere (Habermas 1989).

Previous research showed that sharing of fake news can be: (i) intentional, linked with personal features (Ardèvol-Abreu et al. 2020), views and political partisanship (Osmundsen et al. 2021), and (ii) be unintentional, resulting from an inaccurate evaluation of consumed information (Pennycook et al. 2021), (iii) intentional related to status-seeking, self-confidence or self-esteem (Lee and Ma 2012). However, there is a lack of studies that systematically investigate the impact of social media literacy (SML) on the intentional and unintentional sharing of fake news. Despite a rich methodological tradition, it is difficult to find research in contemporary sociology that analyses how the social characteristics (sociodemographic features and social media literacy skills; see further) of new media users are linked to the problem of disinformation in the broadest sense.

This study seeks to fill a gap by focusing specifically on the unique characteristics and impact of social media platforms. It aims to contribute to a deeper understanding of how these platforms facilitate the spread of fake news and potentially shape users' information consumption behaviors. We draw on Ardèvol-Abreu, Delponti and Rodríguez-Wangüemert's (2020) proposal that fake news sharing has two behavioral dimensions: intentional and unintentional. Intentional misrepresentation (intention of fake news creator) is one of the defining characteristics of fake news. Therefore, from a sociological point of view, it is important to know not only the anatomy of fake news (e.g. content structure, emotional component), but also the mechanisms of sharing fake news on social networks.

In order to frame the intentional and unintentional fake news sharing on social media in wider theoretical context, this article uses the news sharing approach proposed by Kümpel et al. (2015). Such approach draws on research in which news sharing is seen as a specific type of participatory behavior, determined by individual decisions. Thus, we analyze the relationship between online experience (social media experience, social media literacy) demographic features of users and intentional or unintentional fake news sharing through quantitative research focused on online news consumers. As a consequence, the following research questions are pursued: (i) Does social media experience influence fake news sharing on Facebook? (ii) What are the motivations (gratifications sought) for sharing fake news on Facebook? (iii) Is social media literacy related to intentional or unintentional fake news sharing?

Literature Review

Fake news overlaps with concepts that are related to misleading or intentional harm, such as misinformation, disinformation, malinformation and propaganda (Bernal 2018: 515). It is often conceptualized as a type of online disinformation, with wholly or partially false content, deliberately created to deceive or manipulate a specific audience (Marwick 2018; Talwar et al. 2019).

However, the assumption that fake news is false news or falsehood does not fully capture the essence of the phenomenon, as it can include intentionally embedded true or partially true bits of information which is nevertheless misleading (Fallis and Mathiesen 2019). Fake news can also take the form of compromising material, where true information can be used in distorted context to trigger a scandal (Khaldarova and Pantti 2016). Intent to mislead can also be used for humor, without intent to cause harm, as parody, satire or political satire (Duffy et al. 2020).

Therefore, some researchers emphasize that what is crucial is the intention to mislead rather than the falsity or truthfulness of the news content. The point is that the recipients of fake news acquire false beliefs. In this view, fake news is thus first and foremost intentionally deceptive news (Allcott and Gentzkow 2017; Fallis and Mathiesen 2019). For the purpose of this study, fake news is understood as partially or completely false information, intended to mislead the recipient, which may be intentionally and unintentionally disseminated by online news consumers (Baptista and Gradim 2020; Lazer et al. 2018).

Previous research does not allow any clear conclusions to be drawn about the people who spread fake news on social media. Buchanan (2020) suggests that these tend to be people who believe the material may be true or have beliefs consistent with it. They are likely to be younger, male and less educated. However, the results of a study conducted by Ardèvol-Abreu et al. (2020) showed that there were no significant differences between the group of people intentionally reporting fake news—in terms of gender, age, education, strength of ideology, or even in terms of trust in the government or concerns about Covid-19. Also, a study of UK social media users (Chadwick and Vaccari 2019) found that men are more likely than women to share problematic news. Further research is needed to verify the relationship between different socio-demographic variables of propensity to spread fake news.

News sharing can be defined as "the practice of giving a defined set of people access to news content via social media platforms, as by posting or recommending it" (Kümpel et al. 2015: 2). A paucity of empirical studies and theoretical frameworks explaining fake news sharing behavior on social media is evident in the academic literature. This applies to both unintentional and (in particular) intentional dissemination of fake news. In the latter case, people know or at least suspect that the content is false or exaggerated (Chadwick et al. 2018). Several causes of (intentional and unintentional) sharing of fake news can be identified.

Firstly, many social media users are interested in controversial, surprising or bizarre topics, willingly sharing them (Duffy et al. 2020) even when the source is uncertain and the content may be false. Fake news often comes with sensational and controversial headlines (clickbait relying on exaggeration, scandal, drama) and the content may evoke strong emotions (both positive and negative), which not only attracts users' attention but

also promotes dissemination (Baptista and Gradim 2020). The creators of fake news intend to make it clickbait so that as many people as possible spread this content (Marwick 2018: 502). Moreover, a recent study by Pennycook et al. (2021) indicates that fake news spreads online because users do not pay enough attention to the accuracy of headline content in an information overload situation. Therefore, most users do not share misinformation intentionally.

Secondly, an important motive for exchanging fake news is the pursuit of establishing and maintaining social contacts and enhancing one's own reputation and achieving high status in such a network (Baptista and Gradim 2020; Lee and Ma 2012). A social media user seeks to enhance his or her reputation (or, in the case of low self-esteem, seeks acceptance) by demonstrating in the interaction network that he or she is well informed and has new, relevant information. For people with low self-esteem, this may be motivated by fear of missing out (FoMO), which translates into their use of social media, motivating them to try to boost their popularity in their network and gain a sense of inclusion (Baptista and Gradim 2020; Talwar et al. 2019). This is linked to the phenomenon of instant gratification of sharing information, first liking something and gathering reactions from friends (Cooke 2017: 214). This corresponds with the findings of Ihm and Kim (2018), who argue that news sharing is linked to the tendency of individuals to present their selfhood and manage their self-image.

Thirdly, fake news is more likely to be shared with others if it confirms the user's beliefs and opinions (Marwick 2018). Bakshy et al. (2015) point out that Facebook friendship networks are strongly ideologically segregated. People are more likely to read and share information that aligns with their views. Therefore, those who receive news from Facebook friends are less likely to verify it, especially when this requires referring to evidence inconsistent with their views.

