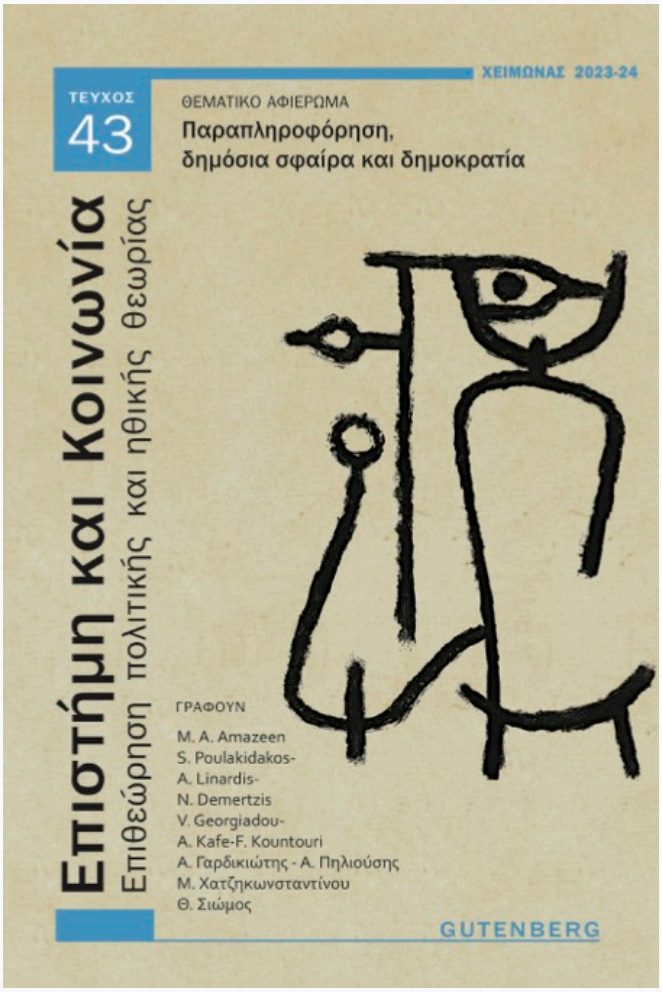
ePublishing

ΕΘΝΙΚΟ ΚΕΝΤΡΟ ΤΕΚΜΗΡΙΩΣΗΣ
EKT
NATIONAL DOCUMENTATION CENTRE

Επιστήμη και Κοινωνία: Επιθεώρηση Πολιτικής και Ηθικής Θεωρίας

Τόμ. 43 (2024)

ΠΑΡΑΠΛΗΡΟΦΟΡΗΣΗ, ΔΗΜΟΣΙΑ ΣΦΑΙΡΑ ΚΑΙ ΔΗΜΟΚΡΑΤΙΑ



Perceptions and attitudes towards fact-checking in Greece: A quantitative audience research

Stamatis Poulakidakos, Nicolas Demertzis, Apostolos Linardis

Copyright © 2024, Stamatis Poulakidakos, Nicolas Demertzis, Apostolos Linardis

Άδεια χρήσης Creative Commons Attribution-NonCommercial-ShareAlike 4.0.

Βιβλιογραφική αναφορά:

Poulakidakos, S., Demertzis, N., & Linardis, A. (2024). Perceptions and attitudes towards fact-checking in Greece: A quantitative audience research: A quantitative audience research. *Επιστήμη και Κοινωνία: Επιθεώρηση Πολιτικής και Ηθικής Θεωρίας*, *43*, 34–68. ανακτήθηκε από https://ejournals.epublishing.ekt.gr/index.php/sas/article/view/34102

*Stamatis Poulakidakos**
*Apostolos Linardis***
*Nicolas Demertzis****

PERCEPTIONS AND ATTITUDES TOWARDS FACT-CHECKING IN GREECE
A QUANTITATIVE AUDIENCE RESEARCH

This article studies the Greek public's perceptions and attitudes towards fact-checking. We conducted quantitative audience research with a nationwide convenience sample of 1370 people (aged 17+) using an online questionnaire during the period 26/11/2021 to 26/05/2022. As evident from our own research, parts of the (digital) audience seem to 'respond' in a positive way to fact-checking organizations. In terms of the most important findings, political interest has the highest effect on the dependent variables of our research questions. More specifically, it has the relative higher positive and statistically significant effect on three dependent variables ('awareness of fact-checking organizations', 'ability to spot fake news on the internet' and 'investigation of the accuracy of a strange news item'). Self-positioning on the left-right axis has the relative high-

* Assistant Professor, Department of Communication and Digital Media, University of Western Macedonia.

** Research Director, National Centre for Social Research.

*** Professor, Department of Communication and Media Studies, National and Kapodistrian University of Athens.

est positive effect on two dependent variables ('belief that the pandemic is an overreaction' and 'effectiveness of fact-checking organizations').

Introduction

'Fake news' is not a new phenomenon (Walter et al. 2019; Andersen and Obelitz Søe 2020:126); yet, the advent of social media (Marietta, Barker and Bowser 2015: 578; Barrera et al. 2020:7), along with various factors such as social grievances, political and affective polarization, widespread distrust, moral relativism, the escalating commercialization of the news media seized by infotainment, the mediatization of politics and the concomitant politainment (Demertzis, Poulakidakos, Tsekeris 2022) has brought an increase in the circulation of biased information or outright false news, posing major challenges for the democratic public sphere. A means to start improving the current information environment by changes that reduce the spread of lies, rumors, and other misinformation online is fact-checking practices.

Fact-checking is an (online) activity focused on assessing the veracity of information that hits the public sphere (e.g., political statements, news items/reports), employing a form of 'scientific objectivity' (Robertson, Mourão and Thorson 2020:234) overhauling any available relevant information (Demertzis, Poulakidakos, Tsekeris 2022). Fact-checkers seek to investigate primary and secondary sources in order to help users decide on the credibility of online content (Amazeen 2015: 4; Brandtzaeg and Følstad 2017: 4-5; Brandtzaeg, Følstad and Chaparro Domínguez 2018; York et al. 2020: 959; Demertzis, Poulakidakos, Tsekeris 2022) and to facilitate the existence of an educated citizenry informed about the facts on pressing issues of public interest (Jarman 2016: 14). To this end, fact-checkers seek to reach as wide an array of people as possible (Robertson, Mourão and Thorson 2020: 219) assuming that a rational public will use accurate information to update their opinions over disputed issues pertaining public debate of public policy and political campaigns.

