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Digital Fact-Checking in the Age of AI: Trust, Privacy, and the Everyday Practices of Truthfulness Verification

Abstract: This article examines how confidence in everyday digital practices, such as searching for product information, managing social media privacy settings, and restricting browser cookies, shapes individuals' confidence in their ability to fact-check online content. The analysis of a recent CROss-National Online Survey (CRONOS) data from 11 European countries reveals that confidence in these digital skills is a stronger predictor of fact-checking confidence than socio-demographic and structural characteristics, participation in digital training, or frequency of internet use. The findings suggest that individuals approach online truthfulness not primarily as epistemic agents or citizens, but as consumers searching for reliable offers. The analysis also provides evidence that trust in scientists enhances fact-checking confidence, while generalized interpersonal trust reduces it, highlighting the need to distinguish between offline and online social norms. Based on these findings, policy recommendations to strengthen the digital fact-checking skills of European citizens are formulated.

Keywords: fake news, fact-checking, digital skills, trust, European Social Survey; CRONOS

Introduction

As artificial intelligence increasingly mediates the production and circulation of online content, the ability of individuals to verify the truthfulness of digital information has become a critical civic skill (Lukavská et al. 2025; Squicciarini et al. 2024). Yet, across Europe, a striking digital fact-checking confidence gap persists. While the vast majority of people are online daily, only a minority feel very confident in checking the truthfulness of what they encounter online (see Table 1). This gap underscores the need to understand the factors that influence individuals' confidence in their digital fact-checking skills.

The CRONOS3 survey asked people across Europe to what extent the statement: "I know how to check the truthfulness of the information or content I find on the internet" is true for them. Only 30.1% said it was "very true"; thus, they were confident in their digital fact-checking skills. Nearly 86% said they use the internet almost all the time or several times a day, revealing a confidence gap: among the most frequent internet users, only 33% expressed confidence in fact-checking, while 67% did not. Among less frequent users, over 10% reported high confidence, and nearly 90% did not.

Table 1

Digital fact-checking confidence by frequency of internet usage

Knows how to check truthfulness of online content		Uses the internet almost all the time or several times a day: No	Uses the internet almost all the time or several times a day: Yes	Total
Very true	**n**	**86**	**1664**	**1750**
	row %	4.9	95.1	100.0
	column %	10.3	33.4	30.1
Other	**n**	**751**	**3312**	**4063**
	row %	18.5	81.5	100.0
	column %	89.7	66.6	69.9
Total	**n**	**837**	**4976**	**5813**
	row %	14.4	85.6	100.0
	column %	100.0	100.0	100.0

Note. Data from the CRONOS3 survey fielded in November 2024 across 11 European countries, filtered to include only internet users aged 18 and older. Categories are grouped from the source variables as follows: w1dq9 ("I know how to check the truthfulness of the information or content I find on the internet," measured on a 6-point scale where 1 means "Not at all true of me," 5 means "Very true of me" and 6 means "I don't understand what this means"). The responses marked "Very true of me" were treated as an indicator of confidence in digital fact-checking, and w1dq3 ("How often did you typically use the internet on any device for work or personal in the last month," measured on a 7-point scale, from "Almost all the time" to "Never"). Weighted counts appear in boldface. Weighting variable w1weight. Total weighted $N = 6139$ with 326 missing values, valid weighted $N = 5813$. Total unweighted $N = 9538$.

Background and Motivation

Synthetic online content, such as automatically generated audio, images, or video, can be used for education or entertainment. However, the rise of false, misleading, and deliberately deceptive digital content, often amplified by artificial intelligence (AI), poses a growing threat (Squicciarini et al. 2024). These threats vary widely, including individuals having their perception of reality distorted to societies experiencing a breakdown in trust in institutions, democratic publics being misled by disinformation, and marginalized groups being disproportionately targeted by deepfakes and harassment (Squicciarini et al. 2024). Public opinion surveys reveal widespread global concern about online misinformation, extending beyond expert and policymaker circles. Although actual exposure to misinformation is relatively limited, research has demonstrated that the more misinformation people believe they encounter, the more concerned they become (Boulianne & Hoffmann 2024).

We situate these concerns and threats within a broader interdisciplinary conversation about the sociotechnical conditions of trust, misinformation, and digital literacy. The prior research has extensively explored the role of digital literacy in combating fake news, especially on social media (Addy 2020; Ardèvol-Abreu et al. 2020; Filipek & Chodak 2024; Guess et al. 2019; Oladokun et al. 2024; Rosales-Márquez et al. 2024), as well as the influence of information, data, and privacy literacy on technology adoption (Lund et al. 2023). However, less attention has been paid to how digital skills and trust (Lukavská et al. 2025) interact with fact-verification skills. Moreover, many previous studies focused on narrow, single-country populations, such as adults in the Czech Republic (Lukavská et al. 2025), students in Peru (Rosales-Márquez et al. 2024) or the USA (Addy 2020), or users of a single social media platform in Poland (Filipek & Chodak 2024). However, these narrow populations limited the generalizability of the studies' conclusions, impeded cross-country comparisons, and restricted their ability to provide recommendations.

At the same time, the global cultural and ideological implications of synthetic media demand critical scrutiny. As Berry (2025) argues, global society is entering an "algorithmic condition" in which machine-generated content not only mimics but reshapes human communication, eroding traditional authenticity cues and destabilizing the social infrastructure of trust. This algorithmic chaos is exacerbated by the diffusion of LLM-powered chatbots, which function as "bullshitters" in the Frankfurtian sense, i.e., they are indifferent to truth rather than prone to hallucinations (Hicks et al. 2024). This indifference to truth makes the digital information environment more polluted with false claims and structurally more chaotic. In this context, fact-checking becomes not just a cognitive task but a form of resistance, a way of reclaiming agency in an increasingly automated information environment.

This algorithmic condition manifests in the information environment, which is particularly concerning given the diffusion of online misinformation during the current era of polycrisis (Lawrence et al. 2024). Polycrisis involves multiple crisis events, such as pandemic aftershocks, economic stagflation, geopolitical tensions, climate disasters, and political instability, casually interacting and concurrently spreading across the global systems (Lawrence et al. 2024). Online misinformation has become a weapon deployed by various stakeholders to advance their goals, as demonstrated by recent events including electoral and referendum campaigns in the USA, UK, Brazil, and Romania (Addy 2020; Botan et al. 2025; Broda & Strömbäck 2024; Guess et al. 2019; Hale et al. 2024); misinformation during the COVID-19 pandemic (Balakrishnan et al. 2021; Laato et al. 2020); disinformation campaigns surrounding Russian aggression against Ukraine and the Israeli-Palestinian conflict (Hameleers 2025; Soares et al. 2023); and efforts by climate change deniers to undermine scientific consensus (Aïmeur et al. 2023; Broda & Strömbäck 2024; Cologna et al. 2025).

