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Research Article

A survey of expert views on misinformation: Definitions, determinants, solutions, and future of the field

We surveyed 150 academic experts on misinformation and identified areas of expert consensus. Experts defined misinformation as false and misleading information, though views diverged on the importance of intentionality and what exactly constitutes misinformation. The most popular reason why people believe and share misinformation was partisanship, while lack of education was one of the least popular reasons. Experts were optimistic about the effectiveness of interventions against misinformation and supported system-level actions against misinformation, such as platform design changes and algorithmic changes. The most agreed-upon future direction for the field of misinformation was to collect more data outside of the United States.

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Research questions

- How do experts define misinformation?
- What do experts think about current debates surrounding misinformation, social media, and echo chambers?
- According to experts, why do people believe and share misinformation?
- What do experts think about the effectiveness of interventions against misinformation?
- How do experts think the study of misinformation could be improved?

Essay summary

- The experts we surveyed defined misinformation as false and misleading information. They agreed that pseudoscience and conspiracy theories are misinformation, while satirical news is not. Experts across disciplines and methods disagreed on the importance of intentionality and whether propaganda, clickbait headlines, and hyperpartisan news are misinformation.
- The experts agreed that social media platforms worsened the misinformation problem and that

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people are exposed to more opposing viewpoints online than offline. Political scientists were skeptical of the claim that misinformation determined the outcome of the 2016 U.S. presidential election, whereas psychologists were not.

- The most popular explanations as to why people believe and share misinformation were partisanship, identity, confirmation bias, motivated reasoning, and lack of trust in institutions.
- The experts we surveyed agreed that current interventions against misinformation, such as media literacy and fact-checking, would be effective if widely adopted. Experts were in favor of platform design changes, algorithmic changes, content moderation, de-platforming, and stronger regulations.
- These experts also agreed that in the future, it will be important to collect more data outside of the United States, do more interdisciplinary work, examine subtler forms of misinformation, study platforms other than Twitter and Facebook, and develop better theories and interventions.

Implications

Fake news, misinformation, and disinformation have become some of the most studied phenomena in the social sciences (Freelon & Wells, 2020). Despite the widespread use of these concepts, scholars often disagree on their meaning. While some use misinformation as an umbrella term to describe falsehoods and deception broadly (Van Bavel et al., 2021), others use it specifically to capture unintentional forms of false or deceptive content (Wardle & Derakhshan, 2017).

In line with these discrepancies, our survey of 150 experts on misinformation from across academia revealed key definitional differences across disciplines and methods used to study misinformation. Experts relying on qualitative methods were more likely to include the intentionality of the sharer in the definition of misinformation than experts relying on quantitative methods. Moreover, psychologists had broader definitions of misinformation (including, for instance, propaganda and hyperpartisan headlines) compared to political scientists. Disagreement on the definitions of key concepts is not unique to misinformation research (e.g., Pearson, 2006), and such disagreements are not necessarily a problem, as they allow for different analytical perspectives and insights. Yet, if definitions of misinformation are too vague or not consensual enough, policy responses to misinformation can easily be instrumentalized by policymakers to strategically reduce freedom of speech, such as by silencing political opponents—a development already criticized by human rights groups (Human Rights Watch, 2021; Reporters Without Borders, 2017). From a scientific perspective, semantic disagreements across disciplines may sow confusion in the field by artificially creating contradictory findings. For instance, some disagreements about the effect and prevalence of misinformation may be intensified by differences in conceptualizations (Rogers, 2020). This should encourage researchers to better define misinformation and be explicit about it to avoid interdisciplinary misunderstandings.

In this article, we do not seek to provide an authoritative definition of misinformation, but rather to document how experts across disciplines define the concept—which can ultimately help practitioners and researchers to operationalize it. Experts agreed that misinformation not only comprises falsehoods, but also misleading information (Søe, 2021). This stands in contrast with most experimental studies on misinformation, which focus primarily on news determined to be false by fact-checkers (Pennycook & Rand, 2022). Researchers may thus want to broaden their nets to include more misleading information and subtler forms of misinformation, such as biased or partisan news. Most experts in our survey also agreed that pseudoscience and conspiracy theories represent forms of misinformation, while satirical and parodical news do not. These findings could help future studies make decisions about what to include in the misinformation category, as some studies have in the past included satirical and parodical news websites (Cordonier & Brest, 2021).

While alarmist narratives about "fake news," "echo chambers," and the "infodemic," abound in public debate (Altay et al., 2023; Simon & Camargo, 2021), experts had sobering views. First, experts agreed that people are *more* exposed to opposing viewpoints online than offline. This should motivate scientists to study the effect of exposure to opposing viewpoints (Bail et al., 2018). Second, despite the popularity of the idea that misinformation and belief in conspiracy theories have increased in the past ten years (Uscinski et al., 2022), experts were divided on this question. This is notable considering the popularity of the idea that we live in a new "post-truth era" (Altay et al., 2023), and it highlights the need for more longitudinal studies (Uscinski et al., 2022). Third, less than half of experts surveyed agreed that participants sincerely believe the misinformation they report to believe in surveys. This should motivate journalists to take alarmist survey results with a grain of salt. Researchers should continue to improve survey instruments (Graham, 2023), but also do more conceptual work on defining "(mis)beliefs" and the circumstances in which they are cause for concern (Mercier & Altay, 2022). Fourth, there is no clear consensus on the impact of misinformation on the outcome of the 2016 U.S. election, with 54% of psychologists agreeing that misinformation played a decisive role, while 73% of political scientists disagree. For journalists and policymakers, it stresses the importance of seeking advice from several researchers with different backgrounds.

Scholars from a variety of fields have investigated the reasons why people believe and share misinformation (Ecker et al., 2022; Righetti, 2021). In this literature, some have focused on motivated reasoning and political partisanship (Osmundsen et al., 2021; Van Bavel et al., 2021), while others on inattention, lack of cognitive reflection, or repeated exposure (Fazio et al., 2019; Pennycook & Rand, 2022). However, we observed little disagreement across methods and disciplines on the key determinants of misinformation belief and sharing. The list of determinants detailed in Figure 2 could be used by scientists, platforms, and companies to design more effective interventions against misinformation. For instance, few interventions against misinformation target partisanship, the most agreed-upon determinant of misinformation belief and sharing in our survey. Similarly, while many existing interventions aim at improving media literacy, illiteracy was only the eighth most agreed-upon determinant of belief in misinformation and the ninth most agreed-upon determinant of misinformation sharing. Finally, contrary to the idea that people believe misinformation because they are not educated enough, lack of education was one of the least popular determinants. The discrepancies between current misinformation response strategies and expert consensus highlight the importance of this interdisciplinary meta-study.

In the literature on misinformation, there are disagreements on which interventions are most effective against misinformation (Guay et al., 2022; Roozenbeek et al., 2021) and on the extent to which interventions against misinformation are effective (Acerbi et al., 2022; Altay, 2022; Modirrousta-Galian & Higham, 2022). Yet, in our survey, we found that experts generally agreed that most existing interventions against misinformation would be effective if deployed in the wild and were adopted widely by social media companies. Despite this apparent optimism, experts mostly selected the "tend to agree" responses, which may reflect their awareness that, in isolation, individual interventions have limited effects, and that it is only in combination that they can have a meaningful impact (Bak-Coleman et al., 2022).