Fourthly, Nicole Cooke (2018) draws attention to a mechanism conducive to the spread of fake news, referred to as "satisficing." It involves choosing information that is 'good enough' or 'acceptable' in a given context while ignoring the issue of its veracity or quality. Satisficing is associated with information overload, when a social media user, out of intellectual laziness, failure to cope with information overload or lack of ability to evaluate it, takes shortcuts.

Last but not least, social media has become a public and private space for sharing, discussing and contributing to news and content of interest to network citizens. Suggestions and recommendations from social media contacts (e.g. sharing, retweeting or receiving content from other users) are an increasingly common way of becoming aware of public issues. The suggestion and recommendation mechanisms used by social media users are a powerful tool for disseminating information, but this also applies to fake news. Additionally, this effect can be amplified by recommendation algorithms and news bots.

Hypotheses

Karlova and Fisher (2013) suggest that "people enjoy sharing information, especially when it is 'news'. Although they may not believe such information themselves, they take pleasure

in disseminating it through their social networks." For example, Guess et al. (2019) found that the oldest Americans tend to share fake news on Facebook more often than younger ones. This may suggest that young users are more experienced in consuming news from social media and therefore more resistant to fake news. Sharing fake news may come from little experience or engagement in using social media and online tools in general. Khan and Idris (2019: 1206) found that "the greater the Internet experience, the lesser the likelihood of sharing without verification." To our knowledge, the relationship between the number of platforms used (experience) and the spread of false information has not yet been tested. Thus, assuming that an important aspect of experience is the variety of social media usage, we hypothesized that:

H1: Users using a greater number of social media platforms tend to share fake news unintentionally.

Guess et al. (2020) found that the media literacy intervention helped respondents to distinguish between false and true stories. Jones-Jang et al. (2019) tested the relationship between different aspects of literacy (media, information, news, digital) and ability to recognize fake news. Their findings suggest that information literacy was positively associated with the respondents' skills to recognize fake news. Vraga and Tully (2019) focused on news literacy and different behaviours of users active on three major social media platforms in the US (Facebook, Twitter and YouTube). News literacy was negatively related to seeing and posting news and political content on all three examined platforms and positively related to scepticism toward information appearing on social media. Referring to results available in the literature we decided to test digital competencies of Facebook users strictly related to news behaviours on social media platforms (Koc and Barut 2016). As a consequence, we proposed the following hypothesis:

H2: Less social media literate users (total scale) are more likely to share fake news on Facebook unintentionally.

Our study used the New Media Literacy model (Chen et al., 2011; Lin et al. 2013; Lee et al. 2015: 85), further developed by Koc and Barut (2016), which distinguishes four four areas of media literacy skills: (i) functional consuming (ii) critical consuming (iii) functional prosuming (iv) critical prosuming. Chen et al. (2011) link functional consuming and prosuming to digital literacy, and critical consuming and prosuming to information literacy. Both the digital and inforamation aspects of social media literacy have previously been analysed in the literature in the context of fake news. González-Cabrera et al. (2019) found that a higher level of digital literacy corresponds to a decreased inclination to distribute unauthenticated or counterfeit information. On the other hand, Jones-Jang et al. (2019) tested the relationship between different aspects of literacy (media, information, news, digital) and ability to recognize fake news. Their findings suggest that information literacy was positively associated with the respondents' skills to recognize fake news. Based on that we assumed that if those with passive skills (functional and critical consumption) share fake news, they do so unintentionally, while those with active skills (functional

and critical prosumption) may be more cynical and share fake news intentionally. As a consequence, we proposed the following hypotheses:

H3: Users with higher scores in the functional consuming aspect of social media literacy tend to share fake news unintentionally.

H4: Users with higher scores in the critical prosuming aspect of social media literacy tend to share fake news intentionally.

Finally, some additional variables have been added to our regression models to gain further insight into the relations between variables used in our hypotheses.

Method

Participants and Study Design

Our survey (CAWI) was conducted between December 2019 and January 2020 among those using Facebook for news consumption purposes. Respondents were recruited by a third party from the largest research panel in Poland. Due to the large number of research items we split our questionnaire into two instruments used in separate waves of the online study. The time interval ranged between 7 and 10 days between each wave. Our study used a convenience sample as there is no sampling frame of Facebook users in Poland. Only those (i) actively using Facebook (at least a few times a week) and (ii) consuming news from sources available on this platform were invited to take part. In total, we reached 1,000 respondents, and each of them participated in both waves of the study; Table 1 presents more details of the sample. Our sample does not deviate from the distribution of selected characteristics of Polish Facebook users and general population of Poland.

Although survey methods have been criticized in the literature for many reasons: time lag (Prior 2009), selective retention (Klapper 1960), order effects bias, acquiescence bias etc., they remain one of the most popular tools used in social media research. It is not surprising, then, that if there are no real data available from social platforms (textual or behavioral), many studies exploring social dimensions of online fake news spreading use a variety of questionnaires. For our study, we adapted a tool for measuring social media users' awareness and susceptibility to fake news proposed by Pew Research Center (PEW 2016). However, we added more items exploring users': (i) political and ideological leanings, (ii) media source preferences, (iii) views on political, economic and social issues, (iv) social media literacy, (v) social media experience, (vi) demographic features. As a result, our data have become a source of rich information on users' news-related behavior on social media.