By foregrounding the everyday digital competencies that underpin fact-checking confidence, this article contributes a novel perspective to studying online misinformation. We challenge the assumption that more digital training alone will close the verification gap and instead call for a rethinking of how digital literacies are conceptualized, taught, and embedded in public life. In doing so, this paper offers theoretical and policy-relevant insights into how European societies might foster more resilient, reflexive, and privacy-aware digital citizens. Unlike typical studies, we used data from a well-established, representative survey conducted in 11 European countries. Thus, our conclusions and recommendations are not limited to a single country, age group, or profession, or the users of a particular internet platform.

Throughout this work, we focus on confidence in digital fact-checking skills, represented by individuals' self-reported confidence in their ability to verify online content. Details on the operationalization of the construct and the dependent variable in our analyses are given in the "Methods" section. Nevertheless, to understand the need for effective fact-checking, we will first clarify the concepts used to talk about digital practices and the types of content that make fact-checking such a critical skill: misinformation, disinformation, fake news, deepfake, shallowfake/cheapfake, and slop.

Misinformation refers to false information shared without the intention to mislead or cause harm (Aïmeur et al. 2023). It is often used as an umbrella concept for false information (Goyanes et al. 2025). By contrast, disinformation is false information intentionally created and disseminated to deceive or manipulate a specific audience (Aïmeur et al. 2023; Broda & Strömbäck 2024; Filipek & Chodak 2024).

Fake news is understood as wholly or partially false information intended to mislead the recipient, typically appropriating "the look and feel of real news" (Tandoc et al., 2018, p. 147). It may be (un-)intentionally disseminated by online users (Filipek & Chodak 2024) and is designed to mimic regular news in form (Lazer et al. 2018). The term gained mainstream attention in the aftermath of the 2016 presidential election in the USA (Addy 2020; Guess et al. 2019). While fake news overlaps with misinformation and disinformation, its crucial characteristic is the person's intention to mislead rather than its falsity (Broda & Strömbäck 2024; Filipek & Chodak 2024). Fake news may include intentionally embedded true or partially true information that is misleading, also in a distorted context (Filipek & Chodak 2024).

Deepfakes consist of AI-generated multimedia, such as videos, sounds, and images made to closely resemble authentic content (Aïmeur et al. 2023; Ajder et al. 2019). The technologies involved now challenge the historical belief that such media are reliable records of reality (Ajder et al. 2019). Nevertheless, not all misleading content requires sophisticated technology. For example, "shallowfakes" (Ajder et al. 2019) or "cheapfakes" (Hameleers 2024) are media that have been manipulated using basic editing tools or placed out of context. They are designed to exploit cognitive biases and may cause harm, even if the quality of the fake is low (Ajder et al. 2019). Less sophisticated fake content may be perceived as more credible than realistic deepfakes (Hameleers 2024).

Slop is a term modeled after "spam," which describes the shoddy and often nonsensical AI-generated content flooding the internet (Runco 2024; Tullis 2025). Unlike the other terms, slop is not characterized by the intention to mislead. Instead, this content may appear bizarre or strange. However, these qualities typically stem from the limitations of automated content generation rather than a deliberate effort to be unrealistic. Slop is created to attract attention, generate engagement, and go viral on social media, benefiting both creators and platform revenues (Tang & Wikström 2024).

The ability to discern accurate information from various forms of false or misleading content is paramount because such information propagates exponentially in a short time (Aïmeur et al. 2023). False information is more likely to spread across multiple platforms than real information, mainly due to human behavior rather than algorithmic recommendations (Aïmeur et al. 2023; Ardèvol-Abreu et al. 2020). Conversely, automated solutions for detecting fake news remain a challenge because false content is often crafted to mimic the truth, making it difficult for AI to determine veracity (Aïmeur et al. 2023; Puczyńska et al. 2025). This highlights the need to empower individuals with strong digital fact-checking skills to navigate the increasingly complex and deceptive online information environment (Filipek & Chodak 2024).

Research Questions and Hypotheses

In the context of such a chaotic and increasingly automated information environment, this paper aims to achieve two main objectives: (i) explore the factors that influence Europeans' confidence in digital fact-checking, i.e., their ability to verify the truthfulness of online information and content; (ii) formulate policy recommendations to strengthen the digital fact-checking skills of European citizens.

The main research question we answer in this study is: *How does confidence in digital skills and trust relate to an individual's confidence in digital fact-checking abilities*? Five hypotheses that further guided investigations conducted for this paper are presented below.

While little research has directly tackled such a research question, other studies provide some evidence of associations between various types of digital skills and diverse aspects of digital fact-checking ability (Filipek & Chodak 2024). The umbrella terms *digital skills* and *digital literacy* broadly refer to general competence with digital tools, while more specific literacies, such as "information literacy" and "news literacy," focus on critically evaluating online content (Chan et al. 2024). These literacies are all crucial in combating the spread of misinformation and disinformation in the digital age (Oladokun et al. 2024). Several studies have shown that limited digital information verification skills contribute to disseminating misinformation, particularly during crises such as the COVID-19 pandemic (Islam et al. 2020; Laato et al. 2020). Higher news literacy related to better recognition of fake online content in experimental settings (Chan et al. 2024).

Digital skills can range from basic to advanced, depending on the specific tasks involved. Given the exploratory nature of our study, we propose a general hypothesis that confidence in one's digital skills is positively associated with confidence in digital fact-checking. This approach allows us to investigate this relationship without prematurely narrowing the scope of inquiry.

H1: Confidence in digital skills is positively associated with confidence in digital fact-checking.

If digital skills reinforce each other, participation in digital skills training could also reinforce digital fact-checking confidence. Thus, digital skills training is often presented as a key policy tool in combating online misinformation at the individual internet user level (Lazer et al. 2018). The UNESCO Recommendation on the Ethics of AI urges Member States to invest in digital, media, and information literacy to strengthen critical thinking and help individuals recognize and resist disinformation, including AI-generated content (Squicciarini et al. 2024).

H2: Participation in digital skills training is positively associated with confidence in digital fact-checking.

While there is broad agreement that misleading online content threatens trust in individuals and institutions (Addy 2020; Berry 2025; Squicciarini et al. 2024), the quantitative relationship between trust and digital fact-checking skills has not been explored in depth (Lukavská et al. 2025). Research shows that societies with higher trust in science and scientists responded more effectively to crises such as the COVID-19 pandemic and global warming, with individuals more likely to follow evidence-based guidance and take informed action (Cologna et al. 2025). Trust in science is more than a function of exposure to scientific information; it depends on credibility perceptions and predispositions toward science (Wintterlin 2025). However, the credibility of science and scientists as sources of knowledge has come under pressure from the spread of misinformation, conspiracy theories, and populist attitudes (Cologna et al. 2025), consistent with the progressing erosion of trust in post-academic science (Sztompka 2007). This suggests that trust in scientists, as credible sources of validated information, can foster a skill for verifying facts and resisting misinformation.

H3: Trust in scientists is positively associated with confidence in digital fact-checking.

To the best of our knowledge, the quantitative association between general trust in others and digital fact-checking skills remains unexplored. Online trust is positively associated with intentional fake news sharing and negatively with news verification (Talwar et al. 2019), but it does not necessarily reflect general trust. However, for over three decades, sociological research has highlighted the role of general trust in others as a crucial element of social cohesion (Fukuyama 1996) and a form of epistemic openness, i.e., a willingness to treat others as credible sources of knowledge (Giddens 2013). Therefore, we expect a positive association between general trust in others and digital fact-checking skills. Trust may encourage openness to new information and a willingness to investigate sources.