Experts agreed that social media platforms have worsened the problem of misinformation and were in favor of various actions that platforms could take against misinformation, such as platform design changes, algorithmic changes, content moderation, de-platforming prominent actors that spread misinformation, and crowdsourcing misinformation detection or removing it. These findings could help policymakers and social media platforms guide their efforts against misinformation—even if they should also factor in laypeople's opinions about it and be vigilant about protecting democratic rights in the process (Kozyreva et al., 2023).

Finally, we offer concrete steps that the field of misinformation could take in the future and that experts agree are important. This includes collecting more data outside of the United States (in particular by local academics), doing more interdisciplinary work, studying subtler forms of misinformation, studying other platforms than Twitter and Facebook, and developing better theories and interventions. To be successful, these efforts will need to be backed up by structural changes, such as infrastructure and funding opportunities to collect data in underrepresented countries, access to more diverse social media data, less siloed disciplinary boundaries in universities, and stronger incentives to follow these recommendations at the publication and funding level. Doing so would address not only the current limitations of misinformation research, but also the wider structural inequalities in social scientific research, where countries such as the United States and platforms such as Twitter are generally overrepresented considering their size (Matamoros-Fernández & Farkas, 2021).

Our findings should be interpreted with a few caveats. First, because most experts in the survey are from the Global North, our findings may not apply to countries in the Global South. Second, while it may be tempting to think that differences in how researchers define misinformation may explain differences in opinions across disciplines, our findings do not formally support it and are inconclusive regarding the existence of such mediation (see Appendix E). More broadly, given the interdisciplinary character and global representation of experts in this survey, we caution against drawing conclusions about the origins of differences across disciplines and methods. For instance, because we did not impose definitions on experts, some differences may be purely semantic (e.g., hyperpartisan news may be defined differently by psychologists and political scientists).

In conclusion, the differences of opinions across disciplines and methods, combined with the agreed-upon need to do more interdisciplinary work on misinformation, should encourage more discussions across disciplines and methods. In particular, collaborations between qualitative and quantitative researchers and between political scientists and psychologists would be fruitful to solve some disagreements. Our findings offer high-level expert consensus on timely questions regarding the definitions of misinformation, determinants of misinformation belief and sharing, individual and system-level solutions against misinformation, and how to improve the study of misinformation. Ultimately, these findings can help policymakers and platforms to tackle misinformation more efficiently, journalists to have a more representative view of experts' views on misinformation, and scientists to move the field forward.

Findings

Finding 1: Defining misinformation.

The most popular definition of misinformation was "False and misleading information," followed by "False and misleading information spread unintentionally." Other definitions, including only false information or only misleading information, were much less popular. Definitions of misinformation varied across methods, with qualitative experts being more likely to include intentionality in the definition of misinformation than quantitative researchers (see Table 1).

Table 1. *Definitions of misinformation across all experts, qualitative experts, and quantitative experts.*

Definitions of misinformation	All experts	Qualitative experts	Quantitative experts
False information	11%	0%	15%
Misleading information	7%	10%	4%
False and misleading information	43%	33%	50%
False information spread unintentionally	5%	6%	4%
Misleading information spread unintentionally	5%	10%	1%
False and misleading information spread unintentionally	30%	41%	25%

Experts across disciplines generally agreed that pseudoscience (85%), conspiracy theories (79%), lies (75%), and deepfakes (73%) constitute forms of misinformation, while satirical and parodical news does not (77% disagreed). There was less agreement and much more uncertainty regarding propaganda, rumors, hyperpartisan news, and clickbait headlines. Note that many experts also expressed uncertainty by selecting the option "Neither agree nor disagree."

We observed some variability across disciplines and methods. Qualitative researchers were less likely to agree that lies and deep fakes (59%) are misinformation compared to quantitative researchers (84%). Propaganda was more likely to be considered misinformation by psychologists (72%) than social scientists (51%) or political scientists (36%). Hyperpartisan headlines were more likely to be considered misinformation by psychologists (64%) than by social scientists (49%) or political scientists (23%). Clickbait headlines were more likely to be considered misinformation by computational scientists (65%), social scientists (57%), and psychologists (54%), than political scientists (22%).

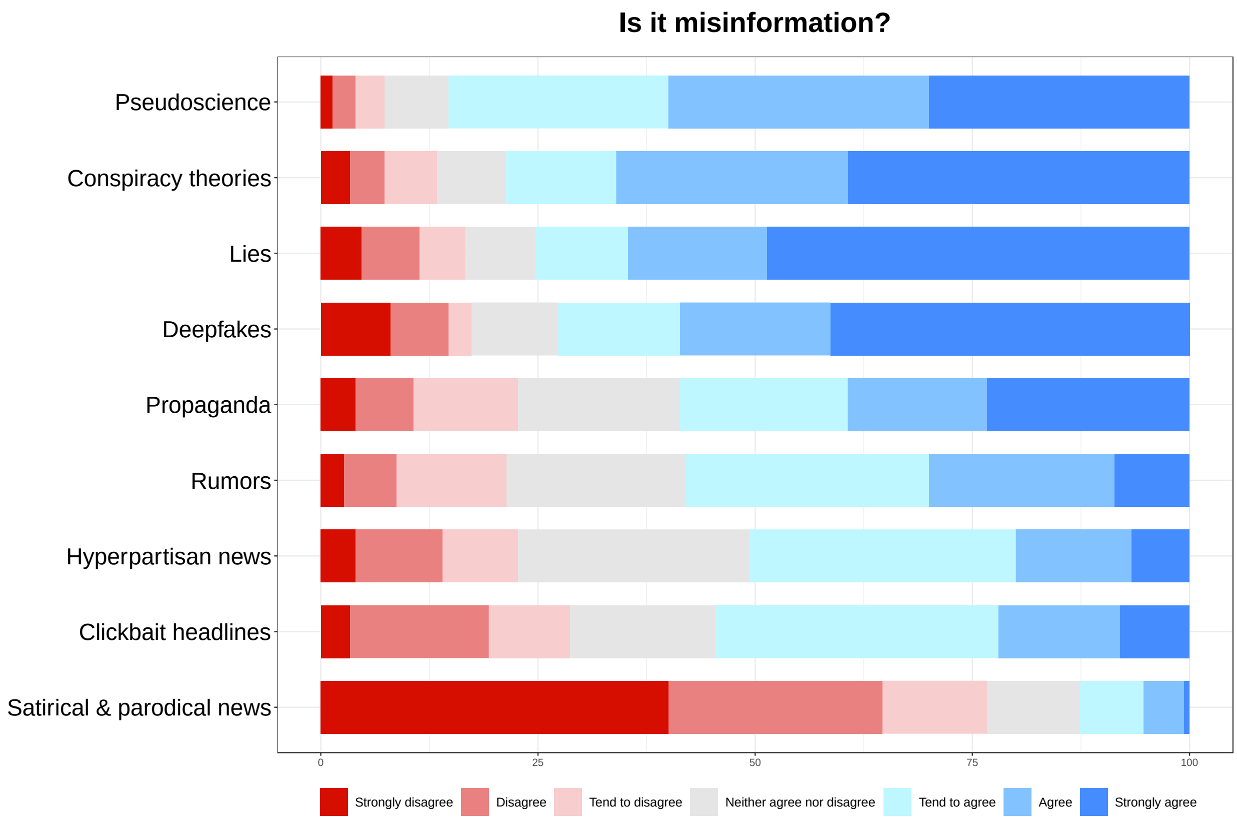

Figure 1. Is it misinformation? *Stacked bar plot (in percentage) representing participants' responses to the question, "To what extent do you agree that the following are examples of misinformation?" Responses are ordered from "Strongly disagree" in dark red to "Strongly agree" in dark blue, with "Neither agree nor disagree" in grey in the middle. Examples of misinformation are ordered from the most agreed upon to the least agreed upon—note that this ordering considers the strength of agreement/disagreement.*

Finding 2: Why do people believe and share misinformation?

