Belgium-Luxembourg Digital Media and Disinformation Observatory

# DELIVERABLE 3.2.3

# Exposure to and belief in disinformation: a comparative study of Belgium and Luxembourg

Executive summary

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**EDMO BELUX is Belgian and Luxembourgish hub for research on digital media and disinformation (EDMO BELUX)**. It brings together an experienced and extensive network of fact-checkers, media, disinformation analysts, media literacy organisations and academics to detect, analyse and expose emerging harmful disinformation campaigns. Through rapid alerts in the network, fact checks and investigative reporting will reach first responders to disinformation (media, civil society, government) in order to minimize the impact of disinformation campaigns. In addition, through media literacy campaigns, EDMO BELUX will raise awareness and build resilience among citizens and media to combat disinformation. Finally, the hub will embed its disinformation monitoring, analysis and awareness into a multidisciplinary research framework on the impact of disinformation and platform responses on democratic processes.

**Within EDMO BELUX, the research pillar of the hub aims at assessing the impact of disinformation** and disinformation responses. The partners in the project collaborate in order to:

- **Monitor the financial viability of the news media sector** in Belgium and Luxembourg and produce a monitoring matrix incorporating indicators related to advertising and subscription revenues, (in)direct public support and philanthropy. The data will be gathered through publicly available financial reports, policy documents and expert interviews with representatives of media organisations in (Dutch- and French-speaking) Belgium and Luxembourg.

- **Assess the impact of disinformation campaigns** on society and democratic processes through quantitative surveys and qualitative in-depth interviews. The reception of disinformation campaigns will be studied from both a supply (content) and demand (audience characteristics and interpretive practices) perspective, accounting for the way in which the cultural, political and media contexts of the three communities (Dutch speaking Belgium, French-speaking Belgium, Luxembourg) shape people's relation with disinformation and democratic engagement in the public sphere(s).

- **Analyse the effectiveness of platform policies to counter disinformation**. Taking into account the assessments of the European Regulators Group for Audiovisual Media Services (ERGA) and the European Commission on the Code of Practice on Disinformation, the preparations for the Digital Services Act and the European Democracy Action Plan, and after consultation with ministries and media regulators, we will assess the policies and practices of major online platforms against the commitments in the Code of Practice on Disinformation.

More information on EDMO BELUX is available at https://BELUX.edmo.eu/

DISINFOCHECK
by EDMO BELUX
Monitoring Disinformation in Belgium and Luxembourg

# Scope of the summary and report

This executive summary describes three key findings emanating from the comparative EDMO BELUX survey conducted in Spring 2022, which sought to gain insight in the spread of disinformation among Belgian and Luxembourgish populations. We study exposure to, belief in, perceived causes of and solutions for disinformation in four regions—Flanders, Wallonia, Brussels and Luxembourg—with a representative sample of N=1,466 respondents.

The findings of our survey tell a cautionary tale. Regarding exposure and belief, we find that citizens in Belgium and Luxembourg are exposed to disinformation, especially the youth, social media users and politically interested individuals. Beyond exposure, we find that belief in disinformation is more prevalent amongst younger citizens, those with right-wing ideological viewpoints, and those who hold general conspiracy beliefs. Finally, our findings indicate that citizens primarily attribute blame for disinformation to social media platforms themselves, while also pointing a finger at regular people's news consumption, the government, and traditional media.

# Key Findings

## Key finding 1: the Belgian and Luxembourgish population, especially the youth, social media users and politically interested citizens, are exposed to disinformation.

While exposure to disinformation differs between depending on the topic, exposure is far from zero (between 14% and 51% of respondents per false claim tested). Luxembourgish citizens seem to be least exposed to disinformation, whereas exposure is highest in the Brussels sample.

Younger age cohorts (18 to 29 years old) are more likely to encounter disinformation, whereas differences on gender and level of education are much smaller. Similarly, use of social media leads to greater disinformation exposure. Moreover, having right-wing ideological affiliations and being politically interested in general lead to more exposure to disinformation. Importantly, conspiracy beliefs relate strongly to disinformation exposure: the effect is the strongest of all political attitudes included in the analysis and is consistent across regions.

## Key finding 2: citizens generally do not believe disinformation, but the subpopulation that does believe false claims, tends to hold deep-rooted conspiracy beliefs.