H4: General trust in others is positively associated with confidence in digital fact-checking.

Confidence in digital fact-checking may also be influenced by experience with digital environments, or even just the frequency of internet usage (see Table 1). Higher levels of internet use or content sharing have been associated with a lower likelihood of sharing fake news, suggesting greater familiarity with online content and improved discernment (Filipek & Chodak 2024; Guess et al. 2019).

H5: Frequency of internet usage is positively associated with confidence in digital fact-checking.

Socio-demographic and structural inequalities have long been recognized as factors that shape digital engagement. Characteristics such as age, education, gender, income, and place of residence influence digital skills and are a source of digital inequalities (Robinson, Schulz, Blank, et al. 2020; Robinson, Schulz, Dunn, et al. 2020). For example, older individuals and those with lower educational attainment are more likely to trust or share disinformation (Guess et al. 2019; Lukavská et al. 2025). Women may be more prone to unintentional fake news sharing. At the same time, rural residents with low income and education levels tend to report lower digital literacy and higher fake news sharing rates (Filipek & Chodak 2024). Socio-economic status also shapes perceived digital competence, with upper-middle-class youth reporting higher confidence in their digital skills (Calderón et al. 2022). However, these patterns may vary across national contexts (Goyanes et al. 2025).

To account for these well-documented disparities, we included country of residence and a range of socio-demographic and structural characteristics as control variables in our analysis. This approach allows us to isolate the effects of digital skills and trust on fact-checking confidence while controlling for potential influences. Details on all variables and data sources are provided in the following “Methods” section.

Methods

Data

To answer the research questions and test the hypotheses, we used databases provided by two large-scale European research projects: the European Social Survey (ESS) and the Cross-National Online Survey 3 (CRONOS3). The ESS, led by the European Social Survey European Research Infrastructure Consortium (ESS ERIC) is a cross-national, cross-sectional survey carried out in 2-year intervals across European countries and Israel (ESS ERIC, n.d.-a).

The ESS adheres to the highest methodological standards to provide policymakers with a high-quality, reliable source of facts and opinions about crucial European issues to enable evidence-based policy solutions (ESS ERIC, n.d.-a). Every country participating in the project must follow guidelines and use random probability methods to ensure a representative sample (ESS ERIC, n.d.-d).

CRONOS3 is the third edition of the CRONOS project, described as "the first attempt to establish a large-scale, cross-national, probability-based, mixed-mode panel following an input-harmonized approach" (Bottoni 2025: 2). We focus only on CRONOS3 as no data from the previous editions were used.

The ESS and the CRONOS3 are connected via research infrastructure. Panel recruitment occurred at the end of the main ESS interview, ensuring participants came from random probability samples. A key distinction is age eligibility. ESS survey respondents are 15 and older, while in CRONOS3, they are 18 and older. CRONOS3 panel members were recruited during the 10th and 11th rounds of the ESS in Austria, Belgium, Czechia, Finland, France, Hungary, Iceland, Poland, Portugal, Slovenia, and the United Kingdom. Notably, Poland joined the project for the first time during CRONOS3 (Bottoni 2025: 2–4).

Topically, CRONOS3 extends the ESS by providing additional variables that align with five NextGenerationEU themes: "Make it Equal," "Make it Green," "Make it Strong," "Make it Digital," and "Make it Healthy" (Bottoni 2025: 8–9). These themes reflect crucial areas of transformation for the EU to prioritize in the coming years, bolstering its development and the development of European societies (European Union, n.d.). Our study explores the Make it Digital module, covered in CRONOS3 Wave 1. It asks questions about internet use, the devices used for access, and digital skills and their development (ESS ERIC, n.d.-c).

Confidence in digital fact-checking skills, the dependent variable, requires people to have access to and use the internet. Thus, the CRONOS3 participants who failed to meet these two conditions were excluded from our analysis as their data were redundant. The first condition was validated using the "netusoft" variable, which records how often a respondent uses the internet. If they answered "Never," they were filtered out. The second condition was validated using the "w1dq2" variable, which asks, "In the last month, what devices have you used to access the internet?" (ESS ERIC, n.d.-b, p. 20). If they answered "I have no access to the internet," they were filtered out. As a result, 346 observations were excluded from the primary sample of 9884 respondents, leaving a final sample of 9538 cases.

Most of the variables used in our analyses come from CRONOS3 Wave 1 (fieldwork period: November 14–30, 2024), although some are available only in the main ESS database. Since the CRONOS3 participants participated in ESS round 10, 11, or both, we merged the two datasets using four variables: "essround" (ESS round), "cntry" (the respondents' country), "idno" (the respondent's identifier in given country), and "mode" (data collection mode, i.e., face-to-face interviews or self-completed) (Bottoni 2025: 11). The following databases were merged: CRONOS3 Wave 1 edition 1.1 (ESS ERIC 2025a), ESS11—integrated file, edition 3.0 (ESS ERIC 2025b), ESS10—integrated file, edition 3.2 (ESS ERIC 2023b), and ESS10 Self-completion—integrated file, edition 3.1 (ESS ERIC 2023c). There are two databases for ESS round 10: one for face-to-face interviews and the other for self-completion. Data merger was performed only for CRONOS3 members.

Variables

The dependent variable is confidence in digital fact-checking skills. Respondents were asked to rate a series of statements regarding various digital skills, beginning with the prompt: "How true is the following statement about you?" The statement most directly related to fact-checking was: "I know how to check the truthfulness of the information or content I find on the internet." Each statement was measured on a 6-point scale, with 1 meaning "Not at all true of me," 5 "Very true of me" and 6 "I don't understand what this means" (ESS ERIC, n.d.-b: 22).

For modeling purposes, we employed logistic regression, which requires the dependent variable to be binary. Therefore, we recoded the original scale to binary form, where "Very true of me" was coded as 1 and all other responses as 0. This binary dependent variable reflects the highest level of confidence in their skills (TOC). The rationale for choosing this cut-off point is that it reflects the most desired skill level. Confidence in fact-checking is what people should strive for and what should be bolstered through training and policy across European societies. Thus, it is crucial to establish what determines the declared respondents' confidence and identify other skills and attitudes that may reinforce it. A summary of all transformations can be found in Table 2.

Other skill-related variables were re-coded in the same way as the dependent variable. Confidence in their ability to create files on their digital device (CDF) reflects the most rudimentary digital skill, along with confidence in their ability to participate in social media (SMP). Similarly, we can interpret their confidence in finding information about goods or services online (FGS). However, online shopping and using services require slightly more knowledge and skill when they need to cross-validate features and quality, and compare prices.

The SML variable represents respondents' confidence in limiting access to their profile or content on social media. Meanwhile, the BCL variable represents the respondents' confidence in their ability to change their browser's cookie settings. These two skills and the dependent variable should be closely connected, as they all reflect people's proficiency in protecting themselves from online threats, such as an invasion of privacy, profiling, misinformation, disinformation, propaganda, or fake news. We consider confidence in their ability "to write code in a programming language" (PRG) (ESS ERIC, n.d.-b: 21) as the highest tier of digital competence.