We documented broad agreement among experts on the reasons why people believe and share misinformation. The most agreed-upon explanation for why people believe and share misinformation is partisanship. Figure 2 shows that 96% of experts agreed that partisanship is a key reason why people share misinformation, and 93% of experts also agreed that partisanship is key to explaining why people believe in misinformation.

Identity, confirmation bias, motivated reasoning, and lack of trust in institutions received very high levels of agreement (between 73% and 93%). Repeated exposure, inattention, lack of cognitive reflection, and lack of digital/media literacy also received relatively high levels of agreement (between 54% and 84%).

Two determinants were particularly unpopular. Less than 50% of experts agreed that lack of education and lack of access to reliable news were reasons why people believe and share misinformation. This is particularly noteworthy considering prior work highlighting the importance of education (van Prooijen, 2017) and an increase in paywalls limiting access to reliable news (Olsen et al., 2020).

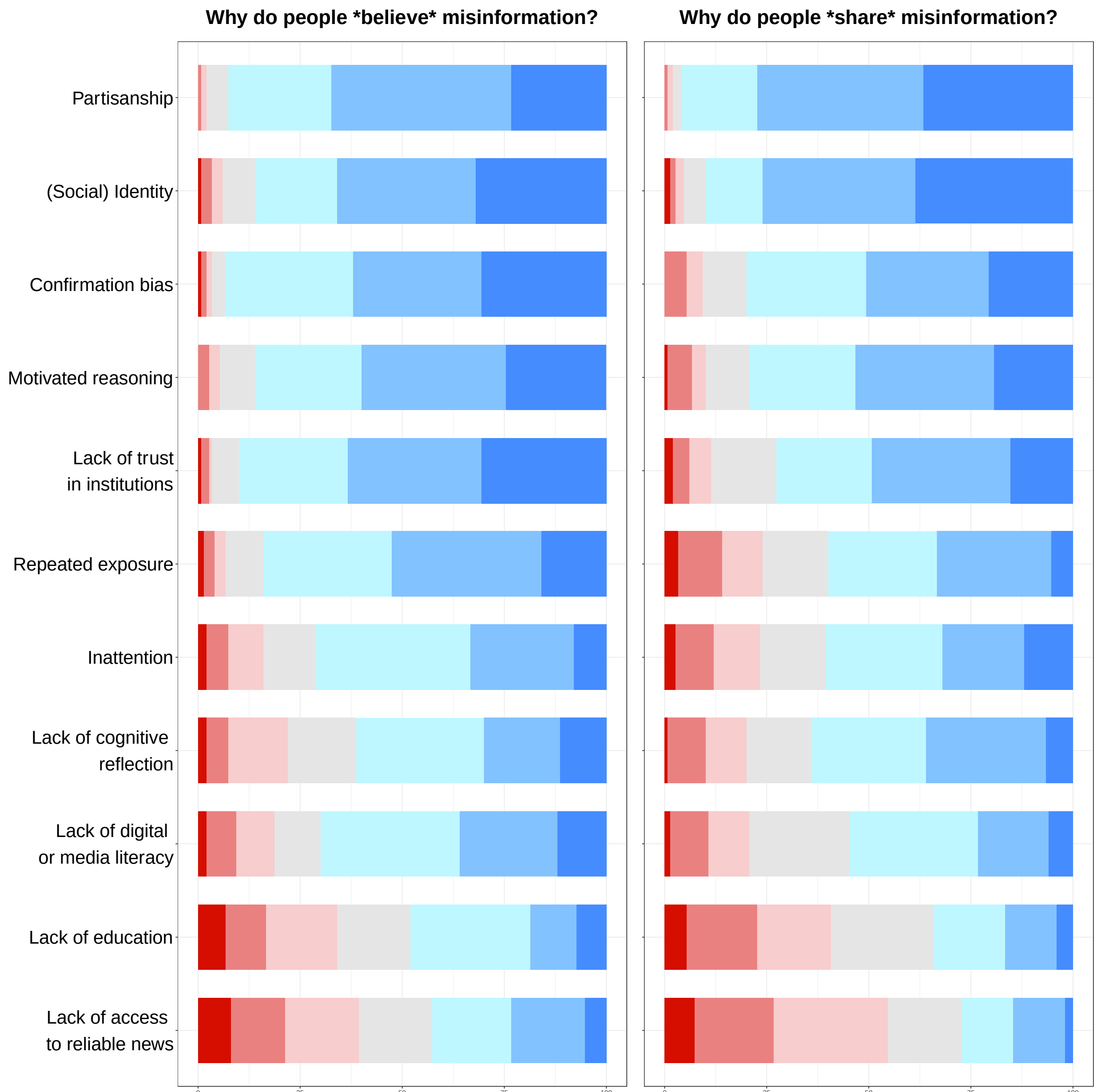

Figure 2. Determinants of misinformation belief and sharing. *Stacked bar plot (in percentage) representing participants' responses on the determinants of misinformation belief (left) and sharing (right). The determinants are ordered from the most agreed upon to the least agreed upon across both belief and sharing.*

Finding 3: Opinions about misinformation and digital media.

Next, we documented misinformation experts' opinions about current debates surrounding misinformation, social media, and echo chambers. The most agreed-upon opinion was that social media and platforms made the misinformation problem worse (79% agreement). Experts also agreed that people are exposed to more opposing viewpoints online than offline (65%). There was less agreement regarding the notion that "falsehoods generally spread faster than the truth on social media" (53%), "people can tell the truth from falsehoods" (53%), and "participants sincerely believe the misinformation they report to believe in surveys" (47%).

The least agreed-with statement was that "belief in misinformation & conspiracy theories is higher than ten years ago"—only 32% of experts agreed and 36% disagreed. It is also the statement about which experts were the most uncertain, with 32% of experts selecting the "neither agree nor disagree" option.

The most polarizing statement was that "misinformation played a decisive role in the outcome of the 2016 U.S. election," with 40% of experts agreeing and 39% disagreeing. This polarization is mostly due to differences in opinion between psychologists and political scientists. Political scientists were very skeptical of this claim, with 73% in disagreement and only 14% in agreement. In contrast, 54% of psychologists agreed that misinformation played a decisive role, while only 26% disagreed.