Tool

As mentioned above, in our study we adapted the New Media Literacy model. Each section: (i) functional consuming, (ii) critical consuming, (iii) functional prosuming, (iv) critical

Table 1

	Sample		FB population*		General population—Poland**	
	%	N	%	N (million)	%	N (million)
Gender						
Male	48.5	485	49	9.9	48	18.6
Female	51.5	515	51	10	52	19.8
Total	100.0	1000	100	20	100	38.4
Place of residence						
Village	35	350	38	7.6	40	15.3
Town up to 20,000	11	105	13	2.6	13	5
Town 20,001–50,000	10	104	11	2.2	11	4.3
Town 50,001–100,000	9	86	9	1.8	8	3
City 100,001–200,000	10	97	8	1.6	8	3.2
City 200,001–500,000	9	95	8	1.6	20	7.6
City 500,001 or more	16	163	12	2.4		
Total	100	1000	99	20.1	—	38.4
Level of education						
Primary	—	—	3	0.6	13	4.9
Junior high	2	26	4	0.8	5	1.5
Basic vocational	6	61	18	3.6	18	7
Secondary (uncompleted)	—	—	7	1.4	—	—
Secondary	31	307	26	5.2	28	10.7
Post-secondary	11	107	4	0.8	—	—
Bachelor's degree	—	—	7	1.4	—	—
Master's degree (uncompleted)	—	—	5	1	—	—
Master's degree	49	489	18	3.6	23	8.8
PhD degree or higher	1	10	—	—	—	—
Total	100	1000	92***	18.5***	86****	32.9****

* Source: Megapanel PBI/Gemius 2015, internet users aged 7+.
** Source: Statistical Yearbook of Poland 2020, Statistics Poland, Warsaw.
*** Sample contains users 18+, while Megapanel PBI/Gemius 2015 includes users 7+.
**** Completed primary school at least.

prosuming contained three questions, which ultimately translated into twelve questions on SML scale. Details about all questions from the SML scale used in our study can be found in Table 2.

Variables

Our dependent variables were made of the following research item: (i) DV1 *Have you ever shared a political news story online that you thought at the time was made up?* (intentional sharing), (ii) DV2 *Have you ever shared a political news story online that you later found out was made up?* (unintentional sharing). Responses to both questions were measured on the nominal scale containing three options: (a) yes, (b) no, (c) no answer. The number of observations included in regression models was reduced by the number of respondents with 'no answer' response for both dependent variables. In total, 68 cases were removed, which meant that the sample was reduced to N = 932 participants. Because of this relatively

little loss, we decided to reduce our data sets instead of alternative coding of 'no answer' responses. To look into the research problem globally, we decided to include a long list of variables (independent variables) describing social media users' activities in the following areas: (i) social and economic status, (ii) social media use and experience, (iii) social media literacy, (iv) political leanings and participation. Details on variables used in regression models can be found in Table 2.

We added the variables illustrating socio-economic status: level of education, gender, occupational status, salary as control variables to our model. However, the impact of demographic factors can provide additional insights into the relationships we are exploring. The ordering of responses in the question: Occupational status, may raise doubts. Taking into account the specifics of the Polish job market, we have deemed this arrangement to best reflect local realties.

The table above synthesizes the measurement scales we used for the variables found in the regression models. The most commonly used measurement scale in our research was the ordinal scale.

Analysis

For the purpose of this study we conducted a three-step analysis. First, we looked into the SML scale. The Alpha-Cronbach scores for all items were above 0.88. This result suggests that multiple items measure the same underlying construct—SML.

However, we decided to use exploratory/confirmatory factor analyses (EFA/CFA) to check the psychometric properties of the scale (Table 2) as it had never been adapted to local Polish conditions. The four factors returned by the EFA explained 51% of the total variance. All items loaded above the threshold (0.4), which suggests the robustness of the scale. However, three items had high cross-factor loadings (Q7. F1: 0.43, F2: 0.42; Q8. F1: 0.64, F2: 0.56; Q9: F1: 0.68, F2: 0.44). Those items were supposed to measure the functional prosumption dimension of SML. Due to their multidimensionality, they were removed from further analysis.

In the second step, we built two generalized logistic regression models (GLM) for each dependent variable (intentional and unintentional sharing). In doing so, we used the backward stepwise elimination of predictor variables initially included in each model. Such automated procedures available in R package MASS (Venables & Ripley 2002) help researchers to build relatively simple, interpretable and best performing logistic regression models (Table 3). The best model in the backward stepwise elimination is selected by the Akaike information criterion AIC.

Finally, we conducted a latent class analysis to identify groups of Facebook users deserving particular attention in terms of their digital skills. In other words, we assumed that there are unobserved profiles generating patterns of responses to SML questions (reduced scale). The latent class analysis (LCA) conducted in the Mclust package (R Programming) for ordinal data helped us to distinguish six latent classes based on the lowest BIC (20359). The two other models suggested by the algorithm (Gaussian mixture models with default function parameters), consisted of 7 and 9 components (with higher BIC). Although BIC

Table 2

Variable	Type of variable
Gender*	Nominal variable (1—male, 2—female)
Salary	Interval variable: 1 to 6-point scale (PLN) (1. < 1,500; 2. 1,500–2,500; 3. 2,501–3,500; 4. 3,501–4,500; 5. 4,501–6,000; 6 > 6,000)
Level of education	Ordinal variable: 6-point scale (1. primary school/middle school (lower secondary), 2. vocational (basic vocational), 3. secondary (upper secondary), 4. post-secondary (non-degree), 5. higher education (bachelor's, master's, engineer's), 6. higher education with at least a doctoral degree).
Occupational status	Ordinal variable: 6-point scale (1. unemployed, 2. part-time job, 3. pension/retirement, 4. student, 5. full-time job, 6. run a business)
Number of SNS used	Ratio variable (index) 7-questions: 1 to 7 point scale (1. using Facebook, 7. engaged in seven social media platforms)
Assessment of own Facebook skills	Ordinal variable: 4-point scale (1. 'very low skills', 4. 'very high skills')
Trust in Facebook news	Ratio variable (index) 3 questions: 1. trust FB news in general, 2. trust friends' news, 3. trust strangers' news; each question 5-point Likert scale (1. 'definitely no', 5. 'definitely yes')
Frequency of Facebook use for news consumption	Ordinal variable: 1 to 4 point scale (1. once a month or less, 2. once a week, 3. a few times a week, 4. every day)
Frequency of Facebook use	As above
	SML scale
Functional consumption	
Ability to use search tools (e.g. notification settings, news feed settings) to find interesting information on Facebook	Ordinal variable: 5-point Likert scale (1. 'definitely no', 5. 'definitely yes')
Up-to-date knowledge of how to search information on Facebook	As above
Paying attention to different opinions on the same issue on social media	As above
Critical consumption	
Paying attention to who is the author of a news item about politics	As above
Being guided by credibility and objectivity when choosing a news channel	As above
Checking the credibility of news in sources other than Facebook	As above
Functional prosumption	
Ability to use the tools available on Facebook to create one's own content (text, graphics, video, audio)	As above
Sharing news with other Facebook users	As above
Commenting on or evaluating news posted by others	As above
Critical prosumption	
Discussing on Facebook to inform or prevent misleading other users	As above
Commenting on posts/news to express personal views/political preferences	As above
Sharing information presenting a different point of view if disagree with the content of the news on Facebook	As above