Current research on the assessment of the effectiveness of fact-checking, though, does not provide a clear conclusion (Jarman 2016:9) as to the addressing misinformation in the public sphere. If anything, the public is composed not only by rational monitorial information seekers but also by sentimental citizens who selectively decode the news through affective shortcuts (Marcus 2002). Hence, in the eyes of several audiences, fact-checkers are perceived as partisan actors in a divided/polarized media system (Robertson, Mourão and Thorson 2020: 234). Research results focusing, predominantly on the US context (Nieminen and Rapelli 2019: 296), highlight the evaluative ambivalence of the perceived effectiveness of fact-checking. On one hand, fact-checking is deemed corrective of the information received by individuals, reducing dis-/misinformation, contributing —at the same time— to the improvement of political knowledge (York et al. 2020: 958). Fact-checking appears to reduce —on several occasions— the likelihood that politicians will make inaccurate claims, limiting the dissemination of erroneous information in the public sphere (Amazeen 2019, 2020). In addition, it has been documented that fact-checking messages may positively affect opinions and beliefs, irrespective of political ideology, pre-existing positions, context (campaign vs. routine), and whether it refutes the entire false statement or just parts of a statement (Walter et al. 2019: 366).

On the other hand, it is argued that fact-checks may have limited, no or even reverse effects, particularly when a misperception is grounded on factors like partisanship or in-group participation. In these occasions, the effects of fact-checking on beliefs and political cognitions are quite weak (Walter et al. 2019:367). Also, there is doubt whether fact-checkers are consistent in their conclusions and whether their methods are reliable (Nieminen and Rapelli 2019: 296).

Additionally, the effect of the fact-checking reports depends upon whether fact-checkers are seen as 'experts' or as 'peers'. A correction tweet from a relevant institution (expert) may reduce misperceptions, while a correction tweet from a random user

(peer) may not, indicating that an expert fact-checker would be more effective. Besides, empirical evidence underlines the importance of (digital) acquaintances. News stories posted by a Facebook friend are more likely to generate interest in seeking further information than those from non-friend sources. Relevant research also suggests that there are key differences in whether friends were perceived to be opinion leaders or not, with perceived opinion leaders having a positive effect on information seeking (Oeldorf-Hirsch et al. 2020: 691). Therefore, the alleged credibility of a fact-checking source appears to be crucial for the effectiveness of its output and as a consequence fact-checking is not always successful due to varied credibility and the quality of communication with the audience.

Since the mission of fact-checking outlets to warrant the public about misinformation cannot be accomplished without a wide audience paying attention to them (Robertson, Mourão and Thorson 2020: 319), it is crucial to know better who is aware of, uses, and one's assessment of its mission. Stemming from recent research in other countries, the current paper presents the results of a quantitative audience research, which seeks to address issues regarding attitudes and perceptions about fact-checking in Greece. First, we comment on the debatable accounting of fact-checking by lay persons and the academia that is contingent upon political cultural and socio-psychological factors. Second, we will discuss the audience's awareness and familiarity with fact-checking procedures; in the third part of the paper, we present our research question, research hypotheses, the method and the results of our investigation, the first done in the Greek context. This work is part of the project titled *Public Discourse Fact-checking* funded by the Hellenic Foundation of Research and Innovation (HFRI) for the 2019-2021 period and led by the National Centre for Social Research (EKKE) in collaboration with the ATHENA Research Centre, and the Laboratory for Social Research in the Media, Department of Communication and Media Studies, National and Kapodistrian University of Athens.

Ambivalence towards fact-checking

Amidst the 'perfect storm' of the crisis of public knowledge and public communication fueled by political polarization and grievance politics, fact-checking is often seen as an inherently ambivalent enterprise which is part and parcel of the more general radical ambivalence marking the late modern human condition. The latter is not characterized by the zero–sum logic of 'either–or', but by the logic of 'both–and' (Beck 1997, 2009). Living in the age of 'both–and' implies simultaneity, hybridity, pluralism, multiplicity, contingency, uncertainty and, above all, ambivalence, and doubt (Demertzis and Tsekeris 2018). On one hand, information and communication technologies, user–generated social media, citizen journalism, or citizen data journalism (Gray, Chambers & Bounegru 2012), computerization movements, free/libre and open-source software movements, open access courseware and open educational resources movements, and fact-checking for that matter, have significantly broadened the range and scope of the public sphere. On the other hand, however, and concurrently, advanced technological systems of massive data collection and storage are currently employed to surveil (and even control) ordinary citizens and their online activities (Lyon 2014: 4) with neuro–marketing (Zurawicki 2010; Sampson 2012), social bots and other autonomous agents (Shorey & Howard 2016), overwhelmingly producing potentially effective propaganda, deception and manipulation results designated as 'alternative facts' or 'post–facts' (or post–truths).

Drawing from the political ad watch experience of the 1980s in the USA, fact-checking was introduced as corrective of erroneous political statements and news journalism and, in this respect, it is a tool for democratic dialogue and a pillar of an open public sphere. Nevertheless, it has been rapidly developed into the widespread postmodern emotional climate of distrust, cynicism (Demertzis 2020: 15-21) and polarization, and thus its public reception is not straightforward. So, negativity against fact-checking services seem to be motivated by basic distrust rather than

rational argumentation often extended beyond fact-checking to involve the entire social and political system. This vicious circle of 'informational disbelief' (Brandtzaeg et al. 2017) makes individuals or social groups to be skeptical towards any information online, including information from societal institutions such as government bodies or the news media.

An important driver of informational disbelief may be the ease with which social media allows for the creation and sharing of user-generated content (Brandtzaeg et al. 2017: 12). An additional interrelated factor is political ideology; studies of social media users have found that people are often skeptical of fact-checkers, viewing them as leaning toward the left, though those on the left do also complain about fact-checks (Robertson, Mourão and Thorson 2020: 322). Partisans appear to be significantly more likely to accuse the fact-checking organizations of political bias, by pointing out the reliance of the report on anonymous sources, or 'revealing' a secret agenda seeking to undermine their favorable politician/party. If a fact-checking report refutes key information in their already established reality frames, partisans will reject the new information because it will contrast their already formed mental schemes (Walter et al. 2019: 353). Mainly, major criticism on the fact-checking procedure comes from the right/conservative part of the political spectrum, while liberals are more likely to share fact-checks and visit fact-checking sites (Robertson, Mourão and Thorson 2020: 322). Two intervening variables seem to be of importance herein: news consumption and interest in politics; liberal/mainstream news consumers seem to have more positive views and conservative news consumers have more negative views towards fact-checking (Robertson, Mourão and Thorson 2020: 327). Sometimes distrust goes as far as to question the benevolence and integrity of the fact-checking services, suggesting that they purposely misrepresent information, take part in fraud or propaganda, or are part of some larger conspiracy (Brandtzaeg et al. 2017: 15).

To be sure, it is not only social media users and/or news outlets consumers who cast doubt to fact-checking. Journalists do

it also; they frequently distrust verification services (Brandtzaeg et al. 2017) stating that they would never take information verified from fact checkers for granted without engaging in further investigations themselves. Some journalists acknowledge that this caution towards fact-checking services may be due to these being relatively new and report that they would require the use of such services as recommended by their own newsroom (Brandtzaeg et al. 2017: 14). Nevertheless, not all social media users and/or journalists voice negative sentiment. Brandtzaeg et al. (2017) showed that a good part of social media users assessed in a positive way the usefulness of online fact-checking services, while journalists viewed the use of online services and tools that may support verification (e.g., Google's reverse image search) as potentially promising.

