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News Credibility Assessment Heuristics: An Integrative Analysis of Internal and External Verification Strategies

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Abstract: The digital era has drastically transformed how people consume and share news. This has led to an unprecedented spread of misinformation that is difficult for the public to identify. While research on journalistic and automated fact-checking is extensive, the ordinary internet users' strategies remain underexplored. This study bridges the gap by investigating both internal (intrinsic cues) and external (extrinsic verification) fact-checking strategies through a mixed-methods approach. Qualitative cognitive interviews with 42 participants revealed an extensive list of intrinsic heuristics. A quantitative pilot survey of 150 respondents highlighted the prominence of extrinsic strategies. Results indicated the following: 76% of participants prioritize lateral reading, 57% verify information in trusted sources, 50% seek expert opinions, and only 21% consult with peers (this is less common). Qualitative analysis further uncovered a key finding. Intrinsic assessments often rely on subjective metadata cues and confirmation bias, sometimes leading to contradictory judgments. This research emphasized the need for a holistic understanding of fact-checking behaviors. It also laid the groundwork for further studies on the effectiveness of such behaviors in improving media literacy.

Keywords: fact-checking strategies, fake news, news credibility assessment, digital misinformation, media literacy

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оригинальная статья

Приемы оценки достоверности новостей: интегративный анализ стратегий внутренней и внешней проверки фактов

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Аннотация: В цифровую эпоху способы потребления и распространения новостей радикально изменились, что привело к беспрецедентному распространению дезинформации, выявление которой представляется довольно трудным. Несмотря на то что существует множество исследований, посвященных анализу журналистских и автоматизированных методов проверки фактов, стратегии обычных интернет-пользователей по-прежнему остаются малоизученными. Цель – исследовать как внутренние (на основе внутренних

признаков), так и внешние (на основе внешней проверки) стратегии проверки фактов. В результате качественного анализа когнитивных интервью 42 участников составлен объемный список внутренних приемов. В рамках количественного анализа пилотного опроса 150 респондентов выявлена распространенность внешних стратегий. Установлено, что 76 % интервьюируемых отдают предпочтение латеральному чтению – сопоставлению информации из разных источников, 57 % проверяют информацию в достоверных источниках, 50 % обращаются к экспертному мнению и только 21 % респондентов обсуждают новости с друзьями или знакомыми (наименее частотный вариант ответа). Выявлено, что внутренние оценки часто опираются на субъективные метаданные и эффект подтверждения (*confirmation bias*), что иногда приводит к противоречивым суждениям. В связи с этим возникает острая необходимость целостного понимания поведения интернет-пользователей при проверке фактов, что закладывает основу для дальнейших исследований его эффективности в целях повышения медиаграмотности населения.

Ключевые слова: стратегии проверки фактов, фейковые новости, оценка достоверности новостей, цифровая дезинформация, медиаграмотность

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Introduction

Currently, we live in an era of rapid digital transformation. This transformation started several decades ago and revolutionized the way individuals communicate with each other and interact with information. This *information age*¹ central to many digital governance initiatives, changing not only private communication, but also how citizens interact with government agencies online. Today, various kinds of information are more accessible than ever. This has completely changed how people process and share information globally.

News consumption patterns have also changed. Media development and social networks provide a constant flow of information and news to its users, drastically increasing people's news exposure. More importantly, users became a part of news creation and distribution. They can create posts, share them, or promote them with a simple click. The rise of incorrect or manipulated content on social media has become a more prevalent issue in the last decade [Benkler et al. 2018; Kavanagh, Rich 2018] when users became active agents in the media sphere.

In recent years, researchers have made more concerning findings. Research shows that fake news spreads faster and wider than true news [Vosoughi et al. 2018].

The recent spread of large language models (LLMs) and generative AI has further complicated misinformation recognition. A study from the University of Zurich showed that AI-generated misinformation can seem more convincing than human-written messages. Participants were less likely to identify fake tweets generated by AI than those written by humans [Spitale et al. 2023]. At the same time, LLMs are being studied as a tool for automatic fact checking. However, the early estimates show mixed results and call for further cautious research [DeVerna et al. 2024; Quelle, Bovet 2024].

Social and psychological theories, such as the backfire effect [Nyhan, Reifler 2010] or confirmation bias [Nickerson 1998], explain why people struggle to verify the truth of news. These obstacles have increased demand for online fact-checkers². However, the scientific focus on journalism and automated fact-checking often overlooks the role of the general public in spreading fake news. This highlights the need for more attention on ordinary internet users and their fact-checking strategies.