On a positive note, the average respondent in our survey does not believe the disinformation claims we tested. However, worryingly, the factual items also score relatively poorly. When looking at who is more likely to believe disinformation, we find that younger, female, and more trusting citizens are more likely to do so. Most importantly, we find a strong connection between disinformation belief and so-called conspiracy beliefs: citizens that believe in disinformation, tend to also adhere to more generalized claims of conspiracy, which makes them vulnerable to future disinformation. These findings should raise concern about the effectiveness of efforts to counter disinformation, such as fact checking, since these citizens may simply reject such efforts outright.

# Key finding 3: social media algorithms and gullible news consumption are deemed primary contributors to disinformation belief, social media content restrictions and fact-checking are acceptable solutions.

The algorithms of social media platforms, followed by the news consumption of regular people, are deemed primary contributors to the problem of disinformation belief, whereas legacy media (such as newspapers, television and radio) and government policy are seen as less important causes. Moreover, three out of four respondents support further content restrictions on social media to shield "gullible" citizens from false information on social media. At the same time, when it comes to legacy media, people generally also think a critical stance is best, although a majority deems fact checks a good idea as well.

# Introduction: the EDMO Comparative Survey

As part of the larger EDMO initiative, EDMO BELUX has as one of its goals to study the impact of disinformation on society. In previous reports (D3.2.1 and D3.2.2), we analysed the extent to which people living in Flanders, the largest region of Belgium, were exposed to and believed in disinformation (Lefevere & Meyer, 2022), and published a qualitative analysis of disinformation (Wiard et al., 2022). As with the prior study, we define disinformation here as false information that deliberately deceives (Hameleers et al., 2020).

The current report builds on these initial efforts but expands the scope of investigation in two ways. We set out to investigate to what extent Belgian and Luxembourgish citizens get exposed. We also turn our attention to correlates of disinformation and ask: *to what extent do people that believe in disinformation, also distrust politics and the media? Where do people put the blame for disinformation in society?*

We present evidence from the EDMO BELUX comparative survey, which was fielded in Spring 2022 in Belgium and Luxembourg. This executive report focuses on three key findings, but more details on the survey methodology, as well as expanded analyses and results, are available in the full report on request.

# Methodology

This report presents data stemming from an online survey amongst 1,466 participants from Belgium and Luxembourg. As EDMO BELUX seeks to understand the spread of disinformation in these two countries and their respective regions, the sample was construed to ensure roughly equal sample sizes in the three Belgian regions and Luxembourg.

The survey was fielded in Spring 2022, with field work for Belgium beginning a bit earlier (June 7 to July 1) compared to Luxembourg (June 20 to June 28). The survey samples consisted of respondents who were recruited from two subcontractor's panels: Dynata for Belgium and IPanel for Luxembourg. Only respondents that completed the survey, and met various quality criteria (*e.g.* no straightlining and speeding), were retained in the final dataset. In the end, the sample size for Belgium was N=1,207 (N=392 in Brussels, N=413 in Flanders and N=402 in Wallonia), and N=259 for Luxembourg. The analyses presented are weighted to correct the sampling distributions on age, gender and education. Full question wordings are available on simple request, in each section we cover the most important question wordings where relevant and needed.

# Results

## Citizens' exposure to disinformation

First, we examine the raw percent of respondents—overall, and per regional subsample—that indicated they had seen a specific (dis)information item. We asked respondents whether they had seen a series of factual and false claims in the media. For the disinformation items, we used claims that had been fact checked to ensure that the claim had at least spread enough to warrant a fact check, and that the claim itself had been debunked in the media.

Regarding the factual items, results show that there are large differences in the extent to which citizens indicated they had seen them before. Simply put, items related to international politics (NATO, Zelenski) were seen less compared to items that were more part of domestic news (fuel prices and honey as an alternative to antibiotics). Turning to disinformation items, the good news is that exposure is typically lower—but the bad news is that exposure is far from zero, and this holds true in all subsamples.

The items about facemasks (51%), sunscreen causing cancer (33%), and the 'Snake Island' soldiers (32%) were particularly widespread, demonstrating that although the countries under study are resilient to disinformation, it still gets spread widely amongst the wider public. The COVID-19 pandemic undoubtedly increased the 'reach' of the facemask claim. That being said, other COVID-19 disinformation such as ivermectin, life insurance and vaccines, were far less widespread. As such, that an issue—such as COVID-19—dominates the public debate, does not automatically make *all* disinformation about the issue as prevalent. We see similar patterns when it comes to exposure to disinformation related to the war in Ukraine: some claims have quite high exposure (*e.g.* Snake Island), whereas other claims were only seen by a small portion of respondents (*e.g.* Roger Cloutier's capture).