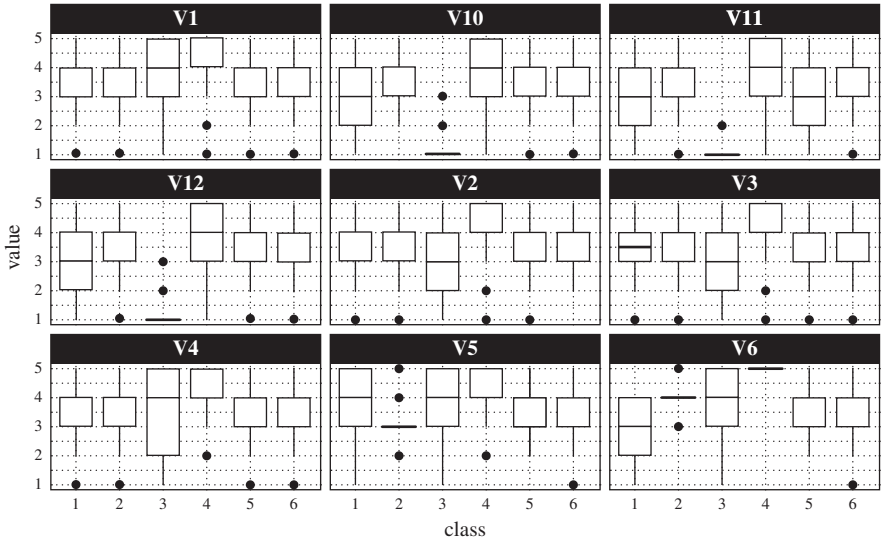
*Gender classification was provided by the survey research company. Only two genders were identified in the findings.

Table 3

	Model 1 Intentional sharing		Model 2 Unintentional sharing	
	Estimate	p-value	Estimate	p-value
Intercept	−3.653	<0.001	3.230	<0.001
Level of education	−0.069	0.134		
Gender			−0.244	0.006
Occupational status	0.052	0.064		
Salary	0.114	0.032		
Number of SNS used	0.197	<0.001	−0.181	<0.001
Assessment of own Facebook skills	0.409	<0.001	−0.325	<0.001
Trust in FB index	0.058	0.002	−0.066	<0.001
Frequency of Facebook use for news consumption			−0.240	<0.001
Frequency of Facebook use			0.183	0.057
Functional consumption	0.078	0.030		
SM literacy index	−0.023	0.065		
Observations	N 932			
Log Likelihood	−393.531		−489.372	
Akaike Inf. Crit.	803.061		994.744	

scores for top three models were comparable, we decided that a model with fewer classes will be more readable. This analysis was deemed particularly suitable due to its ability to categorize individuals into distinct, non-overlapping classes based on patterns in response data, hence allowing a deeper exploration into the heterogeneity within our Facebook user sample. Thus, each class represents a group of respondents who share similar patterns of characteristics. Scores of reduced SML scale (Graph 1) were crossed with the following

Graph 1



variables: age, level of education, place of residence, salary, occupational status, social media use, trust in Facebook, perception of own digital skills (see Appendix).

We propose the following labels for the classes identified in this analytical procedure: (i) lowest SML, (ii) low SML, (iii) medium-low SML, (iv) medium-high SML, (v) higher SML, (vi) highest SML. Two classes "The youngest, heavy SM users with average SM literacy" and "The most SM literate users" cover almost 65% of the whole sample. The two smallest classes "The most educated users with SM literacy below average" and "Low level of SM literacy and lowest level of SM use" represent 13% of the total sample. Interestingly, each class is characterized by unique relations between variables selected for cross-analysis. For example, the "The youngest, heavy SM users with average SM literacy" class is made of the youngest cohort (mean of the age) with the highest use of social media sites. This deserves particular attention as the SML score for this class was below the average for the total sample.

Table 4

CLASSES	1 The oldest users with low SM literacy	2 The most educated users with SM literacy below average	3 The least SM literate users with high self-esteem	4 The most SM literate users	5 The youngest, heavy SM users with average SM literacy	6 Low level of SM literacy and lowest level of SM use
N	96	65	126	265	383	65
Demographics	The oldest fraction with the highest level of salary. High level of education with quite high occupational status.	Relatively young fraction. Residents of rural areas with the highest level of education and occupational status.	Older fraction, residents of bigger cities. Moderate level of education with high occupational status.	Good earners, residents of bigger cities. Well-educated with the lowest occupational status.	The youngest fraction of users. Salary and education below the average. Average occupational status.	Low level of salary, education and occupational status. Mostly rural residents.
Digital and media skills	The highest assessment of own digital skills but relatively low SML score.	The lowest assessment of own digital skills.	The highest assessment of own digital skills (the same score as Class 1). The lowest score in SML.	The highest level of SML and average assessment of own digital skills.	SML below the average. Average assessment of own digital skills.	SML below the average. Low assessment of own digital skills.
Social media use and trust in Facebook	Average use of social media sites and the lowest level of trust in Facebook.	The lowest level of social media use with a low level of trust in Facebook.	Use of social media above the average, the highest level of trust in Facebook.	Average use of social media sites and a high level of trust in Facebook.	The highest level of social media use with trust in Facebook above the average.	The lowest level of social media use with trust in Facebook above the average.

In the next step, we cross-tabulated latent classes with intentional and unintentional sharing of fake news on Facebook. Due to the different class sizes, the results of the cross-tabulations are presented by percentage (Table 5).

Table 5

Class	Sharing of fake news	
	Intentional	Unintentional
1	16.67%	29.17%
2	26.15%	33.85%
3	7.94%	11.90%
4	16.98%	28.30%
5	21.15%	27.15%
6	29.23%	50.77%

The cross-tabulation indicates that respondents belonging to the "Low level of SM literacy and lowest level of SM use" class are the most engaged (80%) in both forms of sharing of fake news on Facebook. In contrast, respondents from the "The least SM literate users with high self-esteem" class share fake news with the lowest frequency (almost 20%). We discuss these results in greater detail in the subsequent sections of the article.