Existing research on public fact-checking practices is fragmented, focusing separately on two broad types of strategies: internal (intrinsic) based on news features and external (extrinsic) relying on external resources.

¹ Zandbergen D. We live in an information age: What does that actually mean? *Waaq Futurelab*. 12 Apr 2013. URL: <https://waaq.org/en/article/we-live-information-age-what-does-actually-mean/> (accessed 1 Mar 2026).

² Stencil M., Griffin R. Fact-checking triples over four years. *Duke Reporters' Lab*. 22 Feb 2018. URL: <https://reporterslab.org/fact-checking-triples-over-four-years/> (accessed 1 Mar 2026); Graves L., Cherubini F. *The rise of fact-checking sites in Europe*. Reuters Institute for the Study of Journalism, 2016. <https://doi.org/10.60625/risj-tdn4-p140>

This separation reveals a gap in understanding fact-checking practices holistically. The current paper bridges these two approaches, outlining both internal and external strategies. While strategies involving external resources are well-documented, practices for assessing news credibility using its characteristics remain underexplored. Bridging this gap is significant for two reasons: (1) it advances media research; (2) it helps policymakers developing digital citizen-facing services and creating misinformation safeguards in e-government systems.

In this paper, we presented an exploratory study bridging two sub-fields in fact-checking research and preparing a base for further complex research on fact-checking strategies. The main goal of our research was to outline particular strategies of both types, presenting a more holistic approach to fact-checking. Tactics for validating information with external sources are quite defined and consistent across existing literature. However, practices of assessing credibility using news characteristics are not articulated yet. To address this discrepancy, qualitative research and quantitative assessment were employed. Qualitative research was employed first to grasp the variety of heuristics people use to assess the trustworthiness of the news piece by itself. Then, quantitative analysis assessed the prominence of fact-checking strategies via external sources. These strategies were outlined in the literature review.

The research is conducted on a Russian sample, where fake news detection is particularly critical. The ecosystem of e-government is expanding. Therefore, understanding citizens' fact-checking behavior is vital for both protecting civic dialogue and ensuring statutory compliance. The general public lacks journalists' skills in news assessment. This makes ordinary citizens more vulnerable to misinformation. At the same time, Russia's law on disseminating fake news imposes legal consequences. Therefore, spreading false information has both social and legal consequences. This makes research on fake news detection highly demanded in Russia.

Overview of the field

In the digital age, rapid disinformation spreading creates various societal risks. The dissemination of false or misleading information can influence public opinion, undermine trust in institutions, or exacerbate social division. For instance, studies show that disinformation during elections can distort democratic processes by misleading voters [Bradshaw, Howard 2019], which

can greatly disorder the social order. Fake news are even more dangerous during crisis periods. False claims about COVID-19 in social media led to vaccine hesitancy and the popularization of harmful medical practices [Burki 2019; Nogara et al. 2022]. Social media platforms amplify the problem. Algorithms prioritize engagement over accuracy, creating echo chambers that preserve and strengthen the influence of fake news [Baumann et al. 2020].

Fact-checking is a crucial tool in combating the misinformation spread. Research highlights that fact-checking can reduce belief in false claims. This is especially true when corrections are timely and clearly communicated [Walter et al. 2020; Fazio et al. 2024]. The sphere of fact-checking has recently advanced significantly. This is due to the appearance of automated fact-checking resources. Z. Guo et al. and X. Zeng et al. associate the rise in research and development of automated fact-checking with the need to keep pace with the rapid dissemination of online content [Guo et al. 2022; Zeng et al. 2021]. These solutions that can be scaled. However, fact-checking itself can be challenging. Disagreements among fact-checkers on ambiguous statements highlight the complexity of the task [Lim 2018].

Fact-checking research has largely stemmed from the journalism domain. Most studies treat it as part of a journalist's role. However, with the growth of online media and public engagement, ordinary internet users have become key players in news creation and distribution. This increases the demand for information verification. Although some papers show that fact-checking goes beyond the realm of journalism [Nogara et al. 2022; Panizza et al. 2022], most literature focuses on the journalist's perspective. This leads to a lack of knowledge about how audiences engage with fact-checking in their daily news consumption. Aiming to close this gap, our paper focused on regular internet users. We examined the strategies they utilize to assess the truthfulness of claims.

Researchers categorize fact-checking strategies into two main groups: internal heuristics, such as analyzing news characteristics, and external methods, such as consulting trusted sources or engaging in lateral reading [Panizza et al. 2022; Wojdyski et al. 2019]. While internal strategies rely on cognitive shortcuts – such as assessing the tone, metadata, or familiarity of news – external strategies involve cross-referencing with reliable sources or seeking expert opinions. This paper aimed to present a holistic view of fact-checking and outline both types of strategies.