Table 2

Variables and coding scheme for logistic regression analysis

Variable Group	Variable new name [Variable original name]	Labels and coding for variables used in analyses
Dependent variable	TOC [w1dq9]	Knows how to check the truthfulness of online content (1 = "Very true of me," 0 = other)
Control	CTR [cntry]	Country
	GND [gndr]	Gender (1 = "Female," 0 = "Male")
	EDY [eduyrs]	Years of full-time education completed (num)
	HIN [hinctnta]	Household total net income decile (num)
	AGE [age]	Age of respondent (num)
Digital skills and training	CDF [w1dq5]	Knows how to create files on a digital device (1 = "Very true of me," 0 = other)
	PRG [w1dq6]	Knows how to write code in a programming language (1 = "Very true of me," 0 = other)
	FGS [w1dq7]	Knows how to find information about goods or services online (1 = "Very true of me," 0 = other)
	SMP [w1dq12]	Knows how to participate in social media (1 = "Very true of me," 0 = other)
	SML [w1dq13]	Knows how to limit access to their profile or content on social media (1 = "Very true of me," 0 = other)
	BCL [w1dq15]	Knows how to limit a browser's cookie settings (1 = "Very true of me," 0 = other)
	DST [see: Labels…]	Participated in any digital skills training in the last 12 months (1 = any "Yes" across variables: w1dq19_1, w1dq19_2, and w1dq19_3; 0 = "No")
Trust	STR [w1sq16]	Trust in scientists (num)
	GTR [see: Labels…]	General trust (num; mean of pplfair, pplhlp, ppltrst variables from main ESS database for round 10 or 11; range: 0–10)
Internet use	UNA [w1dq3]	Uses the Internet almost all the time (1 = uses the Internet "Almost all the time ", 0 = any less frequent use)

Note: GTR is based on data from the main ESS database. All other variables come from CRONOS3 Wave 1.

To examine whether participation in digital skills training increases confidence in fact-checking, we used the CRONOS survey multiple-choice question (w1dq19) on participation in such training. The question offered four options, three were confirmatory, with different funding sources, and one was negative. The dataset included one dichotomous variable for each category. Respondents who reported participation in such training, regardless of funding source were coded as 1; others were coded as 0. Thus, DST is a binary variable, where 0 indicates no participation in the last 12 months, and 1 indicates participation.

To account for possible influence of the frequency of internet use, we used the question about how often a person had used the internet in the previous month, regardless of the purpose. The original 7-point scale, from "Almost all the time" to "Never," was transformed into a binary variable, with 1 indicating "Almost all the time," and 0 indicating less frequent usage (UNA) (ESS ERIC, n.d.-b: 20).

To fill the literature gap, we included variables related to trust. Trust in scientists was measured on an 11-point scale, from "Don't trust at all" to "Trust completely" (STR) (ESS ERIC, n.d.-b: 19). We hypothesize that there is a correlation between the ability to do fact-checking (and, presumably, a willingness to do so) and trust in people who provide evidence-based and validated information. Additionally, a general trust variable (GTR) was created as the mean of three items from the main ESS database that reflect this concept: pplfair ("Most people would try to be fair"), pplhlp ("People mostly try to be helpful"), and ppltrst ("Most people can be trusted") (ESS ERIC 2023a: 5). Again, each item was measured on an 11-point scale (0 = lowest trust, 10 = highest trust). The internal reliability of the GTR index was acceptable (Cronbach's $\alpha = .77$, $n = 3$ items).

To rule out basic demographic explanations of confidence in fact-checking, we controlled for: country (CTR), gender (GND), years of completed full-time education (EDY), household total net income measured in deciles (HIN), and age (AGE). We re-coded GND values of "Female" and "Male" to 1 and 0, respectively, and created 10 dummy variables for CTR, with Austria as the reference category.

In the unweighted sample 31.31% reported confidence in their fact-checking skills, while 65.54% did not. Missing values account for 3.17% of the sample. HIN (9.8% missing) and GTR (8.7%) are the main contributors to sample reduction in the analyses. Full descriptive statistics by dependent variable categories are provided in the appendix.

Results

Model Specification

The analysis aims to identify factors that increase the likelihood of respondents reporting confidence in their digital fact-checking abilities. Thus, we want to see the skills and attitudes that should be fostered in European societies to increase the population's digital self-protection.

We applied logistic regression to determine which skills, features, or attitudes increase the likelihood of people reporting confidence in their fact-checking skills. This approach will reveal by how much this likelihood will increase if the independent variable's value increases by 1 unit. In most cases, it will mean a simple change of state, e.g., going from non-confident to confident in the ability to limit browser's cookie settings.

Regarding the model assumptions the dependent variable (TOC) is binary, all observations are independent, and the sample size is sufficiently large for 25 predictors in a single model. The lack of multicollinearity was confirmed by checking the Variance Inflation Factor (VIF) statistics for every variable in the comprehensive model (Model 1). The highest VIF value was 3.567 ($df = 10$) recorded for CTR, well below the threshold of 10 (Field et al. 2012: 276).

We employed survey-weighted estimation to account for sampling weights and design effects. All analyses were conducted in R, version 4.5.0 (R Core Team 2025) using the "survey" package, version 4.4.2 (Lumley et al. 2003). The "svyglm" function with a quasibinomial family was used to fit a logistic regression model that accommodates overdispersion in binary outcomes. All analytical procedures were documented in R code and publicly accessible via one of the authors' GitHub repositories.

Two models were created. Model 1 includes all the variables. Model 2 excludes GTR and HIN due to the high number of missing values, which limits the sample size. Model 2

Table 3

Logistic regression models for digital fact-checking confidence (TOC)