Audience awareness of, familiarity with and visiting of fact-checking services

Despite the effort of fact-checkers to reach a wider audience, evidence indicates that people are not that familiar with their work, that fact-checks constitute a rather small portion of websites visited, that a limited number of people share fact-checks (Shin and Thorson 2017), and that —when shared— they are shared selectively on social media for political reasons (Robertson, Mourão, Thorson 2020: 219). In the relevant literature, fact-checking awareness is regarded as information about the existence of fact-checking websites (Robertson, Mourão and Thorson (2020). Those more likely to be aware of fact-checking sites are those with higher education, who are more liberal, more interested in politics, and more systematic news consumers (Shin and Thorson 2017 in Robertson, Mourão and Thorson 2020). Research has also shown that fact-checking awareness can be predicted by more frequent political discussion and higher political efficacy (Robertson, Mourão and Thorson 2020: 221).

Familiarity with, i.e., acquaintance and thorough knowledge of fact-checking sites, is usually predicted by gender (male), edu-

cation, political interest, political efficacy, ideology (liberal), and news consumption, while self-reported visiting of fact-checking sites is predicted by ideology (liberals present themselves as more frequent visitors), liberal/mainstream news consumption, as well as political interest. When it comes to age, there are mixed results: while visitors to fact-checking sites are likely to be younger, sharers of fact-checks tend to be older (Robertson, Mourão and Thorson 2020).

The above mentioned research reveals an interlinking between the three gradual stages of the relationship between fact-checking sites and their audiences (awareness, familiarity, visiting), with factors enhancing this relationship being interest in politics, liberal/mainstream news consumption, and liberal ideology (Robertson, Mourão and Thorson 2020: 331). On the other hand, conservatives assess fact-checkers in a negative way (Brandtzaeg, Følstad and Chaparro Domínguez, 2018).

The proliferation and the international networking of fact-checking organizations over the last ten years or so is neatly related to the almost unfettered excess of fake news which, as estimated, may circulate six times faster than accurate news (Vosoughi, Roy and Aral 2018; Dizikes 2018). Yet, what counts more is not so much the technical means of their production and dissemination as the 'demand for disinformation' in the era of post-truth. The 'demand side' of fake news is tied to the psychology of information consumption and opinion formation, through attitude polarization, confirmation bias, source confusion, and illusory correlation (Ackland and Gwynn 2021; Rauch 2021). These are psychological mechanisms indicating why users seek out and believe some sources of information, whether online or offline, while rejecting others, no matter how (in) accurate the published information is.

In this respect, apart from ideological and demographic parameters, qualitative research singled out several personality/behavioral characteristics which seem to influence the susceptibility to misinformation and the concomitant skepticism, if not distrust, against the effectiveness and usefulness of fact-checking

initiatives. Among these characteristics are the Big-5 personality traits (extraversion, agreeableness, conscientiousness, neuroticism, openness), as well as media skepticism (Barman and Conlan 2021; Calvillo et al. 2021; Rammstedt and John 2007; Shin & Thorson 2017; Balgiu 2018; Opgenhaffen 2021).

Research questions

Based on the abovementioned theoretical background, we conducted quantitative audience research to investigate whether there is any difference in the reception of fact-checking services in Greece in terms of awareness, assessment, and susceptibility to fake news between different groups of online news consumers. It is the first time that such a research project is implemented in Greece, and we are fully aware of its pilot character with our conclusions being tentative in view of further investigation and methodological triangulation.

The research questions flagged out from our literature review are the following:

RQ1: Do respondent's personality traits, interest in politics, self-positioning on the left-right political axis or media use typology predict his/her assessment on the effectiveness of fact-checking organisations, when controlling for sociodemographic variables? Which independent variable contributes most to the prediction?

RQ2-RQ5: How does individual's personality traits, interest in politics, self-positioning on the left-right political axis or media use typology impact the likelihood of the awareness of fact-checking organizations / the ability to spot fake news on the internet / the practice of trying to find out whether a slightly 'strange' piece of news is accurate or not / or the belief for the existence of the pandemic, when controlling for sociodemographic variables? What is the independent variable that influences most this likelihood?

Survey methodology

The research method implemented is the survey (Bryman 2012), conducted between 26/11/2021 and 26/05/2022. The questionnaire was disseminated online, through the SoDaNet online research infrastructure[1] and the answers were gathered with the use of the CAWI method. Our convenience sample consists of 1370 individuals aged at least 17 years old, living all over Greece. The participants were recruited through EKKE's website, the Department of Communication and Digital Media of the University of Western Macedonia, the Department of Communication and Media Studies of the National and Kapodistrian University of Athens, web panels of market research companies, and social media.

The questionnaire consists of both generic and specific (focused on fake news and fact-checking) questions. The generic questions refer to political interest, media use typology, media credibility (reverse: media skepticism), internet use history, the basic personality traits inventory (BFI-10), political ideology self-placement, as well as demographic variables pointing to different groups of respondents. The issue specific questions include the awareness of fact-checking organizations and the assessment of their effectiveness, as well as the respondents' susceptibility to fake news.

1. Sodanet is one of the 28 national research infrastructures in Greece but the only one in the field of social sciences. Sodanet provides many data management services to its members and to the wider academic and research community, including: access to data through the data catalogue, access to courses on data management and research methodology, long-term preservation of third-party data deposited in the data catalogue repositories, consultancy services for the creation of Data Management Plans, training services, online survey services and IT services (https://sodanet.gr/).

Data management and statistical analysis

The data were weighted by gender and age group variables (17-34, 35-64, 65+), resulting in gender and age group distributions identical to the 2011 census distributions (Table 9 of the Appendix). The dependent variables of the research questions concern the awareness of fact-checking organizations, the assessment of their effectiveness, as well as the respondents' susceptibility to fake news. The awareness of fact-checking organizations is a dichotomous variable, while the assessment of their effectiveness uses an 11-point scale, where 0 corresponds to 'Not effective at all' while 10 corresponds to 'Completely effective'. The susceptibility to fake news was tapped by the self-reported cross-checking of a seemingly 'weird' news item, the ability to distinguish fake news online, and the respondents' denial of the pandemic. Hence, the susceptibility to fake news was tapped by three dichotomous variables.

The independent variables are political interest, self-positioning on the left-right political axis, personality traits, and media use typology.

The political interest variable was constructed by the combination of a 'subjective' and an 'objective' indicator of the respondents' political curiosity tapped by two questions drawn from the WVS 2017-2018 WAVE 7 and well established in the relevant literature (Van Deth 1990; Van Deth and Elff 2004): How interested would you say you are in politics? (very, somewhat, not very interested, not at all); When you get together with your friends, would you say you discuss political matters frequently, occasionally or never? Total political interest was then estimated by converting the two different scales into one common 5-point scale (Linardis et al. 2023) ranging from 'minimum political interest' to 'maximum political interest'. Then, the mean of the two variables was considered as the estimate of both subjective and objective political interest.