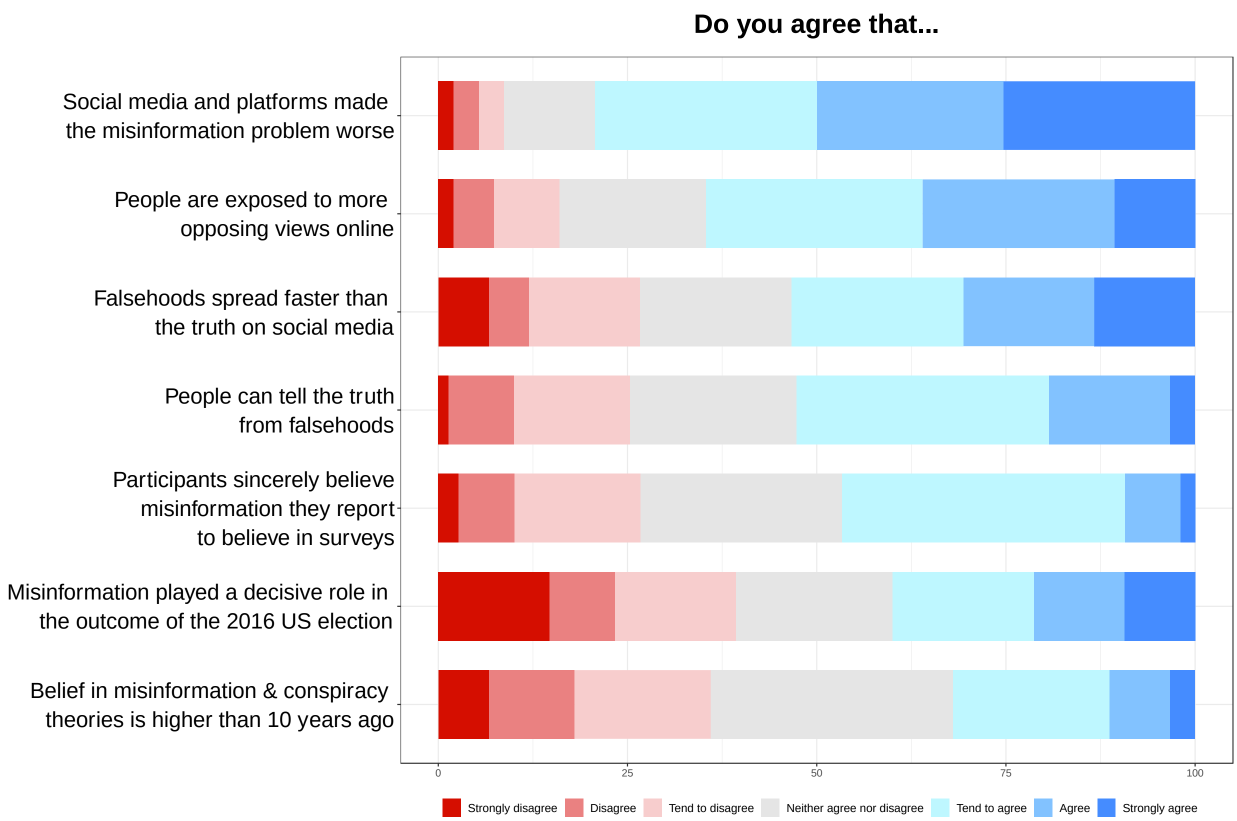

Figure 3. Opinions about misinformation and digital media. *Stacked bar plot (in percentage) representing participants' responses on general opinions on misinformation.*

Finding 4: What are the solutions to the problem of misinformation?

To help researchers and practitioners decide what misinformation solutions to study and develop, we explored what individual-level interventions and system-level actions against misinformation experts favored.

Considering individual-level interventions, experts generally agreed that all the interventions listed in Figure 4 would be effective against misinformation if deployed in the wild and widely adopted by social media companies or institutions. The most popular intervention was digital/media literacy training, with 72% approval, while the least popular was inoculation, with 58% approval.

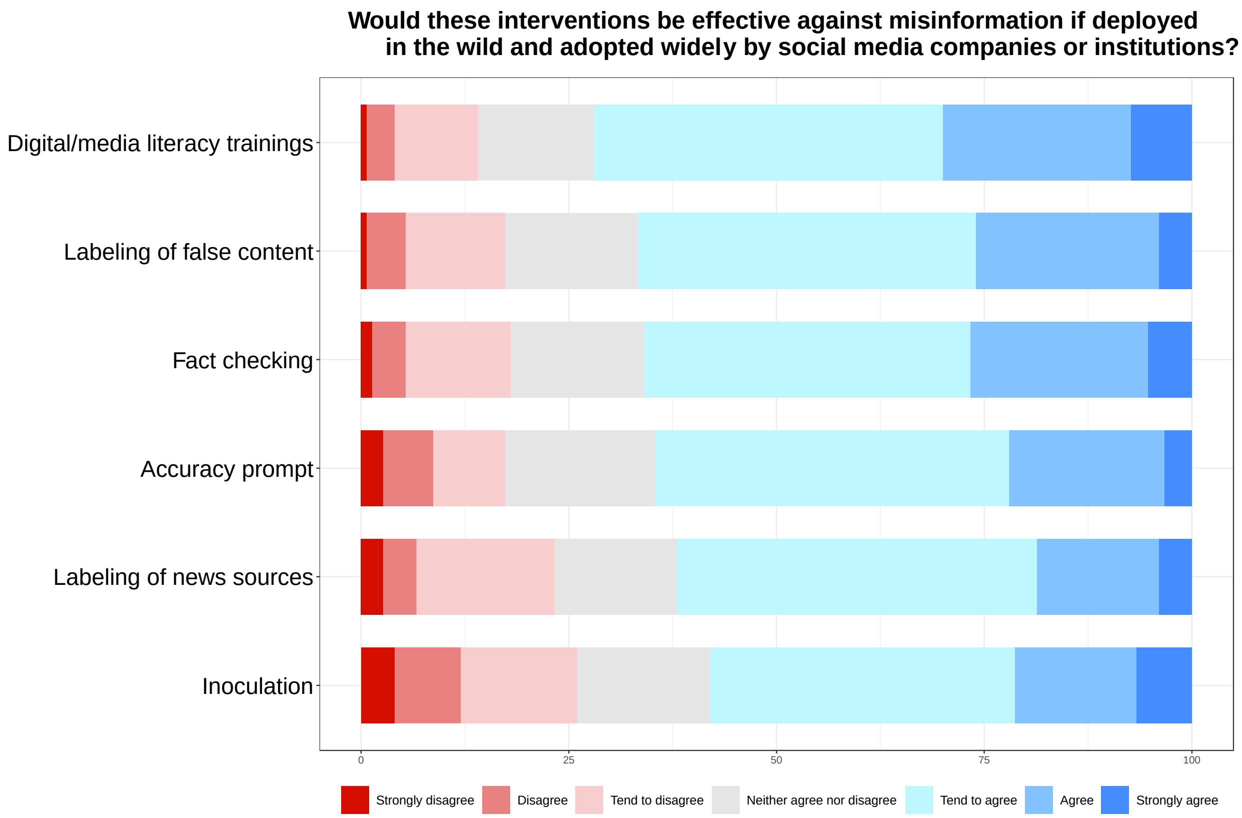

Figure 4. Effectiveness of interventions against misinformation. *Stacked bar plot (in percentage) representing participants' responses on the effectiveness of interventions against misinformation.*

Regarding system-level actions against misinformation, the most widely agreed-upon solution was platform design changes, with 89% approval, followed by algorithmic changes (84%) and content moderation on social media (80%). Experts were also generally in favor of de-platforming prominent actors sharing misinformation (73%), stronger regulations to hold platforms accountable (70%), crowdsourcing the detection of misinformation (66%), removing misinformation (63%), and even, to some extent, penalizing[2] misinformation sharing on social media (53%). By far, the least popular action against misinformation was shadow banning, with more experts disagreeing that this type of action should be taken (46%) than agreeing (33%).

[2] Note that the word penalization can be broadly understood as any form of punishment (e.g., reducing the visibility of misinformation spreaders or sending them a warning) and is not restricted to legal penalization.