Discussion and Findings

This study has examined the relationship between fake news sharing, users' experience and SML. The results indicate that social media engagement and experience, as well as media skills related to online media usage are linked to intentional and unintentional sharing of fake news on social media. However, H1, proposing that those using a greater number of social media platforms tend to share fake news unintentionally, has not been confirmed. Experience gained from multiple social platforms has the opposite effect: those engaged in communication on multiple social media platforms tend to share fake news intentionally. This may be related to the "active skills" (prosumption) of social media users mentioned above. Users may intentionally disseminate fake news as a means to garner attention, boost their online presence and thus enhance their perceived status within the community. This aligns with Lee and Ma's (2012) argument that users may increase their reputation and popularity among peers by sharing diverse content (including fake news) and exchanging ideas in online communities. In other words, the need to seek better status appears to be stronger than a sober assessment of the effects caused by the spread of fake news on social media (Pennycook et al. 2021). Our results expand upon the patterns previously identified in the relevant literature. However, it is worth mentioning that the link between social media ubiquity and intentional sharing may also stem directly from the need of socialization and community belonging (Talwar et al. 2020). Considering the purposes, rewards and goals that social media users aim to receive in an online environment, information searching and comparing skills (functional consumption) seem to complement the need to raise individual status in thorough social media. Humphreys (2016: 84) emphasizes that such goals can be conscious or unconscious, which, in a way, further complicates rational explanations for the phenomenon of sharing fake news on Facebook. Thus, intentional sharing of fake news can be seen as a mechanism for attention gaining (on multiple platforms) that mitigates social deficits (e.g. social isolation, communication problems, low self-esteem). The need

for attention and the above-mentioned deficits can be an important research area for the sociologist, which should be included in a broader analysis of the spread of fake news in the digital environment.

Further, our results indicate that there is no link between lower SML (index score) and unintentional sharing of fake news on Facebook (H2). However, one aspect of social media literacy—functional consumption—deserves further attention. Those with better skills in terms of information searching and comparing (functional consumption) tend to share fake news intentionally on Facebook. At this point, it is worth considering whether this dimension is linked with "active skills" that may be responsible for intentional sharing of fake news. Active skills relate to the users' capability to use social media in a more proactive and productive way, which includes the creation and sharing of content. If a connection exists between these skills and functional consumption, it may suggest that those who are more adept at using, navigating, and producing content on social media might be using their skills to strategically share fake news. Accordingly, functional consumption can be considered to be a set of competencies necessary to achieve reputational and social goals mentioned above. In this light, functional consumption becomes more than just an individual's ability to process online information. It morphs into a complex skillset leveraged to attain specific reputational and social goals. It underscores the importance of understanding the ways in which individuals navigate and use social media platforms and how these skills can both benefit and harm the overall information ecosystem.

Hypothesis 3 posited a positive relationship between functional consumption (the ability to effectively seek out, interpret, and compare online information) and the unintentional sharing of fake news. However, our findings did not confirm this. Users who demonstrate a high level of functional consumption—who can effectively find interesting information, keep up-to-date with Facebook's search capabilities, and engage with a range of opinions—do not necessarily share fake news unintentionally more often. This challenges the preconceived notion that adept usage of platform tools and exposure to diverse perspectives inadvertently contribute to the unintentional spreading of misinformation. It suggests that a more nuanced understanding of users' abilities and their impact on information dissemination is necessary.

Hypothesis 4 claiming that those with higher scores in the critical prosuming aspect of social media literacy tend to share fake news intentionally, has not been confirmed either. This appears to be surprising as it might be expected that individuals who are more engaged in critical and active consumption and production of content (hence, critical prosuming) would be more prone to intentionally disseminate fake news, perhaps to stimulate debate or challenge the prevailing narratives, our data did not support this claim. Probably skills in the area of critical prosumption are associated with experience, and as a result, lead to avoiding the sharing of fake news.

Considering that Hypotheses H3 and H4 have not been confirmed, in order to further explore the issue of intentional and unintentional sharing of fake news on social media, we added to our statistical models some more variables reflecting users' behavior on social media. First, gender has turned out to be significantly related to unintentional sharing. In particular, being male is negatively associated with unintentional fake news sharing. Perhaps men more frequently use Facebook as a medium that serves them in achieving

certain goals (eg. status seeking, power, self-exposure), even if it involves the dissemination of false information. Apart from this, two variables, (i) trust in Facebook (index) and (ii) confidence in one's own fake news recognition skills are positively associated with sharing fake news intentionally and at the same time they are not linked to unintentional fake news sharing It seems, therefore, that the intentional sharing of fake news on Facebook is somehow connected to self-confidence, which may weaken in such a person (self-confident or over-confident) the assessment of the impact of fake news on other social media users. Furthermore, the frequency of Facebook use to access news is negatively related to unintentional sharing of fake news on Facebook. This may suggest that frequent online news consumption somehow prevents negative sharing behaviors which may harm other social media participants. This may be a Facebook-specific behavior, where "close ties" dominate, causing them to try to avoid conflict on the social network and be less inclined to share controversial and emotionally evocative content (de León and Trilling 2021; Valenzuela et al. 2018). On the other hand, a study by Beam et al. (2018) suggests that diversity in Facebook friends increases online news sharing. Therefore, future research should also possibly take into account how diverse Facebook friend networks are.

Our results suggest that gender is significantly related to unintentional sharing of fake news on Facebook (Laato et al. 2020). Specifically, women are more likely to share fake news unintentionally. However, there was no significant relationship between gender and intentional fake news sharing on Facebook. We also found that users with higher salaries are more likely to share fake news intentionally. These findings may signal important relationships between gender, level of education and fake news sharing on social media platforms.

Finally, the latent class analysis (LCA) suggests that social media literacy is cross-related to the following features: (i) demographics, (ii) digital and media skills, (iii) social media use and trust in Facebook. LCA helped us to distinguish six classes based on the SML score of our respondents. In addition to the different levels of media competence, each class has its specificity due to the different combinations of variables grouped in the dimensions mentioned above. We found that members of Class 6, characterized by: (i) low level of salary, education and occupational status, (ii) SML score below the average and a low assessment of own digital skills, (iii) the lowest level of social media use with trust in Facebook above the average, share fake news (intentionally and intentionally) more frequently than others. At the same time, those belonging to Class 3, characterized by: (i) moderate level of education with high occupational status, (ii) the highest assessment of own digital skills and the lowest score in social media literacy (!), (iii) use of social media above the average, the highest level of trust in Facebook, are less likely to share fake news (intentionally and unintentionally) on Facebook.