For political self-positioning, an 11-point scale was used, where 0 corresponds to 'Far Left', while 10 corresponds to 'Far Right'. The big five personality traits are also considered as a

batch of question items. All ten question items referring to personality traits use a 5-point scale, where 1 corresponds to 'strongly disagree' with the statement, while 5 corresponds to 'strongly agree'. There were five positive and five negative items. To create the personality trait indicators, we used the methodology provided by Kankaras (2017). The negative items were reversed and then summed with the positive ones.

Our media use typology accommodated the Eurobarometer index on media use and was created based on answers to the following question drawn from the WVS 2017-2018 WAVE 7: *People learn what is going on in their country and the world from various sources. For which of the following sources, please indicate whether you use it to obtain information daily, weekly, monthly, less than monthly or never* (newspaper, TV, radio, online portals, social media). The media use typology was calculated by the frequency of use of five information sources (newspaper, TV, radio, web, social media) presented on Table 8 at the Appendix.

Finally, the statistical analysis contains a series of multivariate linear and binary logistic regressions applying to the dependent and independent variables (variables of interest) (see Table 1). We also used sociodemographics, i.e., sex, age, regions of residence and educational level as controlling variables.

For categorical variables with more than two categories (e.g., regions of residence and educational level) we created k-1 dummy variables by specifying the reference category and included the dummy variables in the regressions rather than the original variables. Due to the large number of people with a very high educational level (master or PhD) we decided to distinguish this category from high educational level (university degree). For each research question, two models were computed: in Model A the controlling variables were included in the model, while in Model B they were omitted. The inclusion of the variables of interest in both models confirms the existence of a direct and robust relationship between the variables of interest and the dependent variables. The significance level for all hypothesis tests is set either at 0.05or 0.1. The weighting variable will be used in all sub-

sequent analyses, while the statistical analysis software to be used is SPSS 27.To answer the research question concerning those variables that contribute most to the prediction, we used the standardized regression coefficients. SPSS 27 does not produce the standardized regression coefficients for logistic regression. For this reason, we calculated the standardized logistic regression coefficients based on the methodology reported by King (2007).

All survey material (data, questionnaire, etc.) has been deposited in EKKE's data repository, in SoDaNet research infrastructure. The material with documentation in Greek is available at: https://doi.org/10.17903/FK2/DDAYF5, while the same material in English is available at: https://doi.org/10.17903/FK2/IXL3NH.

Table 1: Variables related to the research questions (Variable Description / Reference category for dichotomous variables or range of values for quantitative variables)

	Independent Variables	
Dependent Variables	Controlling Variables	Variables of interest
Effectiveness of fact-checking organisations /0-10, where 0: Not effective at all, 10: Completely effective (Dep1)	Sex / Female	Political interest / 1: minimum political interest – 5: maximum political interest
Awareness of fact-checking organizations / No (Dep2)	Age / 17+	Self-positioning on the left-right political axis/ 0: Left – 10: Right
I usually try to find out if a bit 'strange' news item is accurate or not / No (Dep3)	High educational level / Low-medium educational level	Extraversion/ 1: Totally Disagree – 5: Totally agree
I can spot fake news on the internet / No (Dep4)	Very high educational level / Low-medium educational level	Agreeableness / 1: Totally Disagree – 5: Totally agree
The coronavirus pandemic is an overreaction (there is no pandemic, vaccines hurt) / No (Dep5)	Region of residence: Central Macedonia / Attiki	Conscientiousness / 1: Totally Disagree – 5: Totally agree

	Region of residence: other regions / Attiki	Neuroticism / 1: Totally Disagree – 5: Totally agree
		Openness / 1: Totally Disagree – 5: Totally agree
		Well informed through media use/Informed

Sample Characteristics

With average age 46.31 years, the sample consists of 49% male and 51% female, 53.5% residents of Attica, 15.1% residents of Central Macedonia and 31.4% residents of other regions (Appendix, Table 9). People with high and very high educational level are overrepresented in the sample as the percentage of those with a postgraduate or doctoral degree is 29.4%, while the percentage of individuals with a university degree is 40.5%. This is an intractable methodological problem, when data are collected by recruiting respondents from non-probabilistic web panels drawn from academic institutions (Linardis et al. 2023). No attempt was made to weight by educational level because it would assign extremely high weights to those with low educational level and extremely low weights to those with high educational level.

Results

To measure the internet users' estimation of the fact checking organizations effectiveness (RQ1) we applied two binary logistic regression models (see Table 2). Model A shows that respondents who place themselves on the left-right axis appreciate the effectiveness of fact-checking organizations, meaning that individuals positioned on the right side of the political spectrum evaluate more positively the effectiveness of fact-checking organizations than those who position themselves on the left.

Table 2: Perceived effectiveness of fact-checking organizations

	Model A			Model B		
	B (Un. Coeff)	Beta (St. Coeff)	Sig.	B (Un. Coeff)	Beta (St. Coeff)	Sig.
(Constant)	6.410		<0.001	4.890		.002
Sex	-0.042	-0.007	0.889			
Age	-0.038*	-0.211*	<0.001			
High educational level	-0.509	-0.088	0.184			
Very high educational level	-0.043	-0.008	0.910			
Region of Residence: Central Macedonia	-0.383	-0.051	0.359			
Region of Residence: Other Regions	-0.418	-0.067	0.214			
Political interest	-0.103	-0.029	0.614	-0.328+	-0.092+	0.097
Self-positioning on the left-right political axis	0.224*	0.196*	<0.001	0.183*	0.161*	0.005
Extraversion	0.201	0.056	0.307	0.104	0.029	.604
Agreeableness	0.047	0.012	0.832	0.040	0.010	.857
Conscientiousness	0.128	0.037	0.490	0.152	0.044	.416
Neuroticism	-0.121	-0.038	0.483	-0.022	-0.007	.899
Openness	-0.018	-0.005	0.920	0.122	0.037	.481
Well informed via media	-0.022	-0.004	0.940	-0.097	-0.017	.739
	R Square = 0.109 Adjusted R Square = 0.074 N = 365			R Square = 0.048 Adjusted R Square = 0.027 N = 373		

*+ significant at 10%; * significant at 5%*

The individuals evaluating the effectiveness of fact-checking organizations more positively are center-right respondents (values 6 and 7 in our 11-grade scale-Table 10 of the Appendix). This finding is similar —but certainly not identical— to the findings of previous research on the trust of mainly liberal citizens/mainstream news consumers in fact-checking services (Robertson, Mourão and Thorson 2020). The highly evaluated effectiveness of fact-checking organizations by right wing leaning respondents (value 9) cannot be considered, since our sample for this ideological category is small (see Table 9 of the Appendix).

The significant negative effect of political interest in Model B disappears after the inclusion of controlling variables, which means that we should not take this variable into consideration. According to the standardized beta coefficients, the variable of interest that contributes most to the 'effectiveness of fact-checking organizations' is the self-positioning on the left-right political axis. It should be noted however that the computation of the effectiveness of fact-checking organizations requires respondents' awareness of them and therefore the number of cases contributing to the regression is significantly reduced.