Although we omit the region-specific results from the table for brevity, Luxembourgish citizens seem to have least exposure to disinformation, whereas exposure is highest in the Brussels sample.

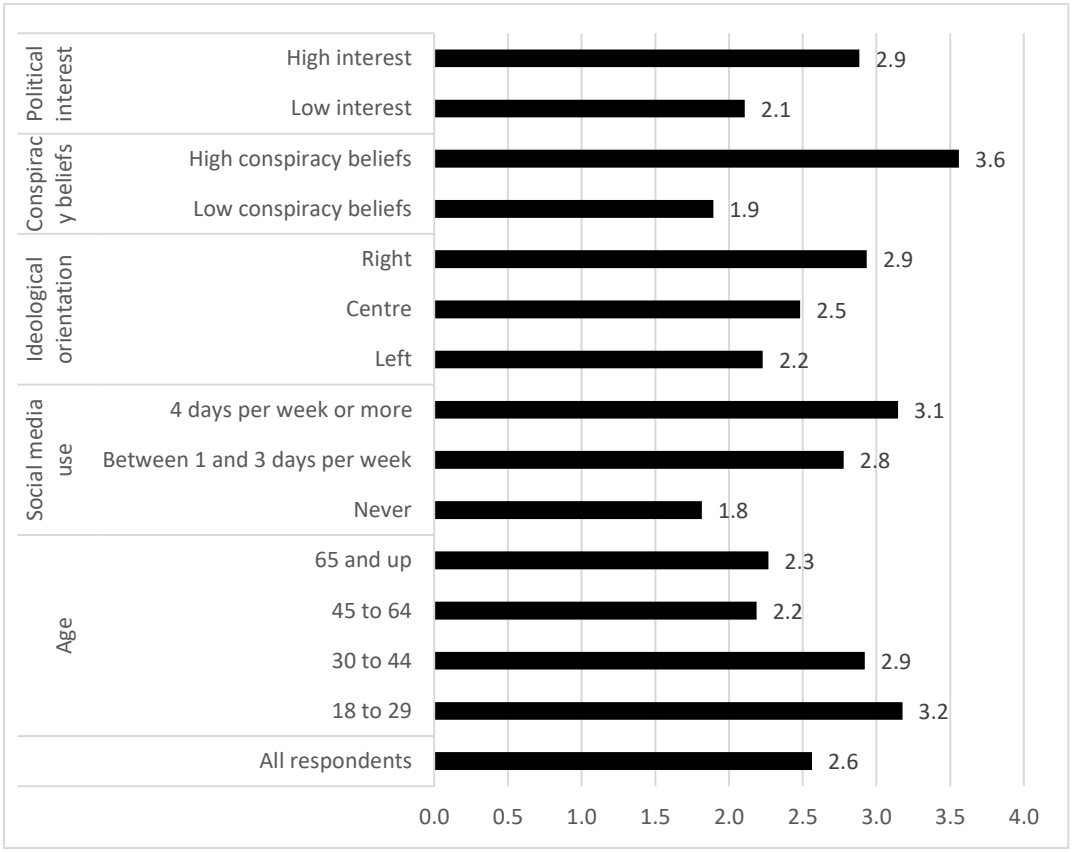
*Table 1: Exposure to disinformation, per region (N=1,466).*

| **Factual items** | **Overall** |
|---|---|
| When the price for motor fuel (diesel and petrol) rise, the state profits. | 65% |
| Honey can be an alternative to antibiotics for upper respiratory infections. | 38% |
| Although NATO members agreed to contribute 2% of their GDP to NATO, Belgium and Luxembourg contribute less than 1% of their GDP to NATO. | 30% |
| Zelenski banned 11 political parties due to their links to Russia. | 18% |
| **Disinformation items** | **Overall** |

| | |
|---|---|
| Wearing a face mask can cause health issues and weaken your immune system. | 51% |
| Commercial sunscreen products are carcinogenic (cause cancer) | 33% |
| The Ukrainian solders on 'Snake Island' were killed after telling the Russian army to "go f*** yourself" | 32% |
| Over their lifetime, solar panels and wind turbines are not able generate more energy than it costs to produce them. | 28% |
| Current evidence demonstrates that ivermectin can help cure COVID-19. | 24% |
| The sun is the main cause of global warming, and high concentrations of CO2 are an effect of rising temperatures and not the other way around | 21% |
| The French presidential elections were manipulated using tears in voting ballots. | 20% |
| 1 in 3 Ukrainian refugees in France do not have the Ukrainian nationality. | 19% |
| Your life insurance can be invalidated due to COVID-19 vaccine complications. | 14% |
| The Russian army captured NATO lieutenant general Roger Cloutier in Ukraine in April 2022. | 14% |

We also investigated who is more (or less) likely to get exposed to disinformation. 0 (not exposed to any of the false claims) to 10 (exposed to all false claims). Figure 1 shows the average number of claims respondents in various categories were exposed to.