Fact-checking with the use of external resource

Apart from assessing the reliability of a news piece on its own, fact-checking also includes consulting various external resources. Internet surfing for verification of received information is a key and most obvious strategy. This is called *lateral reading*. It involves evaluating a source's reliability by comparing it with other sources. Some researchers have proved this method's efficiency. For instance, Panizza et al. found that Internet surfing improved the credibility assessment for unfamiliar content [Panizza et al. 2022].

Another strategy is consulting with friends, family, or acquaintances. Individuals' perceptions of news media are influenced by their social connections [Ognyanova 2019]. Peer communication among peers can be more efficient than messages from official sources [Druckman et al. 2017]. Several works indicate that users can distinguish the news outlet quality when they belong to well-organized groups [Martel et al. 2024]. However, this strategy has drawbacks. Misinformation often goes unchecked in private communications [Rossini et al. 2021], boosting the spread and circulation of fake news.

People also seek expert opinions or comments to fact-check the news which constitutes one more tactic. G. Nogara et al. studied fake news distribution via Twitter (X) during the pandemic. They found that people are more likely to trust experts on unfamiliar topics requiring technical knowledge [Nogara et al. 2022].

When verifying news from an unfamiliar or questionable source, people may search for the same story in an official or trusted source. Panizza et al. showed that a familiar news source influences how people assess news reliability [Panizza et al. 2022]. Interestingly, this factor was stronger than scientific claims featured in the news itself.

Our literature review identified specific external fact-checking strategies for further research. They include lateral reading, consulting with peers, seeking expert confirmation, and verification in trusted sources.

Fact-checking within news – characteristic of fake news

The second aspect of fact-checking involves heuristics people use to assess a news piece on its own. Several elements impact readers' judgments. These includes the news title, the image used, and the source bias [Spezzano et al. 2021]. The way fake news is presented significantly influences its perceived reliability. M. R. Morris et al. argue that metadata on X plays a greater role in determining credibility than content itself [Morris et al. 2012]. M. Broersma supports this view.

He emphasizes that the form of news is more critical for assessing reliability than content [Broersma 2010; 2013].

While reliance on metadata was noted over a decade ago, recent studies confirm this trend. M. Duncan highlights that cognitive limitations lead people to rely on non-content factors when judging credibility [Duncan 2019]. Eye-tracking data showed a key pattern. Time spent on metadata – such as headlines, bylines, and timestamps – correlates with readers' ability to distinguish real news from fake [Wojdyski et al. 2019]. Similarly, S. M. Shariff et al. find that readers base credibility judgments on first impressions and surface characteristics of Twitter news [Shariff et al. 2017]. This creates a paradox: readers trust the content of news but primarily assess reliability using metadata. C. I. Hovland and W. Weiss showed that expert-presented information is deemed more credible than information from questionable sources [Hovland, Weiss 1951]. J. Henke et al. added that including scientific sources improves perceived credibility [Henke et al. 2020].

Content-based heuristics also influence judgments. F. Spezzano et al. found that a neutral tone and the presence of quotes make news appear more professional and trustworthy [Spezzano et al. 2021]. Emotional writing is seen as less reliable. Additionally, J. Henke et al. demonstrated that including statistics or their visualization increases credibility. Instead of objectively verifying news, users rely on practical heuristics [Henke et al. 2020]. J. Swart and M. Broersma classified nine types of strategies [Swart, Broersma 2022]. These ranged from explicit knowledge to tacit knowledge including prior knowledge, cross-referencing, endorsements by others and so on. L. Puustinen and J. Seppänen stressed the importance of intuition [Puustinen, Seppänen 2013]. This factor is often overlooked, which combines cognitive and instinctive trust in news.

Existing research focuses on isolated news characteristics, requiring a more comprehensive approach. J. Swart and M. Broersma provide a foundation, but their taxonomy remains general [Swart, Broersma 2022]. Therefore, grasping particular heuristics and strategies of fact-checking is still an open question. This paper took a more holistic perspective to present a broad variety of distinct verification practices within news.

Methods and materials

This paper employed a mixed-method approach to analyze two aspects of fact-checking: the characteristics of news and the use of external resources. Qualitative research identified features readers consider when assessing news

reliability. Quantitative methods investigated prominent fact-checking strategies involving external sources.

As highlighted in the introduction, the features influencing readers' reliability judgments remain unclear. Assessing credibility without external verification is often subjective. Therefore, qualitative analysis extracts patterns of fake news assessment. The primary data source includes 42 post-experiment cognitive interviews conducted in the Laboratory of Social and Cognitive Informatics, St. Petersburg, Russia. Participants evaluated 24 fake and true news items on an emulated social media interface. They rated credibility on a 6-point Likert scale. The stimuli included 24 fake and true news items on socially divisive topics. Attitudes toward these topics reflected underlying values [Inglehart 2018].