Predictors groups	Predictors	Model 1 (all the variables)			Model 2 (without GTR and HIN)		
		OR	*CI*	*p*	OR	*CI*	*p*
Control variables	GND	1.07	0.81–1.42	0.644	1.02	0.80–1.31	0.860
	EDY	1.01	0.97–1.05	0.760	1.01	0.98–1.04	0.577
	AGE	1.01	1.00–1.02	0.106	1.01	1.00–1.01	0.200
	HIN	1.04	0.99–1.10	0.143			
	CTR (ref. cat.: Austria)						
	Belgium	0.89	0.58–1.36	0.595	0.98	0.65–1.47	0.919
	Czechia	1.12	0.60–2.09	0.715	1.30	0.83–2.02	0.254
	Finland	**1.63**	**1.09–2.45**	**0.018**	**1.55**	**1.06–2.27**	**0.025**
	France	0.97	0.60–1.55	0.894	1.18	0.75–1.86	0.468
	Hungary	1.29	0.63–2.65	0.493	1.24	0.72–2.12	0.440
	Iceland	1.29	0.83–2.01	0.266	1.20	0.79–1.81	0.394
	Poland	0.86	0.52–1.42	0.555	1.11	0.69–1.78	0.667
	Portugal	1.19	0.72–1.96	0.493	1.33	0.83–2.16	0.239
	Slovenia	1.23	0.81–1.87	0.337	1.41	0.95–2.11	0.089
	United Kingdom	0.66	0.43–1.01	0.058	0.74	0.50–1.12	0.152
Digital skills and training	CDF	**2.01**	**1.46–2.77**	**<0.001**	**1.82**	**1.36–2.43**	**<0.001**
	PRG	1.50	0.86–2.62	0.156	1.48	0.90–2.41	0.121
	FGS	**3.48**	**2.20–5.51**	**<0.001**	**3.53**	**2.35–5.30**	**<0.001**
	SMP	1.05	0.72–1.51	0.811	1.07	0.78–1.49	0.671
	SML	**2.97**	**2.12–4.15**	**<0.001**	**2.87**	**2.12–3.88**	**<0.001**
	BCL	**2.29**	**1.66–3.15**	**<0.001**	**2.45**	**1.82–3.29**	**<0.001**
	DST	0.98	0.67–1.45	0.928	1.11	0.78–1.58	0.560
Trust	STR	**1.08**	**1.00–1.17**	**0.044**	1.07	0.99–1.15	0.075
	GTR	**0.89**	**0.82–0.98**	**0.012**			
Internet use	UNA	**1.35**	**1.01–1.81**	**0.043**	**1.42**	**1.09–1.84**	**0.009**
(Intercept)		**0.02**	**0.01–0.06**	**<0.001**	**0.02**	**0.01–0.04**	**<0.001**
n			7392			8806	
Nagelkerke's *pseudo-R^2*			0.401			0.404	

Note. All values are weighted. Weighting variable: w1weight. OR = odds rations; *CI* = confidence intervals; p = p-value; n = unweighted number of observations; $p < .05$ appear in boldface.

is, therefore, based on the largest sample. A summary of both models can be found in Table 3.

Model Interpretation

We assessed model fit using Nagelkerke's *pseudo-R^2*, Akaike information criterion (AIC), and Bayes information criterion (BIC). Nagelkerke's R^2 ranges from 0 to 1; the closer the value is to 1, the better the fit (Field et al. 2012: 316–318). The results for both models are almost the same: $R^2 = 0.401$ for Model 1, and $R^2 = 0.404$ for Model 2, suggesting that both models are equally good at fitting the data. However, the interpretation changes with the AIC and BIC results, both of which account for model complexity, i.e., the number of predictors. BIC penalizes this complexity more severely than AIC. The lower the values, the better (Field et al. 2012: 318). The AIC value for Model 1 is 6598.799, and for Model 2 is 7825.843. BIC value for Model 1 is 6637.965, and for Model 2 is 7870.114. Thus, although both models fit the data similarly based on R^2, the fit-complexity trade-off is better for Model 1, despite having more predictors. We conclude that Model 1 is a better fit for the data, as it includes only respondents who answered all the questions we identified as important for TOC prediction. Thus, further analyses will focus on Model 1.

Model 1 shows only a few statistically significant variables: CDF, FGS, SML, BCL, UNA, STR, and GTR. Interestingly, among country indicators (CTR), only Finland showed statistically significant difference ($p < .05$) from Austria (the reference country), regarding respondents' confidence in fact-checking. Cross-tabulation analysis of TOC and CTR offers further insights into these results. Table 4 shows that the highest percentage of respondents who reported confidence in their fact-checking skills can be found in Finland (38.4%), Iceland (36.4%), and Slovenia (35.6%). The lowest levels were observed in Poland (24.9%), Hungary (25.7%), the UK (26%), and Austria (26.8%). While countries with the highest percentages approach statistical significance, the UK's *p*-value of 0.058 (Table 3) suggests caution. Odds ratios offer some support for this, although Hungary's values contradict it. By and large, we can conclude that respondents' country doesn't directly influence TOC, as the evidence for it is, at best, circumstantial.

Table 4

Distribution of digital fact-checking confidence (TOC) by country (CTR)

Country [Count (% of TOC)]	Knows how to check the truthfulness of online content (TOC)			Total
	People not confident in their fact-checking skills [0 = other]	People confident in their fact-checking skills [1 = "Very true of me"]	Missing values	
Austria	177 (67.8%)	70 (26.8%)	14 (5.4%)	261 (100.0%)
Belgium	212 (63.7%)	102 (30.6%)	19 (5.7%)	333 (100.0%)
Czechia	216 (66.7%)	97 (29.9%)	11 (3.4%)	324 (100.0%)
Finland	95 (57.9%)	63 (38.4%)	6 (3.7%)	164 (100.0%)
France	1138 (63.6%)	561 (31.4%)	89 (5.0%)	1788 (100.0%)
Hungary	207 (69.9%)	76 (25.7%)	13 (4.4%)	296 (100.0%)
Iceland	6 (54.5%)	4 (36.4%)	1 (9.1%)	11 (100.0%)
Poland	491 (69.7%)	175 (24.9%)	38 (5.4%)	704 (100.0%)
Portugal	176 (64.9%)	79 (29.2%)	16 (5.9%)	271 (100.0%)
Slovenia	36 (61%)	21 (35.6%)	2 (3.4%)	59 (100.0%)
United Kingdom	1322 (68.6%)	502 (26%)	104 (5.4%)	1928 (100.0%)
Total	4076 (66.4%)	1750 (28.5%)	313 (5.1%)	6139 (100.0%)

Note. All values are weighted. Weighting variable: w1weight. Total weighted $N = 6139$, total unweighted $N = 9538$.

None of the control variables are statistically significant, indicating that an increase in the likelihood of respondents being confident in their fact-checking skills is not dependent on demographic characteristics. In the case of statistically significant variables, odds ratios (OR) illustrate how the odds of the outcome occurring (respondents reporting confidence in their fact-checking ability) change if the independent variable value increases. OR > 1 indicates that the odds increase, while OR < 1 indicates that they decrease (Field et al., 2012:

335–336). People confident in their ability to create files on digital devices (CDF) have two times higher the odds (OR = 2.01, $p < .001$) of being confident in their fact-checking skills than those who are not. In contrast, SMP and PRG do not show significant effects. This suggests that basic digital competence, rather than social media use or programming skills, is essential for fact-checking confidence. SMP's lack of significance may be due to its high correlation with SML ($r = 0.635$, $p < .001$), with SML absorbing SMP's influence. It is difficult to interpret PRG's lack of significance, as so few respondents reported confidence in their programming skills, regardless of whether they feel confident in their fact-checking skills. Additionally, PRG has no strong (or even moderate) correlation with other variables, indicating that programming remains purely technical and largely distinct from other digital skills.

The results show that FGS is statistically significant and the strongest predictor of confidence in digital fact-checking (OR = 3.48, $p < .001$). Respondents confident in their ability to find information about goods and services online have nearly 3.5 times higher the odds of being confident in their fact-checking skills than those who lack this confidence. An extended interpretation of this finding is provided later in the paper.