*Figure 1: average exposure to disinformation.*



Whereas the average number of disinformation items respondents were exposed to was 2.6, younger respondents were exposed significantly more (3.2). Amongst older respondents, exposure was lower. The obvious explanation is different media use: we see that higher social media use corresponds to greater exposure (3.1) compared to respondents that never use social media for keeping up with current affairs (1.8). Respondents with higher political interest and right-wing political orientations also encounter more disinformation. Finally, we see a large effect of conspiracy beliefs: respondents that agree with—admittedly outlandish—statements such as *"Evidence of alien contact is being concealed from the public"*, tend to get exposed to (and believe, as we show below) much more disinformation (3.6). Note that only a minority of respondents in the sample considered these conspiracy theories believable. For example, only 5% of the sample considered the alien contact statement very believable. That being said, once citizens start to believe these claims, they tend to "go down the rabbit hole" of disinformation.

# Citizens' belief in disinformation

*Next, we turn to an even more pressing question: to what extent do citizens believe disinformation? We measured belief in the disinformation items discussed above on an 11-point scale from 0 (totally unbelievable) to 10 (totally believable). So, an average score above 5 means that respondents tended to believe the disinformation, whereas scores below 5 signify disbelief.*

presents the average belief score for the factual and disinformation claims.

*Table 1: Belief in (dis)information.*

| **Factual items** | **Overall** |
|---|---|
| When the price for motor fuel (diesel and petrol) rise, the state profits. | 6.4 |
| Honey can be an alternative to antibiotics for upper respiratory infections. | 4.9 |
| Although NATO members agreed to contribute 2% of their GDP to NATO, Belgium and Luxembourg contribute less than 1% of their GDP to NATO. | 4.9 |
| Zelenski banned 11 political parties due to their links to Russia. | 4.5 |
| **Disinformation items** | **Overall** |
| The Ukrainian solders on 'Snake Island' were killed after telling the Russian army to "go f*** yourself" | 4.6 |
| Wearing a face mask can cause health issues and weaken your immune system. | 4.4 |
| Over their lifetime, solar panels and wind turbines are not able generate more energy than it costs to produce them. | 4.3 |
| Commercial sunscreen products are carcinogenic (cause cancer) | 4.2 |
| 1 in 3 Ukrainian refugees in France do not have the Ukrainian nationality. | 4.1 |
| Current evidence demonstrates that ivermectin can help cure COVID-19. | 3.8 |
| The Russian army captured NATO lieutenant general Roger Cloutier in Ukraine in April 2022. | 3.5 |
| The sun is the main cause of global warming, and high concentrations of CO2 are an effect of rising temperatures and not the other way around | 3.2 |