As per the internet users' factual awareness of fact checking organizations (RQ2) we also applied binary logistic regression (see Table 3). In either Model there is consistency in the variables of interest contributing on the 'awareness of fact-checking organizations'. Political interest and openness show a positive effect on the 'likelihood of the awareness of fact-checking organizations', while self-positioning on left-right axis and neuroticism have a negative effect on this probability. The higher a person's political interest or the degree of openness, the higher the probability that the person is aware of fact organizations, while the farther to the right side of the political spectrum or with higher levels of neuroticism, the lower the probability that the person is aware of fact-checking organizations. The variable that contributes most to the prediction of this probability is political interest.

Table 3:Awareness of fact-checking organizations-
Binary logistic regression

	Model A			Model B		
	B (Un. Coeff)	Beta (St. Coeff)	Sig.	B (Un. Coeff)	Beta (St. Coeff)	Sig.
(Constant)	-0.752		0.296	-0.991		0.152
Sex	0.117	0.014	0.439			
Age	-0.018*	-0.076*	<0.001			
High educational level	0.224	0.027	0.199			
Very high educational level	0.547*	0.062*	0.003			
Region of Residence: Central Macedonia	0.496*	0.043*	0.015			
Region of Residence: Other Regions	-0.053	-0.006	0.744			
Political interest	0.427*	0.097*	<0.001	0.408*	0.093*	<0.001
Self-positioning on the left-right political axis	-0.065*	-0.042*	0.024	-0.066*	-0.043*	0.017
Extraversion	-0.076	-0.015	0.450	-0.091	-0.017	0.347
Agreeableness	-0.074	-0.013	0.511	-0.155	-0.028	0.151
Conscientiousness	-0.006	-0.001	0.943	0.028	0.005	0.747
Neuroticism	-0.241*	-0.052*	0.005	-0.218*	-0.047*	0.008
Openness	0.168+	0.033+	0.058	0.185*	0.036*	0.030
Well informed via media	0.184	0.023	0.197	0.104	0.013	0.453
	Cox & Snell R Square = 0.087 Nagelkerke R Square = 0.117 N = 1029			Cox & Snell R Square = 0.060 Nagelkerke R Square = 0.080 N = 1042		

*+ significant at 10%; * significant at 5%*

Similarly, binary logistic regression was applied for the investigation of RQs 3 to5 (see Tables 4, 5, and 6). Table 4 shows a consistency in the variables of interest contributing to the 'investigation on the accuracy of a strange news item' in both models, since political interest and agreeableness predict 'likelihood of the investigation on the accuracy of a strange news item'. The higher a person's political interest or the level of agreeableness, the higher the probability that the person will try to find out if a news item is accurate or not, if the person comes across a news item that seems a bit 'strange'/'exaggerated'. Again, the variable that contributes most to the prediction of this probability is that of political interest.

Table 4: Respondents' investigation on the accuracy of a strange news item- Binary logistic regression analysis

	Model A			Model B		
	B (Un. Coeff)	Beta (St. Coeff)	Sig.	B (Un. Coeff)	Beta (St. Coeff)	Sig.
(Constant)	-1.804		0,158	-2.008		0.109
Sex	-0.319	-0.011	0,263			
Age	0.002	0.002	0,854			
High educational level	-0.524+	-0.018+	0,093			
Very high educational level	-0.275	-0.009	0,440			
Region of Residence: Central Macedonia	0.767+	0.019+	0,075			
Region of Residence: Other Regions	-0.043	-0.001	0,875			
Political interest	0.693*	0.045*	<0,001	0.600*	0.038*	<0,001

Self-positioning on the left-right political axis	-0.022	-0.004	0,678	-0.031	-0.006	0.548
Extraversion	-0.091	-0.005	0,632	-0.061	-0.003	0.746
Agreeableness	0.428*	0.022*	0,037	0.425*	0.021*	0.033
Conscientiousness	0.093	0.005	0,564	0.112	0.006	0.481
Neuroticism	0.071	0.004	0,639	0.105	0.006	0.481
Openness	0.89	0.050	0,573	0.108	0.006	0.484
Well informed via media	0.330	0.011	0,212	0.284	0.010	0.277
	Cox & Snell R Square = 0,046 Nagelkerke R Square = 0,113 N = 1029			Cox & Snell R Square = 0,038 Nagelkerke R Square = 0,094 N = 1042		

*+ significant at 10%; * significant at 5%*

In the same vein, and even quite more strongly, political interest is the only variable that shows a significant positive effect on the 'likelihood of the ability to spot fake news on the internet' (see Table 5). The higher a person's political interest, the higher the probability that this person thinks that is not susceptible to fake news online.

Table 5: Ability to spot fake news on the internet - Binary logistic regression analysis

	Model A			Model B		
	B (Un. Coeff)	Beta (St. Coeff)	Sig.	B (Un. Coeff)	Beta (St. Coeff)	Sig.
(Constant)	-0.291		0.755	0.180		0.842
Sex	0.256	0.019	0.193			
Age	0.005	0.012	0.418			
High educational level	0.164	0.012	0.454			
Very high educational level	0.036	0.002	0.878			
Region of Residence: Central Macedonia	0.324	0.017	0.242			
Region of Residence: Other Regions	0.139	0.009	0.497			
Political interest	0.433*	0.058*	<0.001	0.491*	0.066*	<0.001
Self-positioning on the left-right political axis	0.021	0.008	0.579	0.040	0.015	0.277
Extraversion	-0.026	-0.003	0.845	0.000	0.000	0.997
Agreeableness	-0.103	-0.011	0.481	-0.119	-0.013	0.404
Conscientiousness	-0.050	-0.006	0.667	-0.072	-0.008	0.529
Neuroticism	-0.103	-0.013	0.351	-0.157	-0.020	0.147
Openness	0.143	0.017	0.210	0.129	0.015	0.250
Well informed via media	-0.062	-0.005	0.738	-0.073	-0.005	0.688
	Cox & Snell R Square = 0.036 Nagelkerke R Square = 0.060 N = 1029			Cox & Snell R Square = 0.031 Nagelkerke R Square = 0.051 N = 1042		

*+ significant at 10%; * significant at 5%*

Table 6 shows a consistency in the variables of interest contributing on the 'belief that the pandemic is an overreaction' in both models. Self-positioning on the right-side area of the left-right spectrum predicts skepticism in the pandemic, while openness has a negative effect on this probability. The moreone places oneself on right positions of the political axis, the higher the probability that the person believes that the pandemic is an overreaction, while the higher the levels of openness the less the probability the person to believe so. Once more, the self – positioning on the left-right axis is the strongest predictor of this probability.