All recorded interviews were manually transcribed for analysis using affinity mapping. Relevant ideas and quotes were transferred to an online board as separate stickers. These stickers were grouped by common topics. The groups were further divided into subcategories. This structured approach helped identify patterns and outline specific news characteristics affecting reliability judgments.

The second part of the study employed a quantitative approach. It analyzed fact-checking strategies that use external resources. The choice of method was determined by the results of the literature review. Unlike patterns of fake news assessment, analyzed in a qualitative manner, readers' tactics for fact-checking news with external sources are more clearly defined. Through the literature review, we identified four key strategies: lateral reading, consulting with peers, seeking expert confirmation, and verification in trusted sources. The pilot survey data targeted 154 respondents. Participants were aged 18–35 and were HSE students in Saint Petersburg. The sample was recruited through email invitations from academic programs and administrative offices. The survey data provided insights into students' preferred methods of consuming online news and their fact-checking behaviors. Results were organized and analyzed using RStudio and Excel.

Results

Internal fact-checking strategies

The first part of the analysis explored fact-checking practices based on news characteristics. Given the lack of specific practices in existing literature, qualitative analysis will outline potential strategies. Data was drawn from 42 cognitive interviews. These followed an experiment where 50 Russian native speakers

assessed news credibility. The sample, with a mean age of 25.7 and 22 males, was recruited via VKontakte, social media, university notice boards, and other platforms. Interview transcripts were analyzed and organized into an affinity diagram. The data was divided into three main groups: factors influencing reliability assessments, characteristics linked to fake news, and traits associated with trustworthy news.

On what participants based their decisions

Participants based their decisions on:

1. Previous knowledge: Participants mainly based their judgments about a news piece's credibility on their previous knowledge. This showed adherence to more explicit tactics in decision-making. In their assessment, participants relied on previously known facts or news they had encountered before. In narrative interviews, interviewees mentioned two types of preexisting knowledge they relied on.

1.1. Knowledge about the country (the subject of the news). Some participants referred to general knowledge about the mentioned countries. Others paid attention to political context or cultural specificities. This group was subdivided into:

(a) Knowledge about the country's politics. When assessing the reliability of news that she was fully aware of, one respondent compared the political stance of the statement with the current political ideology of the mentioned country. Several respondents pointed out their extensive knowledge of the political agenda in different countries. For example, one participant reported that she was already well aware of the political situation in Poland regarding abortion, which contributed to the decision-making regarding the issue: *I mostly relied on my previous knowledge about the countries. News about abortion in Poland was the easiest to classify because I know a lot about Poland, the sentiments in the country, and the political and ideological situation.*

(b) Knowledge of the country's culture. Some respondents appealed to the cultural specificity of countries. Participants who knew cultural specificities of the mentioned countries tended to assess news as more reliable if the statement reflected the same cultural tendency.

1.2. Knowledge of mentioned personas: Participants mainly referred to the reputation and political affiliation of familiar characters. Several people reported that news featuring Solovyov, Kiselev, and Milonov was easier to estimate reliability because they knew their scandalous reputation. Thus, if in news statements these figures "make a fuss and say nonsense", such news

would be considered more likely to be true as it aligns with their reputation.

2. Life experience: Participants also relied on their own life experience. In one case, an interviewee drew on his experience of living in the country of the news. Another respondent mentioned the experience of citizens from other countries whom he knew. He cited this as a factor in his judgments about the respective country: *Opinion is formed based on personal experience in the country, interactions with its residents, and their experiences.*

3. Stereotypes as a form of knowledge: Although stereotypes are considered oversimplified, essentialist propositions, participants used them as a heuristic in cases of uncertainty. They relied on widespread beliefs about countries, nationalities, etc: *In most cases, I relied on facts I know for sure, but for news I hadn't heard of, I turned to stereotypes I was familiar with.*

4. Opinion of friends and acquaintances: Several interviewees mentioned that they relied on information gained through friendly discussions or gossip when they lacked knowledge on some topic. This helped them assess the news: *I'm not interested in politics, so I had to rely on rumors and discussions with friends; I used knowledge about topics that I had often discussed with others recently.*

5. Intuition: So far, we have presented more explicit knowledge tactics, as classified by J. Swart and M. Broersma [Swart, Broersma 2022]. However, tactics based on tacit knowledge can also be derived from participants' narratives. Several interviewees mentioned intuition when describing how they assessed trustworthiness. With no previous knowledge, some respondents relied on their gut feeling: *It was difficult to assess [the truthfulness], so I mostly relied on my intuition.*