It's worth highlighting that behaviors related to the intentional or unintentional sharing of fake news may have a local, Polish context. For several years now, communication on Polish Facebook has been highly polarized, leading many actors to resort to the use of fake news as a means of achieving various objectives and implementing specific life strategies. Undoubtedly, Polish Facebook is heavily flooded with fake news disseminated by Russian trolls, which may influence the dependencies and behaviors of users described above (Legucka and Szczudlik 2023).

An important feature of modern democracy is the virtual public sphere, which is significantly created by social media. The findings may suggest that the networked public sphere (Friedland et al. 2006) is deformed by the attention-seeking activities of social media users, even at the cost of spreading fake news. In addition, the results are partly in line with the concept of Chris Bail (2021), who pointed out that social media prism is linked to the invisibility of moderates and the dominance of the most active users (including those spreading fake news), because the business logic of social media platforms assumes high engagement of those using them. In practice, the expectation that social media would enhance cross-cutting exposure has proved untrue precisely because real news does not have the same appeal as fake news, which is emotionally charged and reaches further (Vosoughi et al. 2018). This phenomenon can pose a significant threat to democratic processes, including the conduct of electoral campaigns, including by using fake news as mechanisms to generate attention and moral panic.

Our research also indicates that low level of competence in this area make social media users more susceptible to fake news, which generates a distorted picture of reality. As a result, existing social divisions deepen and new conflicts emerge, which can destabilize the course of political, economic and socio-cultural processes. These threats make it necessary for public institutions to take a higher level of interest in, and education about, the competences of citizens in the use of digital communication tools in the future.

Limitations and Future Research

There were some limitations to the current study. First, we used a convenience sample as there is no sampling frame of Facebook users in Poland. Consequently, the results indicate new and prospective relations between variables rather than capture some general trends in the whole population. Second, the study was conducted in one country with certain cultural determinants of online communication and therefore international comparisons may not be fully eligible. Third, we only focused on Facebook users although the problem of fake news sharing cannot be reduced to this particular social networking site. Finally, we did not explore in detail the link between the dimensions of social media literacy but it is very plausible that the distinction between active and passive skills may further explain the phenomena of fake news sharing on social media platforms.

The limitations indicated above may inspire new research on the sharing of fake news. Firstly, future studies of fake news sharing on social media could include a more representative sample, where possible, bearing in mind the constraint related to the random operator. Secondly, it seems that international comparative research conducted simultaneously on multiple social media platforms could significantly expand our knowledge about sharing fake news in the online communication environment. Thirdly, it is important to take into account the different social media platforms to find out whether and to what extent the specifics of a particular platform are conducive to the sharing of fake news. Finally, it is possible to include other variables on the side of the independent variables in order to gain a deeper understanding of the phenomenon under study.

Conclusion

This study examining the relationships between fake news sharing, user experience, and social media literacy has revealed several key findings. It was noted that social media engagement and experience, as well as skills related to online media usage, are linked to both intentional and unintentional fake news sharing. Characteristics such as gender, level of trust in Facebook, and belief in one's ability to recognize fake news were also found to be significant. Males, for example, are less likely to unintentionally share fake news, while those who use Facebook more frequently for news access are less prone to unintentional fake news sharing.

Latent class analysis (LCA) suggested that SML is intertwined with features such as demographics, digital and media skills, and trust in Facebook. Results indicated that users with lower salaries, education level, and occupational status, as well as a lower level of digital skills and trust in Facebook, share fake news more frequently. On the other hand, those with a moderate level of education, high occupational status, and a high level of trust in Facebook are less inclined to share fake news. These findings underscore the complex interplays between various factors influencing the sharing of fake news on social media.

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References

Allcott, H., & Gentzkow, M. 2017. Social Media and Fake News in the 2016 Election, *Journal of Economic Perspectives 31*(2): 211–236. https://doi.org/10.1257/jep.31.2.211

Altay, S., Hacquin, A.-S., & Mercier, H. 2022. Why do so few people share fake news? It hurts their reputation, *New Media & Society 24*(6): 1303–1324. https://doi.org/10.1177/1461444820969893

Aral, S. 2020. *The Hype Machine: How Social Media Disrupts Our Elections, Our Economy, and Our Health—and How We Must Adapt*. New York: HarperCollins.

Ardèvol-Abreu, A., Delponti, P., & Rodríguez-Wangüemert, C. 2020. Intentional or inadvertent fake news sharing? Fact-checking warnings and users' interaction with social media content, *Profesional de la información 29*(5). https://doi.org/10.3145/epi.2020.sep.07

Bail, C. A. 2021. *Breaking the Social Media Prism: How to Make Our Platforms Less Polarizing*. Princeton: Princeton University Press.

Bakshy, E., Messing, S., & Adamic, L. A. 2015. Exposure to ideologically diverse news and opinion on Facebook, *Science 348*(6239): 1130–1132. https://doi.org/10.1126/science.aaa1160

Baptista, J. P., & Gradim, A. 2020. Understanding Fake News Consumption: A Review, *Social Sciences 9*(10): 1–22. https://doi.org/10.3390/socsci9100185

Beam, M. A., Child, J. T., Hutchens, M. J., & Hmielowski, J. D. 2018. Context collapse and privacy management: Diversity in Facebook friends increases online news reading and sharing, *New Media & Society 20*(7): 2296–2314. https://doi.org/10.1177/1461444817714790

Bernal, P. 2018. Fakebook: Why Facebook Makes the Fake News Problem Inevitable, *Northern Ireland Legal Quarterly 69*(4): 513–530.

Boczkowski, P. J., Mitchelstein, E., & Matassi, M. 2018. News comes across when I'm in a moment of leisure: Understanding the practices of incidental news consumption on social media, *New Media & Society 20*(10): 3523–3539. https://doi.org/10.1177/1461444817750396

Buchanan, T. 2020. Why do people spread false information online? The effects of message and viewer characteristics on self-reported likelihood of sharing social media disinformation, *PLoS One 15*(10). https://doi.org/10.1371/journal.pone.0239666

Chadwick, A., & Vaccari, C. 2019. *News Sharing on UK Social Media. Misinformation, Disinformation, and Correction*. Online Civic Culture Centre, Loughborough University.