Table 6: Skepticism over the pandemic - Binary logistic regression analysis

	Model A			Model B		
	B (Un. Coeff)	Beta (St. Coeff)	Sig.	B (Un. Coeff)	Beta (St. Coeff)	Sig.
(Constant)	-0.427		0.741	-0.160		0.897
Sex	-0.002	0.000	0.994			
Age	-0.004	-0.005	0.691			
High educational level	-0.047	-0.002	0.875			
Very high educational level	-0.410	-0.013	0.268			
Region of Residence: Central Macedonia	0.613+	0.015+	0.088			
Region of Residence: Other Regions	0.658*	0.021*	0.024			
Political interest	0.022	0.001	0.885	-0.030	-0.002	0.833
Self-positioning on the left-right political axis	0.189*	0.034+	<0.001	0.212*	0.038*	<0.001

Extraversion	-0.287	-0.015	0.147	-0.256	-0.013	0.183
Agreeableness	0.018	0.001	0.932	-0.012	-0.001	0.952
Conscientiousness	-0.246	-0.013	0.138	-0.245	-0.013	0.130
Neuroticism	-0.087	-0.005	0.577	-0.089	-0.005	0.566
Openness	-0.344*	-0.019*	0.044	-0.375*	-0.020*	0.022
Well informed via media	-0.033	-0.001	0.901	-0.066	-0.002	0.800
	Cox & Snell R Square = 0.043 Nagelkerke R Square = 0.105 N = 1029			Cox & Snell R Square = 0.035 Nagelkerke R Square = 0.086 N = 1042		

*+ significant at 10%; * significant at 5%*

Model Summary

As presented at Table 7, political interest has the highest effect on the dependent variables of our research questions. More specifically, it has the relatively higher positive and statistically significant effect on three dependent variables ('awareness of fact-checking organizations', 'ability to spot fake news on the internet' and 'investigation of the accuracy of a strange news item'). Self-positioning on the left-right axis has the relative highest positive effect on two dependent variables ('belief that the pandemic is an overreaction' and 'effectiveness of fact-checking organizations'). Comparing socio-demographics, older individuals evaluate more negatively the 'effectiveness' and have a lower probability of being aware of fact-checking organizations, comparing with the younger respondents. Finally, residents of Central Macedonia are more likely 'to know fact-checking organizations', 'to investigate the accuracy of a strange news item' and to 'believe that the pandemic is an overreaction' than the residents of Attiki, the most populated region of the country.

Table 7: Standardized statistically significant coefficients for all regressions

	DEP1	DEP2	DEP3	DEP4	DEP5	Total Occurrences
Sex						
Age	-0.211*	-0.076*				2
High educational level			-0.018+			1
Very high educational level		0.062*				1
Region of Residence: Central Macedonia		0.043*	0.019+		0.015+	3
Region of Residence: Other Regions					0.021*	1
Political interest		0.097*	0.045*	0.058*		3
Self-positioning on the left-right political axis	0.196*	-0.042*			0.034+	3
Extraversion						0
Agreeableness			0.022*			1
Conscientiousness						0
Neuroticism		-0.052*				1
Openness		0.033+			0.019*	2
Well informed via media						0

Note: The underline points to the independent variable of interest that contributes most to the dependent variable.

Discussion

Wepresented research results regarding the Greek public's perceptions and attitudes towards fact-checking and susceptibility to fake news. Notwithstanding that this is the first ever research to be accomplished in Greece, we are fully aware of the pilot character of this research and its limitations, especially in terms of sampling, since a survey of the general population of the country is required based on probabilistic sampling design. Concerning the goodness of fit of the models, further investigation on the topics is needed, since R-square (linear regression) or pseudo-R-square (logistic regressions) are quite low, meaning that the models are far from giving reliable predictions of the dependent variables.

Given the above caveats, it comes as not a surprise that the higher interest in politics is related to the increased awareness of fact-checking organizations; as long as these organizations gain some visibility at the digital public sphere and gradually become part and parcel of electoral campaigns, the likelihood is that politically interested internet users come across them all too often. To stress the point further, it is the center-left leaning, and the more open to new experiences individuals who know what fact-checking is. In this respect, our findings are in line with research results found in other countries (Robertson, Mourão and Thorson 2020). What, however, seems to be a counter-intuitive finding is that center-right leaning respondents evaluate quite more the effectiveness of fact checking organizations than the left leaning respondents. A tentative explanation of the low evaluation of the effectiveness of fact-checking by leftist respondents (values 0-3 in our 11-grade scale- Table 10 of the Appendix) is the infantile nature of fact-checking in Greece and the restricted public knowledge on the various fact-checking efforts initiated in the last few years. Having asked our respondents to name up to three fact-checking organizations (in Greece and abroad), the vast majority named Ellinika Hoaxes (Greek Hoaxes) as the

first organization that comes to their minds. Being active since 2013, Ellinika Hoaxes has been repeatedly accused of right-wing ideological bias by leftist Media (Documento 2019; tvxs.gr 2019). Therefore, the low evaluation of fact-checking sites on behalf of the leftists of our sample might be due to the accusations on the right-wing ideological bias of Ellinika Hoaxes by left leaning libertarian Media, and the inherent polarization of the Greek public sphere (Zeri 2014; Poulakidakos and Veneti 2016). This polarized rationale in the function of the Greek public sphere, along with the alleged right-wing bias of Ellinika Hoaxes, may instill increased distrust on the effectiveness of fact-checking among the leftists. In a similar vein, the popularity of Ellinika Hoaxes which is based at Thessaloniki, the 'capital city' of Central Macedonia, along with the conservativism and the belief in conspiracy theories/pseudoscientific statements permeating a rather significant part of local communities[2] could explain the fact that people of this regionin our sample are more likely 'to know fact-checking organizations', 'to investigate the accuracy of a strange news item' and to 'believe that the pandemic is an overreaction' at the same time, no matter how contradictory these statements are.

In terms of personality traits, although 'openness' is positively related with awareness of fact-checking agents, it is unrelated with the evaluation of these agents' performance; be noted that all personality traits do not perform significant effects on the evaluation of fact checking organizations performance.

2. The conservativism permeating the local communities is quite evident in a series of interrelated facts related to the region of Central Macedonia. First, diachronically, Central Macedonia votes rather massively for the right-wing party of New Democracy. Second, the populist far-right party of Elliniki Lysi (Greek Solution), led by Kyriakos Velopoulos, a former journalist who originates from Thessaloniki and systematically disseminates fake news and conspiracy theories, has gained in both 2019 and 2023 elections its highest percentages in the prefectures of the Central Macedonia region (Ypes.gr 2023). Closely connected to the facts, Thessaloniki was the epicenter of multiple (ultra)-nationalist demonstrations against the Prespa Agreement back in 2018 (aftodioikisi.gr 2018, kathimerini.gr 2018).

It might be that since fact-checking is a rather novel activity in Greece with fact-checking sites to be poorly visited whatsoever, it is too early for the Greek internet users to get really familiarized with them and evaluate their effectiveness even if they are open-minded, extraverted, and agreeable.