Interestingly, one respondent connected knowledge with intuition, two concepts that seemed quite opposite at first glance. For him, intuition did not exist on its own

but built on previous knowledge: *My intuition is based on the knowledge I have about the subject (news).*

6. Metadata: Along with the reviewed literature, respondents reported paying attention to metadata such as text style, source, and date of the news post. For example, one participant stated that she was less likely to trust news that dated after 2022. For her, the amount of false information increased after the beginning of the special military operation: *I often looked at the date, because after the start of the special military operation, there has been more misinformation.*

However, assessing metadata appeared to be a more complex and subjective heuristic. It requires a more detailed description, which is provided later.

Taking into account the bases that participants used to assess news credibility, the following schema can be outlined (Fig. 1).

Assessing metadata as one of the internal fact-checking strategies

Reviewing all internal fact-checking strategies derived from the interviews makes it clear that assessing metadata requires a more nuanced analysis. This deeper focus on metadata is strongly supported by existing literature on internal fact-checking strategies. As presented in the literature review, most studies focus on how internet users perceive different types of metadata [Duncan 2019; Shariff et al. 2017; Wojdyski et al. 2019]. We divided metadata characteristics into two groups that are discussed below: characteristics associated with fake news and characteristics associated with trustworthy news.

1. Characteristics associated with fake news. To gain a more precise understanding of the characteristics of both more trustworthy and fake news, we turned to the analysis of two main groups in our affinity map. First, we focused on characteristics of fake news that participants identified. From the full range of indicators

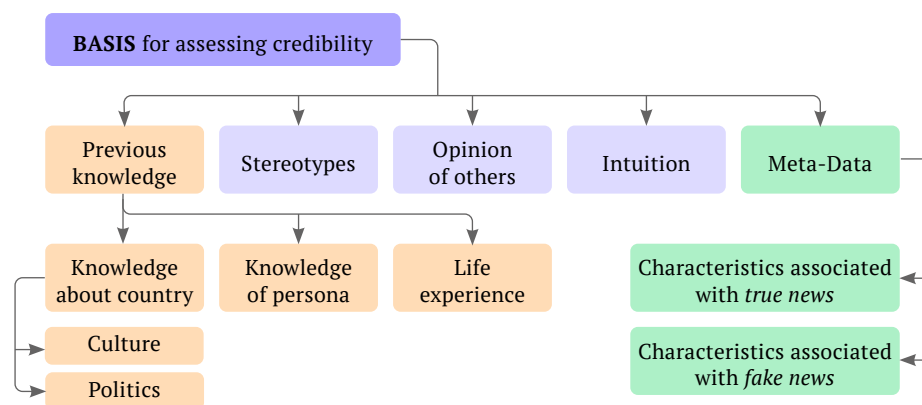


Fig. 1. The basis for assessing news credibility reported by respondents
 Рис. 1. Основа для оценки достоверности новостей по мнению респондентов

of news fakeness, we identified three sub-groups: text quality, features of the news event, characteristics of the news form (metadata).

1.1. Text quality. This subgroup includes characteristics related to text properties such as writing style, word choice, and similar features.

(a) Presence of *smart words*. Participants reported that statements containing what they called *smart words* are more likely to be fake. Upon reviewing the statements in the experiment, we interpreted *smart words* as field-specific terminology. This perception may stem from the common belief that fake news hides behind a mask of expertise to deceive more people.

(b) Emotional language. Emotional storytelling emerged as a subjective indicator of fake news. We hypothesize that people expect fake news to mislead readers by targeting their emotional response. By triggering strong emotions, such content may reduce critical thinking and attentiveness.

(c) Hyperbolization. This characteristic also appears to stem from the expectation that fake news seeks to divide people or provoke them through emotional appeal. Participants identified statements as fake or suspicious when they seemed *too much*, *pretentiousness*, or when the degree of something was exaggerated. Quotes from participants illustrated that: *Excessiveness, distortion, and an overall sense of "too much" are more characteristic of fake news; You can sense when something is off; usually, when the intensity of something is too high, it's a red flag for me.*

(d) Overabundance of details. One respondent noted that an excessive amount of information in a single statement raises suspicions of fictitiousness. She linked this to the nature of deception: when trying to lie, people add details to make the story seem credible. *When a news story contains too much information, it feels like it's been made up. That's how lying works: when you try to lie, you tend to come up with as many details as possible.*

1.2. Features of news events. This subgroup includes characteristics of events covered in news that participants perceived as potentially deceptive.