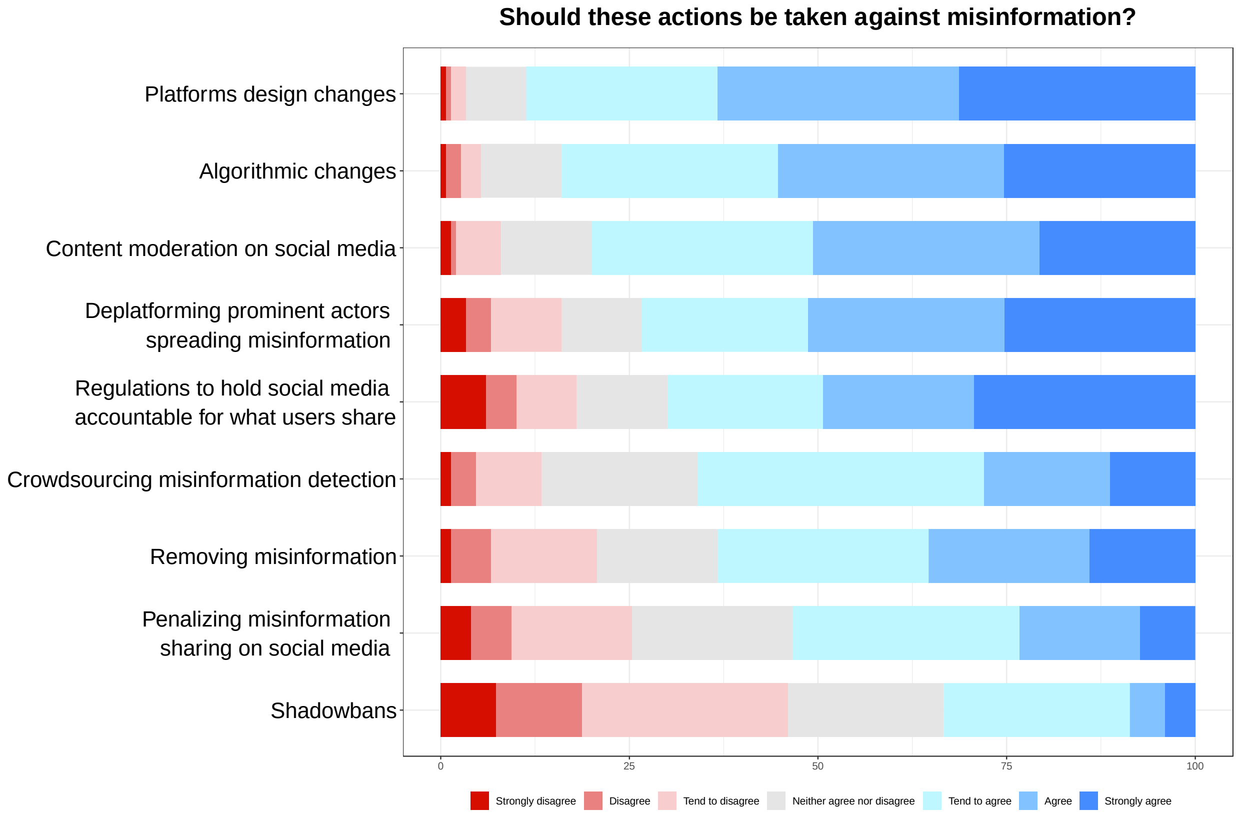

Figure 5. Effectiveness of system-level actions against misinformation. *Stacked bar plot (in percentage) representing participants' responses on actions that should be taken against misinformation.*

Finding 5: What future for the field of misinformation?

The most agreed-upon future direction for the field of misinformation was to collect more data outside of the United States; 95% of experts agreed with the statement (of which 61% strongly agreed). Experts also agreed on the importance of doing more interdisciplinary work (93%), developing better theories of why people believe and share misinformation (88%), developing and testing more interventions against misinformation (85%), moving away from fake news to study subtler forms of misinformation (81%), moving away from Twitter and Facebook data to study TikTok, WhatsApp, and other platforms (85%), and developing better tools to detect misinformation (81%). These views align with existing calls for further geographical and platform diversity in empirical studies—going beyond the most accessible APIs (e.g., Twitter) and most publicized empirical contexts (e.g., the United States; Matamoros-Fernández & Farkas, 2021).

The least popular future direction was to move away from social media data to study offline misinformation, with 59% of experts agreeing and 25% neither agreeing nor disagreeing. On this point, the opinion of psychologists and computational scientists diverged: 69% of psychologists agreed that we should move away from social media data to study offline misinformation, while only 38% of computational scientists agreed.

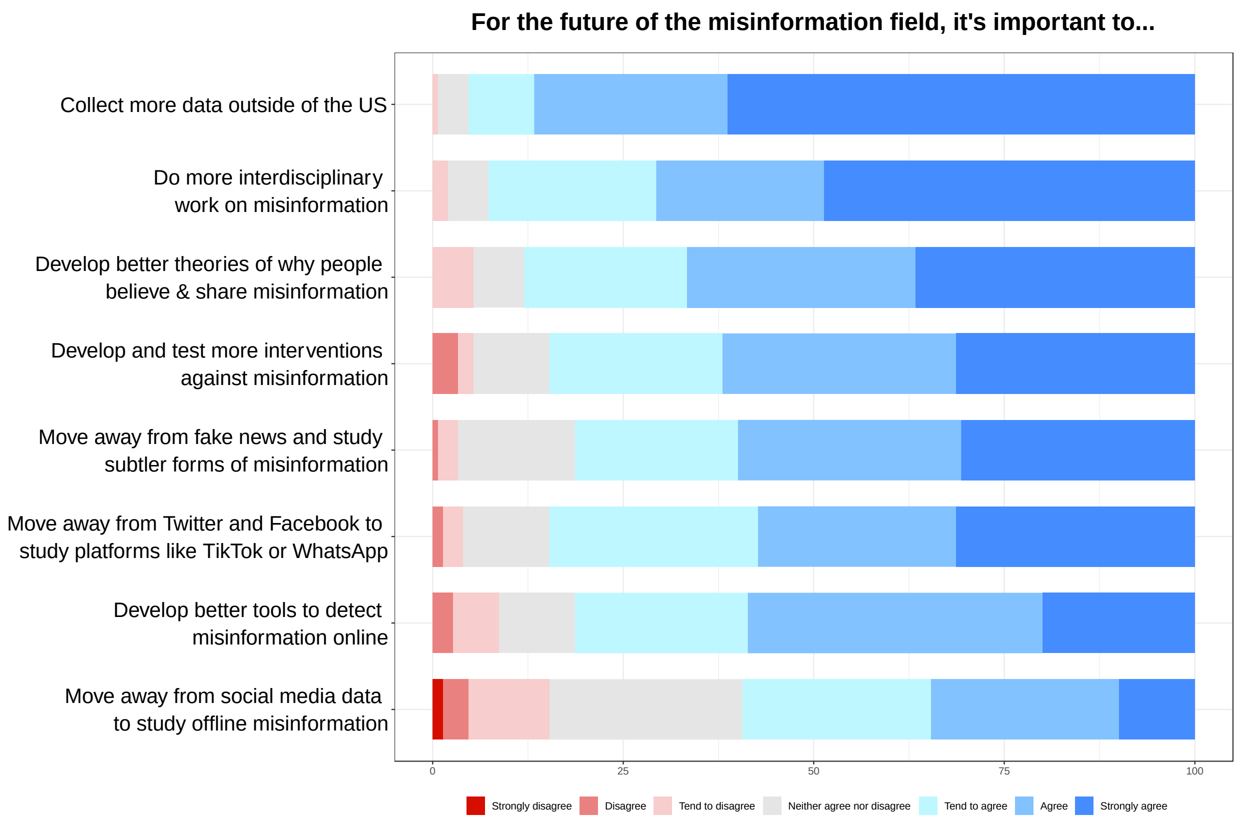

Figure 6. Future directions for the field. *Stacked bar plot (in percentage) representing participants' responses on the future of the misinformation field. Future directions are ordered from the most agreed upon to the least agreed upon.*