Conclusion

As already mentioned, this research is the first to be done in Greece and we know that our conclusions are tentative in view of further investigation and methodological triangulation. More than so as similar projects in other countries, especially when it comes to the impact of the Big 5 personality traits on fake news recognition and conspiratorial thinking, researchers used qualitative and experimental psychological methods (Calvillo et al 2021; Barmanand Conlan 2021; Gumelar et al. 2018). At any rate, however, our results are congruent with the 'ambivalent' attitudes of the audiences towards fact-checking organizations (Brandtzaeg et al. 2017; Walter et al. 2019; Robertson, Mourão and Thorson 2020; Demertzis, Poulakidakos, Tsekeris 2022). Though fact-checking has already made significant steps worldwide, it appears to be going through its infancy in Greece. Fact-checking initiatives face many challenges such as the emotional climate of public distrust and cynicism (Demertzis 2020) that nurtures the 'vicious circle of disbelief' (Brandtzaeg et al. 2017), along with the rise of conspiracy theories that seek to provide simplistic answers to the concurrent crises of our times.

Fact-checking is not panacea, a catch-all solution in terms of addressing all the issues stemming from fake news and their repercussions. Still, fact-checking initiatives in Greece are increasing and seek to leave their own footprint in the (digital) public sphere. In our view, fact-checking's major task is to provide as accurate information as possible, not to change people's political orientations and preferences (Demertzis, Poulakidakos, Tsekeris 2022). As evident from our own research, parts of the (digital)

audience seem to 'respond' positively to fact-checking organizations. It remains to be seen, whether fact-checking in Greece will win the bet of popularity and manage to disseminate its rationale as wide as possible.

References

Ackland, R. and Gwynn, K. (2021). Truth and the Dynamics of News Diffusion on Twitter. In Greifeneder, R., Jaffé, M.E., Newman, E.J., & Schwarz, N. (eds.), *The Psychology of Fake News. Accepting, Sharing, and Correcting Misinformation*. London: Routledge.

Amazeen, M. A. (2015). Revisiting the Epistemology of Fact-Checking. *Critical Review: A Journal of Politics and Society*, 27(1), 1-22.

Amazeen, M. A. (2016). Checking the Fact-Checkers in 2008: Predicting Political Ad Scrutiny and Assessing Consistency. *Journal of Political Marketing*, 15(4), 433-464.

Amazeen, M. A. (2019). Practitioner perceptions: Critical junctures and the global emergence and challenges of fact-checking. *The International Communication Gazzette*, 81(6-8), 541-561.

Amazeen, M. A. (2020). Journalistic interventions: The structural factors affecting the global emergence of fact-checking. *Journalism*, 21(1), 95-111.

Andersen, J., & Obelitz Søe, S. (2020). Communicative actions we live by: The problem with fact-checking, tagging, or flagging fake news – the case of Facebook. *European Journal of Communication*, 35(2), 126-139.

Aftodioikisi.gr (2018). Thessaloniki-Demonstration on the Macedonian Issue: The photos that became viral. Available at: https://www.aftodioikisi.gr/koinonia/thessaloniki-syllalitirio-foto-ton-makedonomachon-pou-eginan-viral/. (Accessed August 21, 2023).

Balgiu, B. A. (2018). The psychometric properties of the Big Five inventory-10 (BFI-10) including correlations with subjective and psychological well-being. *Global Journal of Psychology Research: New Trends and Issues*. *8*(2), 61-69.

Barman, D. and Conlan, O. (2021). Exploring the Links between Personality Traits and Susceptibility to Disinformation. In *Proceedings of 2021 ACM Hypertext and Social Media (HT'21), August*

30-September 2, 2021, Virtual Event, Ireland. ACM, New York, NY, USA. https://doi.org/10.1145/3465336.3475121.

Barrera, O., Guriev, S., Henry, E., & Zhuravskaya, E. (2020). Facts, alternative facts, and fact-checking in times of post-truth politics. *Journal of Public Economics*, 182, 1-19.

Beck, U. (1997). *The Reinvention of Politics: Rethinking Modernity in the Global Social Order*. Cambridge: Polity.

Beck, U. (2009). *World at Risk*. Cambridge: Polity Press.

Brandtzaeg, P. B., & Følstad, A. (2017). Trust and Distrust in Online Fact-Checking Services. *Communications of the ACM*, 60(9), 65-71.

Brandtzaeg, P. B., Følstad, A., & Chaparro Domínguez, M. A. (2018). How Journalists and Social Media Users Perceive Online Fact-Checking and Verification Services, *Journalism Practice*, 12(9) 1109-1129.

Bryman, A. (2012). Social Research Methods. 4th edition. Oxford: Oxford University Press.

Calvillo, D. P., Garcia, R.J. B., Bertrand, K, Mayers, T.A. (2021) Personality factors and self-reported political news consumption predict susceptibility to political fake news. *Personality and Individual Differences* 174 (https://doi.org/10.1016/j.paid.2021.110666).

Demertzis, N. (2020). *The Political Sociology of Emotions. Essays on Trauma and Ressentiment*. London: Routledge.

Demertzis, N., Poulakidakos, S., Tsekeris Ch. (2022). Public communication disruption and information accuracy. *GPSG Working Paper #36*, April 2022.

Dizikes, P. (2018). Study: On Twitter, false news travels faster than true stories. Research project finds humans, not bots, are primarily responsible for spread of misleading information. *MIT News on Campus and Around the World*, 8 March [online]. Available at: https://news.mit.edu/2018/study-twitter-false-news-travels-faster-true-stories-0308 (Accessed February 5, 2022).

Documento.gr (2019). *Who funds Ellinika Hoaxes* (in Greek). Available at: https://www. documentonews.gr/article/poioi-xrhmatodotoyn-ta-ellinika-hoaxes/. (Accessed July 29 2023).

Gray, J., Chambers, L. and Bounegru, L. (eds.) (2012). *The Data Journalism Handbook*. Sebastopol, CA: O′Reilly Media.

Gumelar, G., Zarina Akbar, Z., Erik E. (2018). Engagement and the spread of fake news: Personality Trait as moderator. Proceedings

of the International Conference of Communication Science Research. 10.2991/iccsr-18.2018.34

Haidt, J. (2013). *The Righteous Mind. Why Good People are Divided by Politics and Religion*. London: Penguin Books.

Jarman, J. W. (2016). Influence of Political Affiliation and Criticism on the Effectiveness of Political Fact-Checking. *Communication Research Reports*, 33(1), 9-15.

Kankaraš, M. (2017). Personality matters: Relevance and assessment of personality characteristics. OECD Education Working Papers Series.

kathimerini.gr (2018). Demonstration in Thessaloniiki: 90000 demonstrators for Macedonia. Available at: https://www.kathimerini.gr/society/944489/syllalitirio-thessalonikis-90-000-diadilotes-gia-ti-makedonia/. (Accessed August 21, 2023).

King, J. (2007). Standardized Coefficients in Logistic Regression – Jason E. King. Baylor College of Medicine. Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio, Texas, Feb. 7-10, 2007.

Linardis, A., Maravelakis, P., and Fragoulis, G. (2023). Data collection methods using digital questionnaire and survey methodology. Management of online, face-to-face and telephone surveys and data with Lime survey and SPSS. Kallipos.

Lyon, D. (2014). Surveillance, Snowden, and big data: Capacities, consequences, critique. *Big Data & Society* 1(2), 1-13.

Marcus, G. E. (2002). *The Sentimental Citizen. Emotion in Democratic Politics*. University Park, PA: Pennsylvania State University Press.