Privacy-protection skills are the second and third strongest predictors. Respondents confident in their ability to limit access to their profile or content on social media (SML) have approximately three times higher the odds of being confident in their fact-checking skills than those who don't feel proficient in limiting this access (OR = 2.97, $p < .001$). Those who were confident in their ability to limit their browser's cookie settings (BCL) have 2.3 times higher the odds of being confident than those who were not (OR = 2.29, $p < .001$). These results were expected, as the two skills focus on privacy and protection against profiling and other online threats. Despite the moderate-to-strong correlation between SML and BCL ($r = 0.568$, $p < .001$), they are both statistically significant and strong predictors. The relationship between them and TOC is probably based on a broader predisposition for people to protect themselves online. Individuals who seek to protect their privacy will likely be motivated to protect themselves from other threats, like mis-/disinformation or being exploited.

Internet frequency (UNA) is another statistically significant predictor, although its impact is the lowest. People who use the internet almost all the time are 35% (OR = 1.35, $p < .05$) more likely to be confident in their fact-checking skills than those who use it less often.

Both trust-related variables, STR and GNTR, are statistically significant and their impact is meaningful. Trust in scientists increases the odds of fact-checking confidence by 8% for every point of STR (OR = 1.08, $p < .05$). Thus, someone scoring the maximum trust (10) in scientists is 80% more likely to report confidence in fact-checking skills than someone with minimal trust (0). Nevertheless, this result is somewhat modest. General trust in other people (GTR) has a similar effect size, although it is negatively associated with fact-checking. Each additional point in GTR decreases the odds of respondents reporting confidence in their digital fact-checking skills by 11% (OR = 0.89, $p < .05$). Thus, contrary to our initial hypothesis (H4), a negative relationship was found between general trust in others and confidence in digital fact-checking. As trust remained the least studied factor of online misinformation behavior, a broader interpretation of these findings is provided in the "Discussion" section.

Lastly, when HIN and GTR were omitted in Model 2 to increase the number of observations, STR lost statistical significance. Although it was not a strong predictor in Model 1, this change is most likely caused by the composition of characteristics of the additional 1414 respondents included in Model 2 but not included in Model 1. GTR and STR are not strongly correlated ($r = 0.210$, $p < .001$), so it is unlikely that they interact in Model 1 in a significant way.

Discussion

This study examined the factors that influence Europeans' confidence in their digital fact-checking skills, focusing on the roles of digital skills and trust. Guided by five hypotheses and grounded in the interdisciplinary social science literature, the analysis revealed that specific digital competencies and trust orientations are associated with fact-checking confidence. The findings contribute to the growing body of research on digital literacy and trust in the context of online disinformation and misinformation.

Digital Skills Confidence is Positively Associated with Confidence in Digital Fact-Checking

Digital skills confidence is positively associated with confidence in digital fact-checking, with the ability to find information about goods and services online being the strongest predictor. The results partially support hypothesis H1 that digital skills confidence is positively associated with fact-checking confidence (TOC), aligning with prior research that links digital literacy to resilience against misinformation (Filipek & Chodak 2024; Oladokun et al. 2024). The strongest predictor of TOC was the ability to find information about goods and services online (FGS), suggesting that individuals perceive fact-checking as a form of digital self-protection. This supports the idea that digital fact-checking is both a cognitive skill and a defensive practice embedded in everyday digital consumer routines.

The strong association between FGS and TOC suggests that individuals may apply evaluative online strategies developed in consumer contexts to other informational problems. This suggests that digital skills are transferable across domains (Harper et al. 2022), reinforcing the notion that fact-checking is part of a broader repertoire of digital self-defense. However, the findings warrant careful interpretation. While the ability to critically assess product or service information could enhance general evaluative competence, it does not necessarily imply equivalent scrutiny in politics, health, or science. As Bauman (2005: 126) noted, "the consumer is an enemy of the citizen," highlighting the extent to which market rationality has colonized civic life.

In this light, the prominence of FGS as a predictor of TOC may even reflect an asymmetry between consumer behavior and civic engagement. While skepticism and critical evaluation are well-developed in online market interactions, where advertising and sales tactics are widely recognized as potentially deceptive, these dispositions may not be extended to other information domains, in line with Bauman's arguments.

Limiting access to social media content (SML) and limiting browser cookie settings (BCL), emerged as strong predictors. Indeed, digital literacy includes information evaluation and protective behaviors (Robinson, Schulz, Dunn, et al. 2020), which may reinforce each other. The moderate correlation between SML and BCL further suggests a shared underlying disposition toward digital vigilance.

In contrast, confidence in using a social media (SMP) and programming skills (PRG) were not significant predictors for digital fact-checking confidence. Despite its relevance to digital engagement, the SMP's lack of significance may reflect more complex mechanisms behind its relationship with digital fact-checking. Previous research suggests that engagement in multiple social media platforms may even be associated with intentionally sharing fake news (Filipek & Chodak 2024). The lack of association between TOC and PRG supports that specialized, technical proficiency alone is insufficient for fact-checking confidence; it also requires evaluative and protective digital practices (Robinson, Schulz, Dunn, et al. 2020).

Participation in Digital Skills Training is Not Positively Associated with Confidence in Digital Fact-Checking

Participation in digital skills training did not predict fact-checking confidence, thus failing to support the second hypothesis (H2). This finding challenges assumptions in policy discourse that training alone can enhance digital resilience (Lazer et al. 2018; Squicciarini et al. 2024). The finding may reflect variability in training quality, content, or accessibility, or indicate that such training is mainly targeted at entry-level internet users. Alternatively, it may suggest that experiential learning and informal digital practices play a more central role in shaping fact-checking confidence than formal instruction.

Trust in Scientists is Positively Associated with Confidence in Digital Fact-Checking

Trust in scientists (STR) predicts digital fact-checking confidence, supporting our third hypothesis (H3), though with a modest effect size. This finding aligns with research showing that trust in science enhances individuals' responsiveness to evidence-based information during a crisis such as the COVID-19 pandemic (Cologna et al., 2025). It also supports the idea that trust in the credibility of knowledge-producing institutions can foster confidence in an individual's ability to evaluate information, reflecting Giddens' (2013) arguments.

However, the modest effect opens up a discussion regarding a disconnect between scientific knowledge and everyday digital content. While trust in scientists may support a general orientation toward evidence and verification, the types of information encountered online, especially on social media, may be essentially trivial, commercial, and emotionally charged, due to the mechanisms of the attention economy (Goldhaber 1997). Such a mismatch can limit the practical influence of scientific trust on fact-checking behaviors.

General Trust in Others is Negatively Associated with Confidence in Digital Fact-Checking

Contrary to our expectations (H4), general trust in others (GTR) was negatively associated with fact-checking confidence. This finding challenges the assumption that general trust fosters epistemic openness (Giddens 2013) and suggests instead that higher interpersonal trust may reduce critical vigilance. While social media users are hesitant to challenge misinformation in general (Gurgun et al. 2024), the strongest individual predictor of sharing fake content was altruism (Balakrishnan et al. 2021), and online trust showed a negative association with verifying news before sharing (Talwar et al. 2019). These findings collectively suggest that specific dimensions of interpersonal trust may weaken people's digital self-defense skills against misinformation by reducing their critical evaluation of online content.