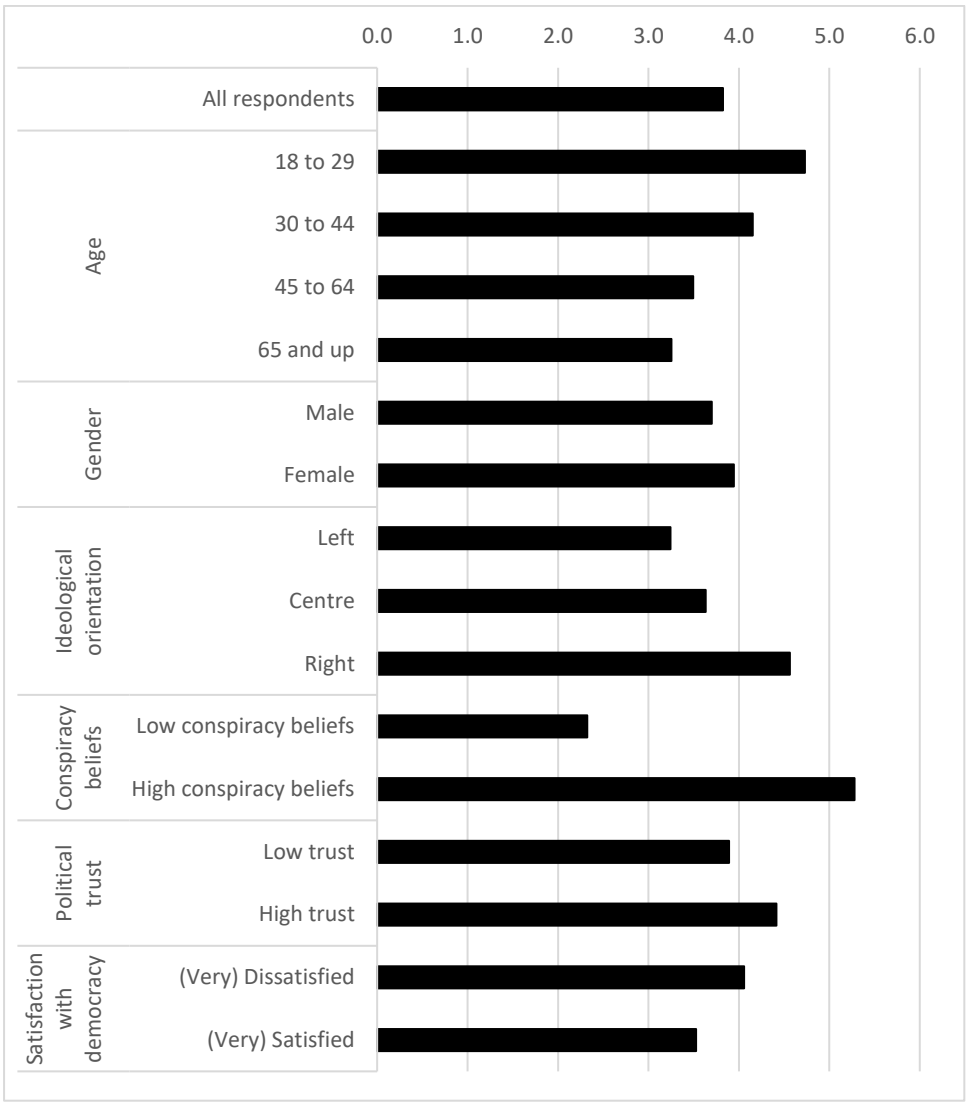
| | |
|---|---|
| Your life insurance can be invalidated due to COVID-19 vaccine complications. | 3.1 |
| The French presidential elections were manipulated using tears in voting ballots. | 3 |

There is good news and bad news: the good news is that the disinformation items are, on average, evaluated as below 5 – so, the average respondent in our survey does *not* believe in the disinformation. The bad news, however, is that barring one item ("When the price for motor fuel (diesel and petrol) rise, the state profits"), the factual items *also* receive scores below 5: this means that survey respondents were also overly sceptical of factual statements, which is worrisome.

When we look at the disinformation items, there are substantial variations in their believability scores: these differences do not seem related to the topic – i.e., the three COVID-19 statements get believability scores that range from 3.1 to 4.4; the three items on the Ukraine war get scores ranging from 3.5 to 4.6. It does seem to be the case that mainstream media coverage matters in conveying believability – if inadvertently: the item on the Snake Island soldiers was initially covered by mainstream media in Belgium, but later debunked. It still received 4.6 overall (and not shown in the table, it gets even 5.2 in Flanders).

Next, we consider the extent to which various respondent characteristics relate to their belief in disinformation. Scores above 5 on this scale suggest that respondents generally believed disinformation, whereas scores below 5 suggest disbelief. Figure 2 shows average scores for various categories of respondents.

*Figure 2: average belief in disinformation.*




We find that younger and female respondents are more prone to believe disinformation. Moreover, political attitudes matter: more satisfaction with democracy decreases a respondents' likelihood of believing disinformation. More trusting respondents are more likely to believe disinformation. So, while the decline in political trust is often seen as a risk for the functioning of democracy (Marien, 2011), a "healthy dose of distrust" may also make for a critical citizenry that does not just accept any piece of (dis)information. The strongest effect is, once more, exerted by conspiracy beliefs, which trump the effect sizes of the other factors at play. Conspiracy beliefs are more generalized beliefs in conspiracies, and as we demonstrated in the previous report on Flanders (Lefevere & Meyer, 2022), respondents holding these beliefs are much more likely to believe disinformation.