Methods

Participants

The experts were contacted between the 6th of December 2022 and the 16th of January 2023. In total, 201 experts responded to the survey. Fifty were excluded because they did not finish the survey (i.e., they stopped before the final quality check question). Two additional participants were excluded because they failed the quality check question. Our final sample was 150 experts (51 women, M_{age} = 39.11, SD_{age} = 9.66). In Appendix A, we report demographic information about the experts. We did not consider gender in the recruitment of participants and do not have access to the gender breakdown of the respondents we contacted—it is thus unclear whether the gender imbalance in the survey is an artifact of our recruitment techniques or not.

Experts on misinformation were recruited to participate in the survey using four overlapping recruitment strategies. First, the email addresses of 171 experts were retrieved from Google Scholar by using the keywords "misinformation" and "fake news" (first twelve pages since 2018). Second, 93 experts were recruited from the program committee of MISDOOM, an international conference on mis/disinformation. For this, we collected their email address and emailed them directly. Third, 95 experts were contacted via the De Facto mailing list, a network of French experts on misinformation, and 36 experts were contacted because they attended an ICA pre-conference on the future of mis/disinformation studies. Fourth, 190 experts were contacted via snowball sampling: they were recommended by other experts at the end of the survey. The experts were also allowed to share the survey with their lab or colleagues but were instructed not to share it on social media. As we made clear in the survey, we relied on a quite broad definition of expertise: "anyone who has done academic work on misinformation." We could not ensure that all respondents were experts on misinformation. However, because we did not share the survey publicly and only contacted experts on misinformation (i.e., those who wrote academic articles on misinformation, attended a conference on misinformation, or were recommended by misinformation experts), we are confident that the risk of having non-expert respondents is very low.

Design and procedure

After completing a consent form, participants were asked to answer eight questions divided into eight blocks on (i) the definition of misinformation, (ii) examples of misinformation, (iii) why people believe misinformation, (iv) why people share misinformation, (v) general questions about misinformation and digital media, (vi) individual-level interventions against misinformation, (vii) system-level actions against misinformation, and (viii) the future of the field of misinformation. In Appendix B, we report all the survey questions and response options.

The presentation order of the blocks was fixed. The questions inside the blocks were presented in a randomized order (except for the first block, since the definitions of misinformation were incremental). Participants were asked to report their age, gender, nationality, political orientation, area of expertise, and method used to study misinformation. Participants were also asked if they have answered the survey in a meaningful way and whether we could use their data for scientific purposes. Finally, participants were asked to recommend other experts on misinformation and could share their thoughts about the experiment in a text box.

The questions and response options were determined by a team of interdisciplinary experts on misinformation (cognitive science, sociology, media and communication, psychology, and computer science) and represent the authors' understanding of the literature on misinformation. The questions and response options are not exhaustive; for instance, there are many more reasons why people believe and share misinformation, and there are many more ways to define misinformation. We focused on what we deemed to be the most relevant given our knowledge of the field. Moreover, one author recently conducted a qualitative survey on misinformation experts and used this knowledge to design the present survey.

In Appendices C and D, we offer a visualization of the results broken down by disciplines and methods. On OSF, readers will find the regression tables of all statistical comparisons between disciplines and methods (for more information about the statistical models, see Appendix E). In the Results section, we only report statistically significant differences and the most meaningful differences across methods and disciplines (based notably on effect size).

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Authorship
After the first author who led the project, the order of authors was determined by alphabetical order.

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Competing interests
The authors do not report any competing interests.

Ethics
Participants provided informed consent before participating in the survey. Participants had the freedom not to answer the question regarding their gender (they could also select the "non-binary/third gender" option or the "prefer not to say" option).

Data availability
All materials needed to replicate this study are available via the Harvard Dataverse: https://doi.org/10.7910/DVN/5C3FHW and OSF: https://doi.org/10.17605/OSF.IO/JD9XF.

Appendix A: Demographics

The sample of participants covers a large number of countries with a bias towards Western liberal democratic countries. Experts were from the United States (43), United Kingdom (16), France (14), Germany (13), Canada (5), Australia (5), Italy (5), Brazil (4), Netherlands (4), Israel (4), Spain (3), Switzerland (3), Austria (3), China (2), India (2), Singapore (2), Chile (2), Argentina (1), Finland (1), Hungary (1), Iran (1), Ireland (1), Lebanon (1), Norway (1), Pakistan (1), Russia (1), Turkey (1).

Experts leaned strongly toward the left of the political spectrum: very right-wing (0), fairly right-wing (0), slightly right-of-center (7), center (15), slightly left-of-center (43), fairly left-wing (62), very left-wing (21).

The misinformation experts represent a broad range of scientific fields. Experts specialized in psychology (39), communication and media science (32), political science (22), computational social sciences (17), computer science (9), sociology (8), journalism (8), philosophy (5), other (4), medicine/other (2), linguistics (2), history (1), physics (1).

Experts used the following methods to study misinformation: online experiments (42), mixed methods (32), big data methods (24), surveys (21), qualitative methods (non-specified) (15), field experiments (4), I don't work with data (4), mathematical models and simulations (3), other (2), ethnography (2), in-person experiments (1).

Experts were grouped into four methods categories:

- Quantitative methods: online experiments, surveys, in-person experiments, and field experiments (*N* = 68)
- Qualitative methods: mixed methods, qualitative methods, ethnography (*N* = 49)
- Big data methods (*N* = 24)
- Other: I don't work with data, other, mathematical models and simulations (*N* = 9)

Experts were grouped into four disciplines categories:

- Social sciences: communication and media science, sociology, journalism, linguistics, history (*N* = 51)
- Psychology (*N* = 39)
- Computational sciences: computational social sciences, computer science (*N* = 26)
- Political science (*N* = 22)
- Other: philosophy, other, physics, medicine (*N* = 12)

Appendix B: Materials

Experts' opinion on definitions of misinformation was measured with the question, "Which of the following do you think best describes the term 'misinformation'? Select one."

- False information
- Misleading information
- False and misleading information
- False information spread unintentionally
- Misleading information spread unintentionally
- False and misleading information spread unintentionally

In all the questions below, participants responded on a 7-point Likert scale ("Strongly disagree" [1], "Disagree" [2], "Tend to disagree" [3], "Neither agree nor disagree" [4], "Tend to agree" [5], "Agree" [6], "Strongly agree" [7]). Note that we did not offer a "Don't know" (DK) option in addition to the "Neither agree nor disagree" option. However, we asked attitudinal questions, not knowledge questions, and there is evidence that respondents largely use "Neither agree nor disagree" as a substitute for DK (Sturgis et al., 2014).

Experts' opinions on examples of misinformation were measured with the question, "To what extent do you agree that the following are examples of misinformation?"