Our result also highlights a tension between social cohesion and digital risk awareness. While general trust is foundational to social integration (Fukuyama 1996), its uncritical extension to digital environments may increase susceptibility to misinformation.

Internet Usage Frequency is Positively Associated with Confidence in Digital Fact-Checking

Internet usage frequency (UNA) was positively associated with fact-checking confidence (H5), though the effect was modest. This supports prior findings that greater exposure to digital environments enhances familiarity with online content and may improve discernment (Filipek & Chodak 2024; Guess et al. 2019). However, the relatively small effect size suggests that the frequency of use alone is not a strong determinant of fact-checking confidence. The difference in fact-checking confidence between frequent and infrequent users is small, reinforcing that specific digital skills, rather than general exposure, are more influential.

Lack of Evidence for Control Variables and Country Effects

None of the socio-demographic control variables, including age, gender, education, income, or place of residence, were statistically significant in our investigation. This finding does not align with studies on digital inequality (Robinson, Schulz, Blank, et al. 2020; Robinson, Schulz, Dunn, et al. 2020), nor with findings regarding various aspects of online misinformation behavior (Filipek & Chodak 2024; Guess et al. 2019; Lukavská et al. 2025). Fact-checking confidence is an independent function of specific digital skills and trust orientations rather than structural characteristics. Furthermore, Gurgun et al.'s (2024) identify social concerns and effort/interest considerations as primary barriers to challenging misinformation. Their findings regarding a marginal role of age and gender support our conclusion that confidence in specific digital practices is a stronger predictor of fact-checking behavior than demographic characteristics.

Similarly, country-level differences were limited. While Finland showed significantly higher fact-checking confidence than Austria, other national differences were not statistically robust. This suggests that national context may shape digital practices indirectly through factors not captured in the model.

Conclusion

The main research question asked how confidence in digital skills and trust interact with confidence in digital fact-checking. The results indicate that confidence in consumer information retrieval and privacy protection skills is strongly associated with fact-checking confidence. Trust in scientists is positively related to fact-checking confidence, while general trust in others shows a negative association.

Implications for Application and Policy

The results for FGS indicate that workshops or information campaigns aimed at developing digital security skills should incorporate an analogy to shopping online. Grounding the training in everyday consumer experiences will make the content familiar and, thus, easier to absorb. This approach gains additional validation from Pang et al. (2022), who demonstrate that platform-specific approaches leveraging users' familiar interaction patterns are more effective in anti-fake news tackling than generic interventions. To increase people's "digital self-defense" skills, training must focus on specific security and fact-checking competencies, not general digital proficiency.

It is paramount that any awareness-raising initiatives account for differences between online and offline social norms and interactions. The two diverge greatly; thus, people can be easily misled and exploited. Balakrishnan et al.'s (2021) finding that altruism is the strongest predictor of fake news sharing during the COVID-19 pandemic illustrates this vulnerability.

Finally, academics need support to communicate their findings more accessibly through popular science formats. The evidence from Pang et al. (2022) showing how different platforms create distinct socially mediated public spheres further emphasizes that scientists must adapt their communication strategies to platform-specific affordances and norms. Consequently, making evidence-based knowledge more accessible to the public may further increase trust in scientists (Cologna et al. 2025).

Limitations and Future Research

A key limitation of this study lies in the construction of the dependent variable which is based on self-assessment. While our approach captures the most aspirational level of digital fact-checking confidence, it introduces potential biases.

Self-assessment may not accurately reflect actual skill levels. Individuals often overestimate fact-checking ability, and overconfidence can reduce responsibility when sharing content (Aïmeur et al. 2023). Higher confidence predicts intentional sharing of false information (Filipek & Chodak 2024). Moreover, while self-confidence is a known predictor of digital engagement and skill development (Rosales-Márquez et al. 2024), it may mask gaps in actual competence, particularly in complex tasks such as fact-checking.

Additionally, self-assessment scales are susceptible to social desirability bias (Calderón et al. 2022). Respondents might underreport undesirable behaviors or overstate virtuous ones, such as their digital fact-checking skills (Goyanes et al. 2025). Self-perceptions of competence are influenced by socio-demographic factors and biographical experiences, not only actual capability (Calderón et al. 2022).

Future research should complement self-assessed measures with performance-based or behavioral data to better capture fact-checking skills. Including such indicators into international surveys would strengthen investigations of digital competence and misinformation.

Appendix

Examining missing values as a category of TOC, we see hardly any missing values for the control variables (excluding CTR because of how it is counted in Table 3). Conversely, virtually all other variables show a high level of missing information for this category, ranging from 69.2% to 82.5%. This suggests that participants who skipped the question about TOC were also likely to omit responses on other key variables. Again, there are two exceptions. As before, there is a relatively high percentage of missing values for HIN (17.9%), despite being a control variable. That is, participants who did not answer the question about income were also more likely to omit the question about fact-checking. Interestingly, the other exception was GTR, which exhibited a relatively few missing values compared to the other non-control variables, perhaps because it is the most general variable. It should be noted that GTR is the only variable extracted from the main ESS database.

Analyzing the means of control variables (excluding CTR), the sample comprises 54.9% women, and their presence is more pronounced among those not confident in their fact-checking skills (55.8%). Regarding education, the respondents had completed, on average, 14.9 years of full-time education; the mean is higher for those reporting confidence (15.9). The average age of CRONOS3 participants is 52.4 years, but the confident group is much younger (46.4) compared to the non-confident group (55.5). This aligns with expectations, as we expect that younger people are more familiar with modern technology, have more experience with it, and may be more aware of possible threats on the Internet. For the description of respondents' household net income decile differences, we use the median. The median for the whole sample and the non-confident group is 6, but the confident group's median is 7.

For the substantive variables, there are no significant differences in levels of trust between the confident and non-confident respondents. The average trust in scientists (STR) is 7.23 for the full sample and 7.61 for the confident group; for general trust (GTR), the average for the full sample is 5.90, and 5.96 for the confident group. Participation in digital skills training (DST) is low across both groups: only 12.2% of the non-confident group and 19% of the confident group reported having undergone training. While there are almost twice as many course participants (percentage-wise) who claimed proficiency in fact-checking, the proportions overall are modest. Programming confidence (PRG) is even lower, particularly among the non-confident group (3.19%). Among the confident group, it is somewhat higher, at 11.9%. We can draw two conclusions from this. First, there are almost (proportionately) four times more programming-proficient people among the confident group than the non-confident group. Second, in general, very few respondents are capable of programming—it is a rare skill.

Further analysis shows that respondents who are confident in their fact-checking skills are also more likely to express confidence in their remaining digital skills (CDF, FGS, SMP, SML, BCL) and are more likely to use the Internet almost all the time (UNA). The largest difference between non-confident and confident groups is observed for SML (25.5% and 73%) and BCL (17.8% and 63.8%). These results support our interpretation that privacy-related skills are closely connected with TOC, as they are closely linked to protection from online threats. Descriptive statistics by dependent variable categories are provided in Table A.