(a) Extraordinary or shocking events. Participants indicated that they become more cautious when the depicted event goes beyond everyday life or contradicts their expectations: *News that seems absurd or like a joke is definitely fake. Shocking news or anything that goes beyond the ordinary needs to be double-checked.*

(b) Events that are hard to verify. When participants encountered information they could not check, they tended to suspect deliberate misinformation. They viewed such news as more likely to be fake: *When dates*

and facts that are difficult to verify appear, it seems that they might have been deliberately fabricated.

(c) Event as an action. One interviewee reported that statements describing specific actions seemed less credible to him. In contrast, news presenting someone's opinion or quote appeared more trustworthy because people can think and say a lot of things.

1.3. Characteristics of news forms. This section outlines specific qualities of news presentation that participants identified as influencing their reliability assessment.

(a) Sensational ("screaming") title. Sensational titles are strongly associated with clickbait tactics. Clickbait typically uses exaggerated claims to attract traffic. Participants viewed such headlines as unprofessional, which lowered their trust in the news.

(b) High number of likes. One respondent shared that she is more prone to believe news with less amount of likes because likes can be easily inflated for deceptive purposes: *In everyday life, I don't trust likes; on the contrary, I tend to believe news with fewer likes, because likes can be easily manipulated.*

(c) Presence of images. Similarly, participants were wary of news accompanied by photographs. They considered images a potential manipulation tool: *Photographs are more likely to be fake. Images are deceptive, and they can be easily manipulated for one's own purposes.*

(d) Uneducated or low-quality comments. Participants sometimes judged news credibility based on the quality of user comments. Seeing illiterate comments led some to assume the news was fake. The logic was that if a person of low literacy believed the news and interacted with it, it might not be credible: *If there is an illiterate comment, it is most likely a fake news story, because a person of low intellect replied to it, believing it to be true.*

2. Characteristics associated with trustworthy news. The final main group comprised characteristics that participants associated with trustworthy news. Building on the previous discussion of subjective indicators of fake news, this section is divided into the same three categories: text quality, features of news event, and characteristics of the news form (metadata).

2.1. Text quality.

(a) Presence of quotes. A participant noted that inclusion of direct citations increased her trust in the news.

(b) Abundance of verifiable facts. In contrast to the view that excessive detail and a high digitalization could signal deception, another respondent reported that a substantial number of facts in a news item increased confidence in it.

(c) Neutral narrative style. While some participants identified emotional storytelling as a sign of fake news, others highlighted that the neutral, official tone of writing was associated with greater trustworthiness.

2.2. Features of news events.

(a) Events that correspond to the respondent's view. Interestingly, several participants – without being aware of it – reported the presence of confirmation bias. Confirmation bias refer to the tendency of individuals to seek, interpret, and remember information that aligns with his/her pre-existing beliefs, while disregarding contradictory evidence. In this study, respondents perceived positive news that aligned with their attitudes to the issue as more likely to be true.

(b) Confirmation bias also appeared to influence fact-checking patterns for one respondent. She refrained from fact-checking such news as she just wants to believe it. In contrast, when encountering unpleasant news, she opted for thorough fact-checking: *Much of trust is influenced by the appeal of the news topic – if the news is positive and appealing, I'm more likely to trust it. Sometimes I carefully check unpleasant news to make sure it's not true.*

2.3. Characteristics of news forms.

(a) Reliable news source. Participants identified official websites and authoritative figures as reliable news sources. Trust in a news brand generally spills over to each individual news piece it publishes.

(b) Link to the original source. When a news post included or attached a link to a primary news source, participants reported being more inclined to trust the news piece.

(c) High number of likes and comments. While another interviewee viewed it as indicative of fake news, another participant interpreted it completely differently. News that attracted significant public attention seemed credible.

(d) Emotional comments. Highly emotional comments increased the perceived trustworthiness of a news

piece for one participant. We hypothesize that it stems from the perception that strong emotional reactions associates with real world significance (i.e. the news piece is more likely to be genuine).

All the characteristics presented in Table – whether associated with fake or trustworthy news – are mental heuristics that people apply in their decision-making process. In other words, they represent cognitive shortcuts used to assess the reliability of the news without consulting external sources. Applying these heuristics constitutes distinct internal strategies of fact-checking.

It is also important to emphasize that such strategies are highly subjective and vary significantly among individuals. Even within our relatively small sample, we identified two pairs of contradictory strategies. A large amount of detail and information may both raise skepticism due to excessive detail and trust because of high information density. Additionally, social engagement metrics (likes and comments) are ambivalent as participants view likes either as a sign of manipulation or as a signal of credibility.