- Satirical and parodical news
- Hyper-partisan news
- Conspiracy theories
- Clickbait headlines
- Pseudo-science
- Propaganda
- Deep fakes
- Rumors
- Lies

Experts' opinions on the determinants of belief in misinformation were measured with the question, "To what extent do you agree that each of the following explains why people *believe* misinformation?"

- (Social) Identity
- Partisanship
- Repeated exposure
- Motivated reasoning
- Confirmation bias
- Inattention
- Lack of digital or media literacy
- Lack of trust in institutions
- Lack of education
- Lack of cognitive reflection
- Lack of access to reliable news media

Experts' opinions on the determinants of misinformation sharing were measured with the question, "To what extent do you agree that each of the following explains why people *share* misinformation?" and were offered the same options as for the determinants of belief in misinformation.

Experts' opinions on general questions about misinformation and digital media were measured with the question, "To what extent do you agree with each of the following statements?"

- Social media and digital platforms have worsened the misinformation problem.
- In surveys, participants sincerely believe the misinformation they claim to believe (i.e., they are not merely expressing a political opinion or trolling, etc.)
- People are able to distinguish between the truth and falsehoods.
- More people believe in misinformation and conspiracy theories today than ten years ago.
- People are exposed to more opposing viewpoints online than offline.
- Falsehoods generally spread faster than the truth on social media.
- Misinformation played a decisive role in determining the outcome of the 2016 U.S. elections.

Experts' opinions on individual-level interventions against misinformation were measured with the question, "To what extent do you agree that the following tools would be effective to combat misinformation if deployed in the wild and adopted widely by social media companies or institutions?"

- Fact-checking
- Labeling of false content (e.g., Facebook labels)
- Labeling of news sources (e.g., Newsguard labels)
- Digital or media literacy training
- Accuracy prompt (briefly reminding people about accuracy)
- Inoculating people against misinformation with games or videos (e.g., Bad News game)

Experts' opinions on system-level actions against misinformation were measured with the question, "To what extent do you agree that the following interventions should be used against misinformation?".

- De-platforming prominent actors who spread misinformation
- Stronger regulations to hold social media companies accountable for what is shared on their platforms
- Content moderation on social media platforms
- Penalizing misinformation sharing on social media
- Algorithmic changes (e.g., upranking high-quality news sources and downranking low-quality)
- Shadowbans (i.e., banning users without other users knowing)
- Platforms design changes (e.g., rewarding accuracy instead of engagement)
- Removing misinformation
- Crowdsourcing the detection of misinformation (e.g., Twitter Birdwatch)

Experts' opinions about the future of the misinformation field were measured with the question, "For the future of the field of misinformation, to what extent do you agree that it's important to:"

- Collect more data outside of the United States.
- Move away from fake news and study subtler forms of misinformation.
- Move away from Twitter and Facebook data to study TikTok, WhatsApp, and other platforms.

- Move away from social media data to study offline misinformation.
- Develop better theories of why people share and believe misinformation.
- Develop better tools to detect misinformation online.
- Develop and test more interventions to fight misinformation.
- Do more interdisciplinary work on misinformation.

Appendix C: Visualizing differences across disciplines

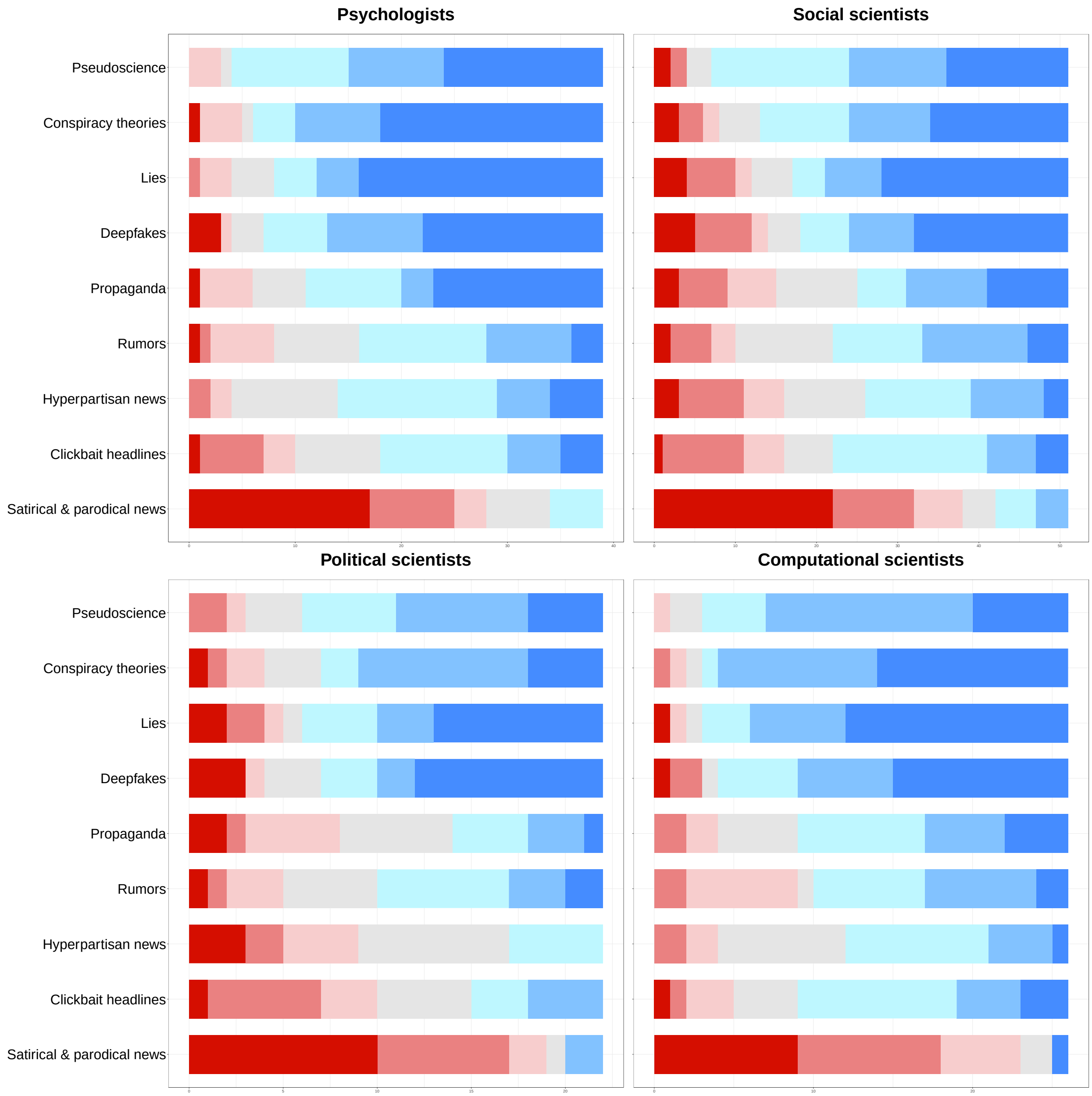

Figure 7. Defining misinformation: differences across disciplines.