Table A

Descriptive statistics for variables re-coded for the analysis by respondents' confidence in their fact-checking skills (TOC)

	People not confident in their fact-checking skills [coded as 0] (n = 6249)	People confident in their fact-checking skills [coded as 1] (n = 2987)	Missing values (n = 302)	Overall (n = 9538)
Country (CTR) [count (% of TOC)]				
Austria	589 (9.4%)	241 (8.1%)	18 (6.0%)	848 (8.9%)
Belgium	742 (11.9%)	309 (10.3%)	35 (11.6%)	1086 (11.4%)
Czechia	540 (8.6%)	203 (6.8%)	27 (8.9%)	770 (8.1%)
Finland	908 (14.5%)	581 (19.5%)	40 (13.2%)	1529 (16.0%)
France	511 (8.2%)	233 (7.8%)	25 (8.3%)	769 (8.1%)
Hungary	358 (5.7%)	128 (4.3%)	13 (4.3%)	499 (5.2%)
Iceland	613 (9.8%)	350 (11.7%)	38 (12.6%)	1001 (10.5%)
Poland	290 (4.6%)	121 (4.1%)	22 (7.3%)	433 (4.5%)
Portugal	355 (5.7%)	189 (6.3%)	22 (7.3%)	566 (5.9%)
Slovenia	595 (9.5%)	345 (11.6%)	28 (9.3%)	968 (10.1%)
United Kingdom	748 (12.0%)	287 (9.6%)	34 (11.3%)	1069 (11.2%)
Gender (GND)				
Mean (SD)	0.558 (0.497)	0.528 (0.499)	0.550 (0.498)	0.549 (0.498)
Median [Min, Max]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]	1.00 [0, 1.00]
Missing count (% of TOC)	2 (0.0%)	1 (0.0%)	2 (0.7%)	5 (0.1%)
Years of full-time education completed (EDY)				
Mean (SD)	14.5 (3.86)	15.9 (3.87)	14.0 (4.14)	14.9 (3.93)
Median [Min, Max]	14.0 [0, 45.0]	16.0 [0, 37.0]	14.0 [0, 33.0]	15.0 [0, 45.0]
Missing count (% of TOC)	73 (1.2%)	30 (1.0%)	2 (0.7%)	105 (1.1%)
Household total net income decile (HIN)				
Mean (SD)	5.99 (2.64)	6.75 (2.58)	5.98 (2.68)	6.23 (2.64)
Median [Min, Max]	6.00 [1.00, 10.0]	7.00 [1.00, 10.0]	6.00 [1.00, 10.0]	6.00 [1.00, 10.0]
Missing count (% of TOC)	599 (9.6%)	281 (9.4%)	54 (17.9%)	934 (9.8%)
Age of respondent (AGE)				
Mean (SD)	55.5 (16.3)	46.4 (15.1)	46.9 (18.3)	52.4 (16.6)
Median [Min, Max]	57.0 [18.0, 90.0]	46.0 [19.0, 88.0]	45.0 [18.0, 90.0]	53.0 [18.0, 90.0]
Missing count (% of TOC)	16 (0.3%)	5 (0.2%)	3 (1.0%)	24 (0.3%)
Knows how to create files on a digital device (CDF)				
Mean (SD)	0.264 (0.441)	0.676 (0.468)	0.194 (0.398)	0.396 (0.489)
Median [Min, Max]	0 [0, 1.00]	1.00 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Missing count (% of TOC)	40 (0.6%)	6 (0.2%)	240 (79.5%)	286 (3.0%)
Knows how to write code in a programming language (PRG)				
Mean (SD)	0.0319 (0.176)	0.119 (0.324)	0.0351 (0.186)	0.0601 (0.238)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Missing count (% of TOC)	44 (0.7%)	8 (0.3%)	245 (81.1%)	297 (3.1%)
Knows how to find information about goods or services online (FGS)				
Mean (SD)	0.551 (0.497)	0.939 (0.239)	0.444 (0.501)	0.675 (0.468)
Median [Min, Max]	1.00 [0, 1.00]	1.00 [0, 1.00]	0 [0, 1.00]	1.00 [0, 1.00]
Missing count (% of TOC)	27 (0.4%)	5 (0.2%)	239 (79.1%)	271 (2.8%)

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	People not confident in their fact-checking skills [coded as 0] (n = 6249)	People confident in their fact-checking skills [coded as 1] (n = 2987)	Missing values (n = 302)	Overall (n = 9538)
Knows how to participate in social media (SMP)				
Mean (SD)	0.336 (0.472)	0.751 (0.432)	0.283 (0.455)	0.470 (0.499)
Median [Min, Max]	0 [0, 1.00]	1.00 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Missing count (% of TOC)	56 (0.9%)	10 (0.3%)	249 (82.5%)	315 (3.3%)
Knows how to limit access to profile or content on social media (SML)				
Mean (SD)	0.255 (0.436)	0.730 (0.444)	0.273 (0.449)	0.408 (0.492)
Median [Min, Max]	0 [0, 1.00]	1.00 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Missing count (% of TOC)	75 (1.2%)	16 (0.5%)	247 (81.8%)	338 (3.5%)
Knows how to limit browser's cookie settings (BCL)				
Mean (SD)	0.178 (0.382)	0.638 (0.481)	0.226 (0.423)	0.326 (0.469)
Median [Min, Max]	0 [0, 1.00]	1.00 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Missing count (% of TOC)	53 (0.8%)	17 (0.6%)	249 (82.5%)	319 (3.3%)
Uses the internet almost all the time (UNA)				
Mean (SD)	0.262 (0.440)	0.492 (0.500)	0.224 (0.419)	0.336 (0.472)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]
Missing count (% of TOC)	15 (0.2%)	2 (0.1%)	217 (71.9%)	234 (2.5%)
Trust in scientists (STR)				
Mean (SD)	7.05 (1.94)	7.61 (1.89)	6.63 (2.41)	7.23 (1.95)
Median [Min, Max]	7.00 [0, 10.0]	8.00 [0, 10.0]	7.00 [0, 10.0]	8.00 [0, 10.0]
Missing count (% of TOC)	26 (0.4%)	7 (0.2%)	209 (69.2%)	242 (2.5%)
General trust (GTR)				
Mean (SD)	5.88 (1.76)	5.96 (1.79)	5.74 (1.93)	5.90 (1.78)
Median [Min, Max]	6.00 [0, 10.0]	6.33 [0, 10.0]	6.00 [0, 10.0]	6.00 [0, 10.0]
Missing count (% of TOC)	582 (9.3%)	221 (7.4%)	25 (8.3%)	828 (8.7%)
Participated in any digital skills training in the last 12 months (DST)				
Mean (SD)	0.122 (0.327)	0.190 (0.392)	0.0132 (0.115)	0.140 (0.347)
Median [Min, Max]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]	0 [0, 1.00]

Note: All the statistics and counts are unweighted. DST does not have missing values; hence, there is no row for them in the Table. The min/max values define the range of variable values. When the range is from 0 to 1, it means it can be multiplied by 100% to get the percentage of people who are confident in their fact-checking skills. Total unweighted $N = 9538$.

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