External fact-checking strategies

The second part of the research focused on identifying prominent fact-checking strategies that employ external sources. In the literature review, the following strategies were outlined: lateral reading, consulting with peers, seeking expert confirmation, and verification of trusted sources. With this framework established, we can proceed to analyze the usage frequency of these tactics with the help of the survey data. The survey aimed to identify students' preferences concerning the websites they used for the news consumption and to uncover their strategies for verifying the authenticity of received information.

To begin the quantitative analysis, we presented descriptive statistics of the survey sample. The survey sample included approximately 150 participants (one

Tab. Summary of internal fact-checking heuristics identified in cognitive interviews
Табл. Эвристические методы внутренней проверки фактов: результаты когнитивных интервью

Heuristic Category	Fake News Signals	Trustworthy News Signals
Text	Emotional tone, hyperbole, <i>smart words</i> , excessive details	Neutral style, direct quotes, high factual density
Event	Shocking content, hard-to-verify claims, action-focused statements	Alignment with personal views (confirmation bias)
Form and metadata	Sensational headline, many likes*, images*, illiterate comments*, post-2022 date†	Official source, link to primary source, emotional comments*, many likes*

Note: * – contradictory interpretations among participants; † – context-specific finding (Russian information environment).

participant was excluded for not meeting the age criteria). The mean age was 21.6, and the median was 21, indicating a slight skew toward younger respondents. The sample was 71% female, with men representing 25.7%, and 5 participants (3.3%) did not report their gender.

The second part of the survey explores patterns of news consumption, with the majority reading or watching news on a daily basis. This finding is important for the analysis, as the study conclusions are based on individuals with high news exposure. Three participants reported never consuming news online, so they were excluded from further analysis (Fig. 2).

In the discussion of news consumption in Russia, it is particularly interesting to examine prominent the social media platforms that students use. Russia stands out from other countries in terms of social media usage due to the popularity of locally developed social networks. The majority of participants (72%) preferred text-based news on social media or messengers.

Then, participants were asked to select the strategies they used for verifying news. The survey offered five tactics, all of which had been previously outlined in the literature review: lateral reading, consulting with peers, seeking expert information, and checking trusted sources. Checking the original source was treated as a separate tactic in the survey. Lateral reading emerged as the dominant strategy, as the majority (76%) of the sample reported using it when fact-checking the news. Source-trust strategies were also highly prevalent. Around 57% of participants check the original source and the same amount look for a particular piece of news in the trusted sources. Seeking expert opinion and comments is still quite popular among Russian youth: around 50% of respondents seek expert information to verify the news. The least popular tactic appeared to be a discussion with peers, used by only 21% (Fig. 3).

For defying a list of external fact-checking strategies, the option that was chosen by one person only is an important result of this pilot survey. That shows that the created list of strategies is sufficient and covers the majority of strategies employed by ordinary internet users.

Discussion

The current paper discussed the impact of digital development and drastic changes in news consumption patterns on society, with the particularly focus on the proliferation of fake news and challenges associated with fact-checking. Although the scientific community is actively engaged in exploring these

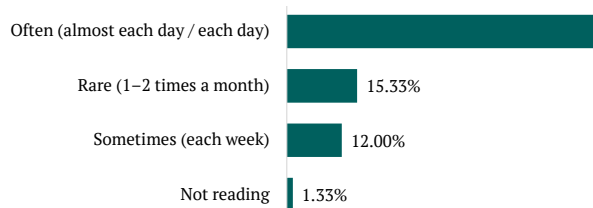


Fig. 2. Frequency of news consumption
Рис. 2. Частота потребления новостей

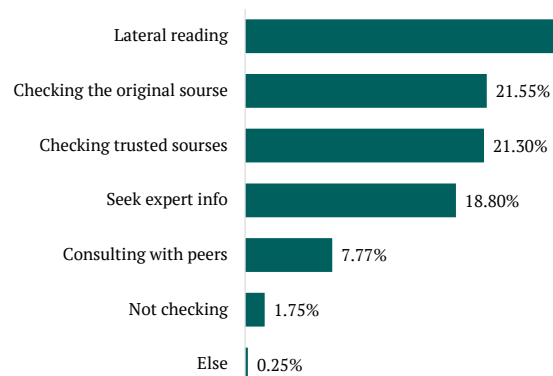


Fig. 3. Employed fact-checking strategies by sample
Рис. 3. Используемые респондентами стратегии проверки фактов

issues, a holistic approach to identifying and studying the fact-checking practices of the general public is yet to be employed. Existing literature categorizes fact-checking practices into two broad types: those relying on internal news features and those using external resources. However, these types are generally studied separately, highlighting the need for a comprehensive study that integrates both approaches. This paper therefore aimed to present an exploratory study to create a foundation for a new wave of research, to lay the groundwork for a more holistic approach to understand news-verification strategies among ordinary user, and to inform policy designers responsible for citizen-facing digital services.