# Who is to blame? Causal attribution of fake news

We also queried respondents about the extent to which they considered four factors to contribute to the problem of disinformation, on a scale from 0 (Did not contribute at all) to 10 (Contributed very much). This allows us to gain insight as to where citizens put the blame for the current state of affairs.

*Table 2: Causal attribution of disinformation, overall and per region.*

| **Cause of disinformation** | **All** | **BXL** | **FL** | **WAL** | **LUX** |
|---|---|---|---|---|---|
| The news consumption of regular people | 6.0 | 5.9 | 5.6 | 6.0 | 6.9 |
| The algorithms of social media platforms | 6.8 | 6.6 | 6.7 | 6.6 | 7.5 |
| The news coverage of traditional media (newspapers, television broadcasters and radio) | 5.4 | 5.6 | 5.1 | 5.9 | 5.1 |
| Government policy towards fake news | 5.3 | 5.3 | 5.5 | 5.3 | 4.7 |

Citizens, on average, seem to put the blame on all factors named, with social media being the most blamed (6.8), followed by people's own behaviour, whereas legacy media and politics being seen as less of a cause. In Luxembourg, respondents put more blame on individual behaviour and social media, and less so on legacy media and politics. In the three Belgian regions, differences are less outspoken. However, when we see to what extent people's blame attributions to the four causes correlate, we find that correlations are relatively weak. In other words: individual respondents attribute blame to some, but not all actors.

Respondents were also asked to indicate what factors they considered to contribute to disinformation. Specifically, we presented respondents with several statements regarding potential solutions to disinformation, ranging from social media platforms' tightening their restrictions on content, to public scrutiny of media content.

The first statement pertained to social media platform content: *"Social media platforms should become stricter in the type of information they allow to be posted on their platforms"*. Overall, a clear majority of the public agrees with this statement: 78%, or more than three out of four respondents, agreed with the statement. So, whereas part of the public takes issue with content restrictions on social media, they seem to be a minority.

The reason people indicated that content on social media should be restricted, might lie with how they perceive the public's ability to deal with inaccurate information: 84% of respondents agrees with the statement *"People too easily believe information they see posted on social media"*. In other words, because people consider the general public to be too gullible in their consumption of

information, content restrictions should be imposed to 'shield' them from false information. When it comes to legacy media such as newspapers, television and radio, people generally *also* think a critical stance is best. 72% of respondents agree with the statement that *"People should be more critical of the information they see in the traditional media (newspapers, television broadcasters and radio)"*.

Are fact checks a solution, then? A good share of respondents seems to think so. We asked respondents whether they agreed or disagreed with the statement *"Fact checks help people distinguish fake news from accurate information"*, and 65% agreed.

We also asked respondents on their opinion regarding legacy media: to what extent should media allow more viewpoints in their coverage, and is current coverage too restricted? A first statement read *"Traditional news media (newspapers, television broadcasters and radio) are too strict in the viewpoints they allow to be presented in their news coverage"*. Only a minority of about 35% agrees with this statement, suggesting that only a minority thinks more views—even if factually inaccurate, perhaps—should be allowed on television. That being said, only 31% explicitly *disagrees* with the statement, so the public's views on legacy media are less outspoken when we compare them to the perception of social media. Similarly, we asked whether respondents agreed with the claim that *"There is too much censorship of opinions in the public debate"*. This more directly assesses whether the public considers media—which dominate the public sphere in contemporary democracies—stifle opinions and viewpoints. Yet, once more only a minority of respondents (41%) things censorship of viewpoints is problematic.

Does this mean that the public only points the finger at social media as falling short? Not quite. Journalistic media also receive a fair share of scrutiny. In particular, journalists are seen as *"biased in their reporting on current affairs"* by a (narrow) majority of respondents (53%). Perceived media bias of this kind is not a new phenomenon: in particular, claims of media bias have been a persistent feature of contemporary politics (Hopmann et al., 2012).

# Conclusion

The findings of our study tell a cautionary tale. Citizens in Belgium and Luxembourg are exposed to disinformation, especially the youth, social media users and politically interested. There is also a clear correlation between belief in disinformation, conspiracy theories and low political trust. We also find worrying evidence of affective polarization in Belgium and Luxembourg, especially in Flanders and towards politicians and asylum seekers.

Social media platforms are overwhelmingly blamed for contributing to the problem of disinformation, as is insufficient digital literacy. Proposed solutions point then towards surfacing trustworthy information more, but not all are trusting of legacy media anymore either.

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