Marietta, M., Barker, D. C., and Bowser T. (2015). Fact-Checking Polarized Politics: Does The Fact-Check Industry Provide Consistent Guidance on Disputed Realities? *The Forum*, 13(4), 577-596.

Nieminen, S. and Rapelli, L. (2019). Fighting Misperceptions and Doubting Journalists' Objectivity: A Review of Fact-checking Literature. Political Studies Review, 17(3), 296-309.

Oeldorf-Hirsch, A., Schmierbach, M., Appelman, A., and Boyle, M. P. (2020). The ineffectiveness of fact-checking labels on news memes and articles. *Mass Communication and Society*, 23(5), 682-704.

Opgenhaffen, M. (2021). Fact-Checking Interventions on Social Media Using Cartoon Figures: Lessons Learned from 'the Tooties'. *Digital Journalism*, 1-24.

Poulakidakos, S. and Veneti, A. (2016). Political Communication and Twitter in Greece: Jumping on the bandwagon or an enhancement of the political dialogue? In Deželan T. and Vobic I. (Eds.) *(R)evolutionizing Political Communication through Social Media*. USA: IGI Global, pp. 119-146

Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality, 41*(1), 203-212.

Rauch, J. (2021). *The Constitution of Knowledge: A Defense of Truth*. Brookings Institution Press.

Robertson, C. T., Mourão, R. R., and Thorson, E. (2020). Who Uses Fact-Checking Sites? The Impact of Demographics, Political Antecedents, and Media Use on Fact-Checking Site Awareness, Attitudes, and Behavior. *The International Journal of Press/Politics*, 25(2), 217-237.

Sampson, T. (2012). *Virality: Contagion theory in the age of networks*. Minneapolis: University of Minnesota Press.

Shin, J., and Thorson, K. (2017). Partisan Selective Sharing: The Biased Diffusion of Fact-Checking Messages on Social Media. *Journal of Communication*, 67(2), 233-255.

Shorey, S. and Howard, P. N. (2016). Automation, big data, and politics: A research review. *International Journal of Communication* 10(2016): 5032-55.

Tvxs.gr (2019). *Nikos Sarantakos reports fraud on Ellinika Hoaxes and resigns* (in Greek). Available at: https://tvxs.gr/news/ellada/o-nikos-sarantakos-kataggellei-tin-apati-ton-ellinikon-hoaxes-kai-apoxorei/. (Accessed July 29, 2023).

Van Deth, J. (1990). Interest in Politics. In M. Jennings, J. Kent, W. van Deth et al. (eds), *Continuities in Political Action: A Longitudinal Study of Political Orientations in Three Western Democracies*. Berlin/New York: De Gruyter and Aldine.

Van Deth, J., & Elff, M. (2000). Political Involvement and Apathy in Europe 1973-1998. *Arbeitspapiere - Mannheimer Zentrum für Europäische Sozialforschung*, 33.

Vosoughi, S., Roy, D. & Aral, S. (2018). The spread of true and false news online. *Science* 359 (6380), 1146-1151.

Walter, N., Cohen, R. J., Holbert L. & Morag, Y. (2019). Fact-Checking: A Meta-Analysis of What Works and for Whom. *Political Communication*, 37(3), 350-375.

York, C., Ponder, J. D., Humphries, Z., Goodall, C., Beam, M., & Winters, C. (2020). Effects of Fact-Checking Political Misinformation on Perceptual Accuracy and Epistemic Political Efficacy. *Journalism and Mass Communication Quarterly*, 97(4), 958-980.

Ypes.gr (2023). June 2023 General Elections Results. Available at: https://ekloges.ypes.gr/ current/v/home/parties/108/. Accessed on August 21, 2023.

Zeri, P. (2014). Political Blogosphere Meets Off-Line Public Sphere: Framing the Public Discourse on the Greek Crisis. *International Journal of Communication*, 8, 1579-1595.

Zurawicki, L. (2010). *Neuromarketing: Exploring the brain of the consumer*. London: Springer.

Appendix

Table 8. Algorithm for the construction of Media Use Typology

	Count of occurrences in 5 information sources			
S/N	Daily or weekly	Monthly	Less than monthly or Never	Media Use Typology
1	0	0	5	Uninformed
2	1	0	4	Informed
3	2	0	3	Informed
4	3	0	2	Informed
5	4	0	1	Well informed
6	5	0	0	Well informed
7	0	1	4	Ill-informed
8	1	1	3	Informed
9	2	1	2	Informed
10	3	1	1	Informed
11	4	1	0	Well informed
12	0	2	3	Ill-informed
13	1	2	2	Informed
14	2	2	1	Informed
15	3	2	0	Informed
16	0	3	2	Ill-informed
17	1	3	1	Informed
18	2	3	0	Informed
19	0	4	1	Ill-informed
20	1	4	0	Informed
21	0	5	0	Ill-informed

Table 9. Weighted distributions or means of dependent and independent variables

Variable	Category	Perce-ntage	Mean	N
Sex	Male	49%		1370
	Female	51%		
Educational level	Low or Medium	30.1%		1364
	High	40.5%		
	Very high	29.4%		
Region of residence	Attiki	53.5%		1370
	Central Macedonia	15.1%		
	Other regions	31.4%		
Age			46.31	1370
Age groups	17-34	29.5%		1370
	35-64	47.7%		
	65+	22.8%		
Political interest			3.98	1370
Self-positioning on the left-right political axis			3.80	1054
Left-right political axis	Far Left - 0	14.5%		1054
Left-right political axis	1	8.5%		
Left-right political axis	2	10.1%		
Left-right political axis	3	14.2%		
Left-right political axis	4	12.9%		
Left-right political axis	5	16.5%		
Left-right political axis	6	5.6%		
Left-right political axis	7	7.9%		
Left-right political axis	8	5.4%		
Left-right political axis	9	1.9%		
Left-right political axis	Far Right - 10	2.5%		

Extraversion			3.16	1367
Agreeableness			3.28	1367
Conscientiousness			3.61	1367
Neuroticism			3.01	1367
Openness			3.32	1367
Media Use Typology	Uninformed	0.13%		1361
	ill-informed	0.31%		
	Informed	53.75%		
	Well informed	45.81%		
Do you know what fact-checking organizations are?	Yes	43%		1257
	No	57%		
Effectiveness of fact-checking organisations			5.39	480
If you come across a news item and it seems a bit 'strange', do you usually try to find out if it is accurate or not?	Yes	91.2%		1351
	No	8.8%		
Would you personally say you can spot fake news on the internet?	Yes	81%		1227
	No	19%		
The coronavirus pandemic is an overreaction	Yes, I believe so	10.5%		1255
	No, I don't believe it	89.5%		

Table 10. Weighted perceived effectiveness by political axis category

		Average effectiveness of fact checking organizations
Political is	Far Left	4.87
	1	4.54
	2	5.05
	3	4.83
	4	6.23
	5	5.59
	6	6.41
	7	7.10
	8	5.87
	9	7.17
	Far Right	4.58