Internal fact-checking strategies rely on characteristics of the news item itself or its content. A qualitative analysis of 42 post-experimental interviews revealed several key patterns how individuals assess credibility without external verification. They often rely on prior knowledge, including general knowledge about a country's politics or culture, and familiarity with specific personas' reputations. Additionally, individuals use their life experience or turn to stereotypes to fill knowledge gaps or rely on the opinions of friends and acquaintances. In cases of uncertainty, some people trust their intuition, using gut feelings based on tacit knowledge.

Metadata play a significant role, including text style and news form features such as screaming or exaggerated titles, unusual numbers of likes or comments, and the presence of images or quality of user comments (e.g. illiterate or emotional). The date of publication is also important, with post-2022 news often met with skepticism due to misinformation concerns. Characteristics of the news event itself impact credibility, with extraordinary or hard-to-verify events raising doubts, while news describing specific actions (rather than quotes or opinions) is perceived as less trustworthy. Conversely, trustworthy news is associated with neutral narratives, presence of quotes, factual content, and events aligning with a person's views (*confirmation bias*). Additional trust indicators include reliable sources, links to original sources, and emotional engagement in comments.

External fact-checking strategies involve consulting outside resources to verify the credibility of news. A pilot survey assessed the prominence of strategies outlined in the literature. The most prominent strategy is lateral reading, where individuals search across multiple sources to confirm reliability. Verification in trusted sources and checking the original source are also widely used, with individuals seeking familiar, reputable platforms or following links to primary sources. Seeking expert confirmation is another key method, where individuals rely on opinions from specialists, particularly on technical topics. Lastly, some individuals consult with peers (friends, family, or acquaintances), though this strategy is less popular among younger people due to perceived limitations in their peers' expertise or societal distrust.

Revisiting the results of this study, further research implications should be outlined. While current research identifies various fact-checking practices employed by general public. The effectiveness of these procedures remains to be determined. Equally important, upcoming research should question the dual role of LLMs as generators of increasingly convincing misinformation and potential allies in automated verification. Determining how citizens interact with LLM-based tools will be crucial for improving fact-checking strategies in AI-mediated civic environments.

Several limitations of this work should be acknowledged. The quantitative analysis was based on the sample of Russian youth ($n = 150$). This limits the generalizability of the findings. Secondly, although this study aimed to comprehensively analyze both aspects of fact-checking (internal and external),

the strategies could not be directly compared to the lack of pre-existing literature on internal indicators of fake news. At the same time, external fact checking methods were more thoroughly covered in prior work, allowing for a more detailed frequency analysis. This limitation is also presenting a gap in our work and create a ground for further research and even more meaningful insights in efforts to combat fake news.

Conclusion

This exploratory study contributes to a more holistic understanding of how ordinary internet users engage in fact-checking by examining both internal (news-based) and external (resource-based) strategies. Qualitative analysis revealed that internal heuristics – such as reliance on prior knowledge, metadata cues, and intuitive judgments – are highly subjective and often contradictory. The subjectivity highlights the cognitive complexity of credibility assessment. Quantitative findings demonstrated that external strategies, particularly lateral reading (76%), verification in trusted sources (57%), and seeking expert confirmation (50%), are widely employed by young Russian internet users, while consulting with peers remains the least popular tactic (21%).

The novelty of this work lies in bridging two previously fragmented research streams, offering an integrated perspective on public fact-checking behaviors. Practically, the findings contribute to the design of digital media literacy interventions and citizen-facing e-government services by emphasizing the need to support users in navigating both intuitive judgments and source-based verification.

Future studies should investigate the effectiveness of identified strategies in improving detection accuracy, expand sampling to more diverse demographic and cultural contexts, and explore the dual role of LLMs as both generators of sophisticated misinformation and potential tools for automated verification. Ultimately, fostering a holistic fact-checking competence among citizens is essential for strengthening resilience against misinformation in digitally mediated societies.

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³ *Meta Platforms*, the parent company of *Facebook*, *Instagram* and *WhatsApp* Messenger, is banned in the Russian Federation as an extremist organization. Компания *Meta Platforms*, владеющая социальными сетями *Facebook* и *Instagram* и онлайн-мессенджером *WhatsApp*, признана экстремистской организацией, ее деятельность запрещена на территории РФ.