Chadwick, A., Vaccari, C., & O'Loughlin, B. 2018. Do tabloids poison the well of social media? Explaining democratically dysfunctional news sharing, *New Media & Society 20*(11): 4255–4274. https://doi.org/10.1177/1461444818769689

Chambers, S. 2020. Truth, Deliberative Democracy, and the Virtues of Accuracy: Is Fake News Destroying the Public Sphere, *Political Studies 69*(1): 147–163. https://doi.org/10.1177/0032321719890811

Chen, D.-T., Wu, J., & Wang, Y.-M. 2011. Unpacking new media literacy, *Journal on Systemics Cybernetics and Informatics 9*(2): 84–88. http://hdl.handle.net/10497/18170

Cooke, N. A. 2017. Posttruth, Truthiness, and Alternative Facts: Information Behavior and Critical Information Consumption for a New Age, *The Library Quarterly 87*(3): 211–221. https://doi.org/10.1086/692298

Cooke, N. A. 2018. *Fake News and Alternative Facts: Information Literacy in a Post-Truth Era*. Chicago: ALA Editions.

de León, E., & Trilling, D. 2021. A Sadness Bias in Political News Sharing? The Role of Discrete Emotions in the Engagement and Dissemination of Political News on Facebook, *Social Media + Society 7*(4). https://doi.org/10.1177/20563051211059710

Duffy, A., Tandoc, E., & Ling, R. 2020. Too good to be true, too good not to share: the social utility of fake news, *Information, Communication & Society 24*(6): 1303–1324. https://doi.org/10.1080/1369118x.2019.1623904

Fallis, D., & Mathiesen, K. 2019. Fake news is counterfeit news, *Inquiry*: 1–20. https://doi.org/10.1080/0020174x.2019.1688179

Friedland, L. A., Hove, T., & Rojas, H. 2006. The Networked Public Sphere, *Javnost-the Public 13*(4): 5–26. https://doi.org/10.1080/13183222.2006.11008922

González-Cabrera, C., Ugalde, C., Figueroa, C., & Pesántez, J. 2019. The impact of media literacy on the intention to share fake information in social networks, in *EDULEARN19 Proceedings*, IATED, pp. 7123–7131.

Guess, A., Nagler, J., & Tucker, J. 2019. Less than you think: Prevalence and predictors of fake news dissemination on Facebook, *Science Advances 5*(1): 1–8. https://doi.org/10.1126/sciadv.aau4586

Guess, A., Nyhan, B., & Reifler, J. 2018. Selective exposure to misinformation: Evidence from the consumption of fake news during the 2016 US presidential campaign. https://apo.org.au/node/126961

Guess, A. M., Lerner, M., Lyons, B., Montgomery, J. M., Nyhan, B., Reifler, J., & Sircar, N. 2020. A digital media literacy intervention increases discernment between mainstream and false news in the United States and India, *Proceedings of the National Academy of Sciences 117*(27): 15536–15545.

Habermas, J. 1989. *The Structural Transformation Of The Public Sphere: An Inquiry into a Category of Bourgeois Society*. Cambridge, Ma.: MIT Press.

Humphreys, A. 2016. *Social Media. Enduring Principles*. Oxford: Oxford University Press.

Ihm, J., & Kim, E.-m. 2018. The hidden side of news diffusion: Understanding online news sharing as an interpersonal behavior, *New Media & Society 20*(11): 4346–4365. https://doi.org/10.1177/1461444818772847

Jones-Jang, S. M., Mortensen, T., & Liu, J. 2019. Does media literacy help identification of fake news? Information literacy helps, but other literacies don't, *American Behavioral Scientist 65*(2): 371–388. https://doi.org/10.1177/0002764219869406

Kalogeropoulos, A., Negredo, S., Picone, I., & Nielsen, R. K. 2017. Who Shares and Comments on News? A Cross-National Comparative Analysis of Online and Social Media Participation, *Social Media & Society 3*(4). https://doi.org/10.1177/2056305117735754

Karlova, N. A. & Fisher, K. E. 2013. A social diffusion model of misinformation and disinformation for understanding human information behavior, *Information Research 18*(1) paper 573. http://InformationR.net/ir/18-1/paper573.html

Khaldarova, I., & Pantti, M. 2016. Fake News, *Journalism Practice 10*(7): 891–901. https://doi.org/10.1080/17512786.2016.1163237

Khan, M. L., & Idris, I. K. 2019. Recognise misinformation and verify before sharing: a reasoned action and information literacy perspective, *Behaviour & Information Technology 38*(12): 1194–1212. https://doi.org/10.1080/0144929X.2019.1578828

Klapper, J. T. 1960. *The Effects of Mass Communication*. Los Angeles:The Free Press.

Koc, M., & Barut, E. 2016. Development and validation of New Media Literacy Scale (NMLS) for university students, *Computers in Human Behavior 63*: 834–843. https://doi.org/10.1016/j.chb.2016.06.035

Kümpel, A. S., Karnowski, V., & Keyling, T. 2015. News Sharing in Social Media: A Review of Current Research on News Sharing Users, Content, and Networks, *Social Media & Society 1*(2). https://doi.org/10.1177/2056305115610141

Laato, S., Islam, A. N., Islam, M. N., & Whelan, E. 2020. What drives unverified information sharing and cyberchondria during the COVID-19 pandemic?, *European Journal of Information Systems 29*(3): 288–305. https://doi.org/10.1080/0960085X.2020.1770632

Lazer, D. M. J., Baum, M. A. B., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., Metzger, M. J., Nyhan, B., Pennycook, G., Rothschild, D., Schudson, M., Sloman, S. A., Sunstein, C. R., Thorson, E. A., Watts, D. J., & Zittrain, J. L. 2018. The science of fake news, *Science 359*(6380): 1094–1096. https://doi.org/10.1126/science.aao2998

Lee, C. S., Goh, D. H.-L., Chua, A. Y. K., & Ang, R. P. 2010. Indagator: Investigating Perceived Gratifications of an Application That Blends Mobile Content Sharing with Gameplay, *Journal of the American Society for Information Science and Technology 61*(6): 1244–1257. https://doi.org/10.1002/asi.21305

Lee, C. S., & Ma, L. 2012. News sharing in social media: The effect of gratifications and prior experience, *Computers in Human Behavior 28*(2): 331–339. https://doi.org/10.1016/j.chb.2011.10.002

Lee, L., Chen, D.-T., Li, J.-Y., & Lin, T.-B. 2015. Understanding new media literacy: The development of a measuring instrument, *Computers & Education 85:* 84–93. https://doi.org/10.1016/j.compedu.2015.02.006

Legucka, A., Szczudlik, J. 2023. Dezinformacja i propaganda Rosji oraz Chin w kontekście wojny na Ukrainie. The Polish Institute of International Affairs (PISM), 17.01.2023, https://www.pism.pl/publikacje/dezinformacja-i-propaganda-rosji-oraz-chin-w-kontekscie-wojny-na-ukrainie.

Lelkes, Y., Sood, G., & Iyengar, S. 2017. The Hostile Audience: The Effect of Access to Broadband Internet on Partisan Affect, *American Journal of Political Science 61*(1): 5–20. https://doi.org/10.1111/ajps.12237

Lin, C., Salwen, M. B., & Abdulla, R. A. 2005. Uses and Gratifications of Online and Offline News: New Wine in an Old Bottle?, in: M. B. Salwen, B. Garrison, & P. D. Driscoll (eds.), *Online News and the Public*. Mahwah, N.J.: Lawrence Erlbaum Associates, pp. 221–236.

Lin, T.-B., Li, J.-Y., Deng, F., & Lee, L. 2013. Understanding new media literacy: An explorative theoretical framework, *Educational Technology & Society 16*(4): 160–170.

Marwick, A. E. 2018. Why Do People Share Fake News? A Sociotechnical Model of Media Effects, *Georgetown Law Technology Review 2*(2): 474–512.

Menczer, F., & Hills, T. 2020. Information Overload Helps Fake News Spread, and Social Media Knows It, *Scientific American*. https://www.scientificamerican.com /article/information-overload-helps-fake-news-spread-and-social-media-knows-it/

Osmundsen, M., Bor, A., Vahlstrup, P. B., Bechmann, A., & Petersen, M. B. 2021. Partisan Polarization Is the Primary Psychological Motivation behind Political Fake News Sharing on Twitter, *American Political Science Review 115*(3): 999–1015. https://doi.org/10.1017/s0003055421000290

Pennycook, G., Epstein, Z., Mosleh, M., Arechar, A. A., Eckles, D., & Rand, D. G. 2021. Shifting attention to accuracy can reduce misinformation online, *Nature* (592): 590–595. https://doi.org/10.1038/s41586-021-03344-2

Pera, R., Quinton, S., & Baima, G. 2020. I am who I am: Sharing photos on social media by older consumers and its influence on subjective well-being, *Psychology & Marketing 37*(6): 782–795. https://doi.org/10.1002/mar.21337

PEW. 2016. *Pew Research Center: Many Americans Believe Fake News Is Sowing Confusion*. https://www.journalism.org/2016/12/15/many-americans-believe-fake-news-is-sowing-confusion/

Prior, M. 2009. The immensely inflated news audience: Assessing bias in self-reported news exposure, *Public Opinion Quarterly 73*(1): 130–143. https://doi.org/10.1093/poq/nfp002

Rampersad, G., & Althiyabi, T. 2019. Fake news: Acceptance by demographics and culture on social media, *Journal of Information Technology & Politics 17*(1): 1–11. https://doi.org/10.1080/19331681.2019.1686676

Talwar, S., Dhir, A., Kaur, P., Zafar, N., & Alrasheedy, M. 2019. Why do people share fake news? Associations between the dark side of social media use and fake news sharing behavior, *Journal of Retailing and Consumer Services 51*: 72–82. https://doi.org/10.1016/j.jretconser.2019.05.026

Talwar, S., Dhir, A., Singh, D., Virk, G. S., & Salo, J. 2020. Sharing of fake news on social media: Application of the honeycomb framework and the third-person effect hypothesis, *Journal of Retailing and Consumer Services 57*. https://doi.org/10.1016/j.jretconser.2020.102197

Vaccari, C. 2013. *Digital Politics in Western Democracies*. Baltimore. Johns Hopkins University Press.

Venables, W. N., & Ripley, B. D. 2002. *Modern Applied Statistics with S* (Fourth edition). New York: Springer.

Valenzuela, S., Correa, T., & Gil de Zúñiga, H. 2018. Ties, Likes, and Tweets: Using Strong and Weak Ties to Explain Differences in Protest Participation Across Facebook and Twitter Use, *Political Communication 35*(1): 117–134. https://doi.org/10.1080/10584609.2017.1334726

Vosoughi, S., Roy, D., & Aral, S. 2018. The spread of true and false news online, *Science 359*(6380): 1146–1151. https://doi.org/10.1126/science.aap9559

Vraga, E. K., & Tully, M. 2019. News literacy, social media behaviors, and skepticism toward information on social media, *Information, Communication & Society 24*(2): 150–166. https://doi.org/10.1080/1369118X.2019.1637445

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Appendix

	The oldest users with low SM literacy	The most educated users with SM literacy below	The least SM literate users with high self-esteem	The most SM literate users	The youngest, heavy SM users with average SM literacy	Low level of SM literacy and lowest level of SM use	All classes
	1	2	3	4	5	6	Average
Age	**42.22**	39.6	**41.4**	**40.83**	39.31	**40.51**	40.35
Salary	**3.06**	2.75	2.74	**3.05**	2.9	2.75	2.92
Place of residence	**3.45**	2.42	**3.57**	**3.52**	**3.5**	3.11	3.41
Level of education	**4.03**	**4.06**	3.99	**4.04**	3.98	3.86	4
Occupational status	**2.24**	**2.34**	**2.33**	2.13	**2.28**	2.15	2.24
SNS in use	3.54	3.26	3.6	3.54	**3.65**	3.26	3.552
Trust in FB news	2.74	2.75	**3.04**	**3.00**	**2.97**	**2.97**	2.95
SM_literacy	29.98	30.98	23.75	**38.16**	30.28	30.54	31.58
Own_skills	**2.9**	2.74	**2.9**	**2.86**	**2.86**	2.83	2.86