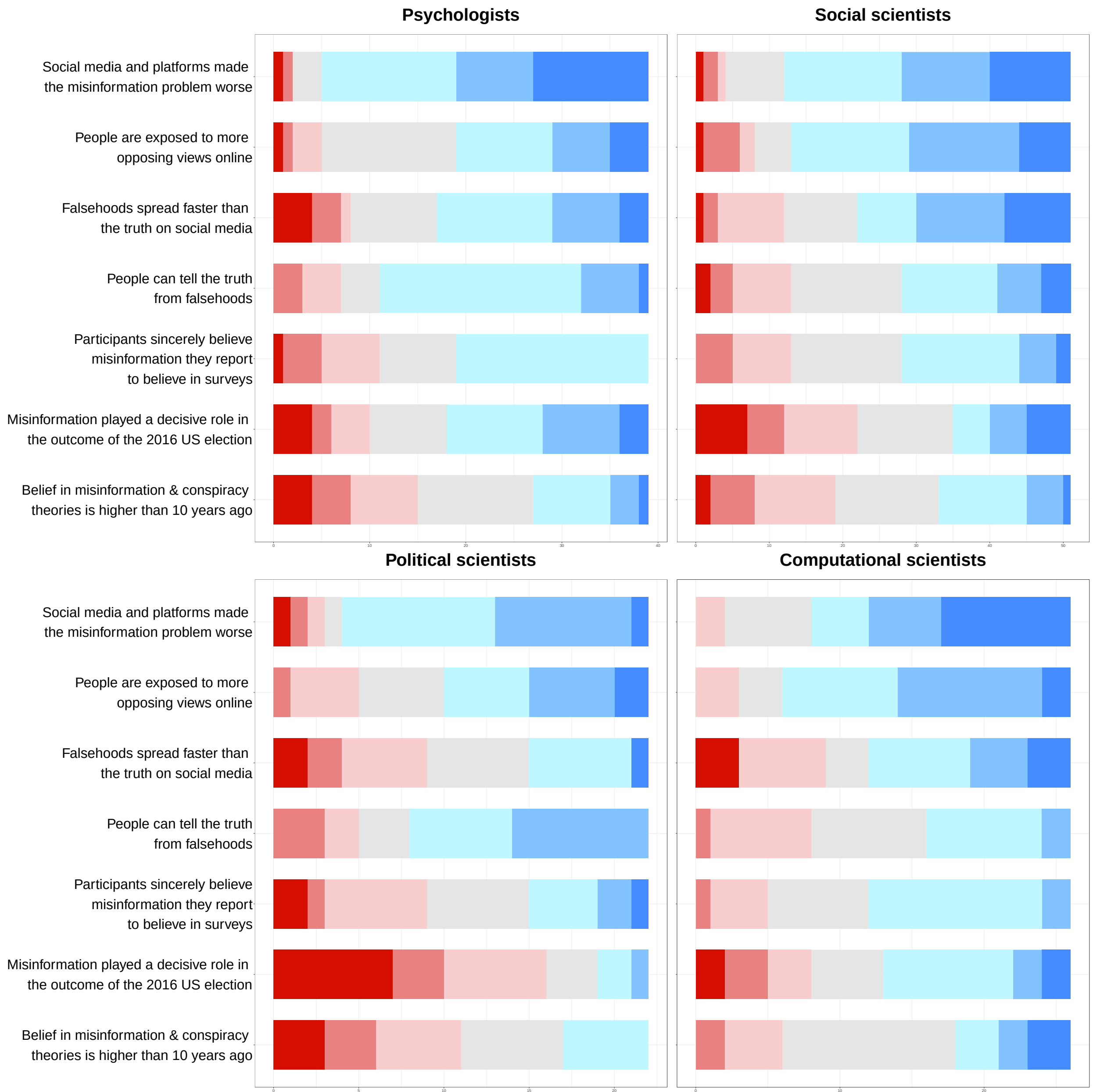

Figure 8. Opinions about misinformation and digital media: differences across disciplines.

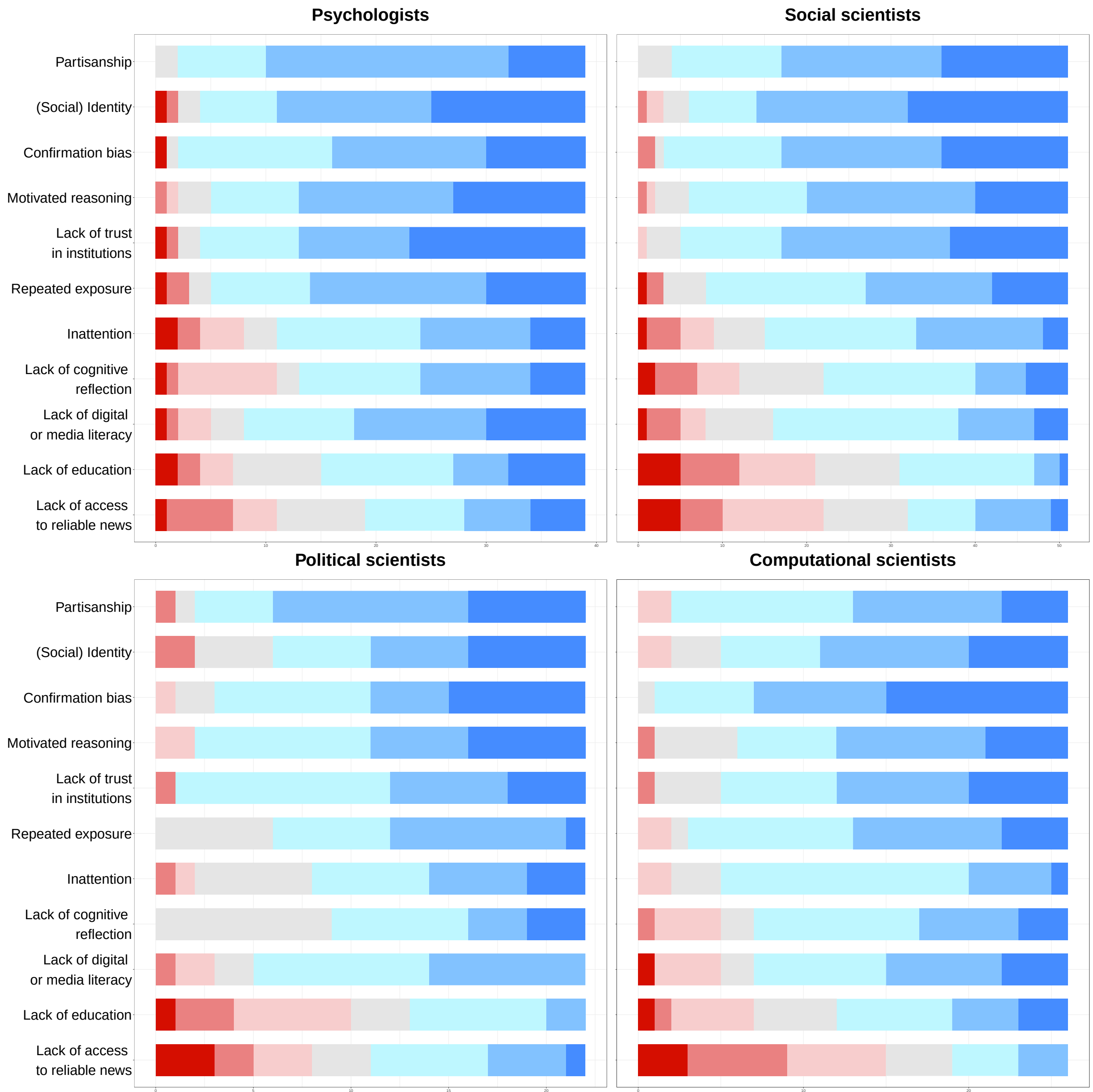

Figure 9. Determinants of misinformation belief: differences across disciplines.

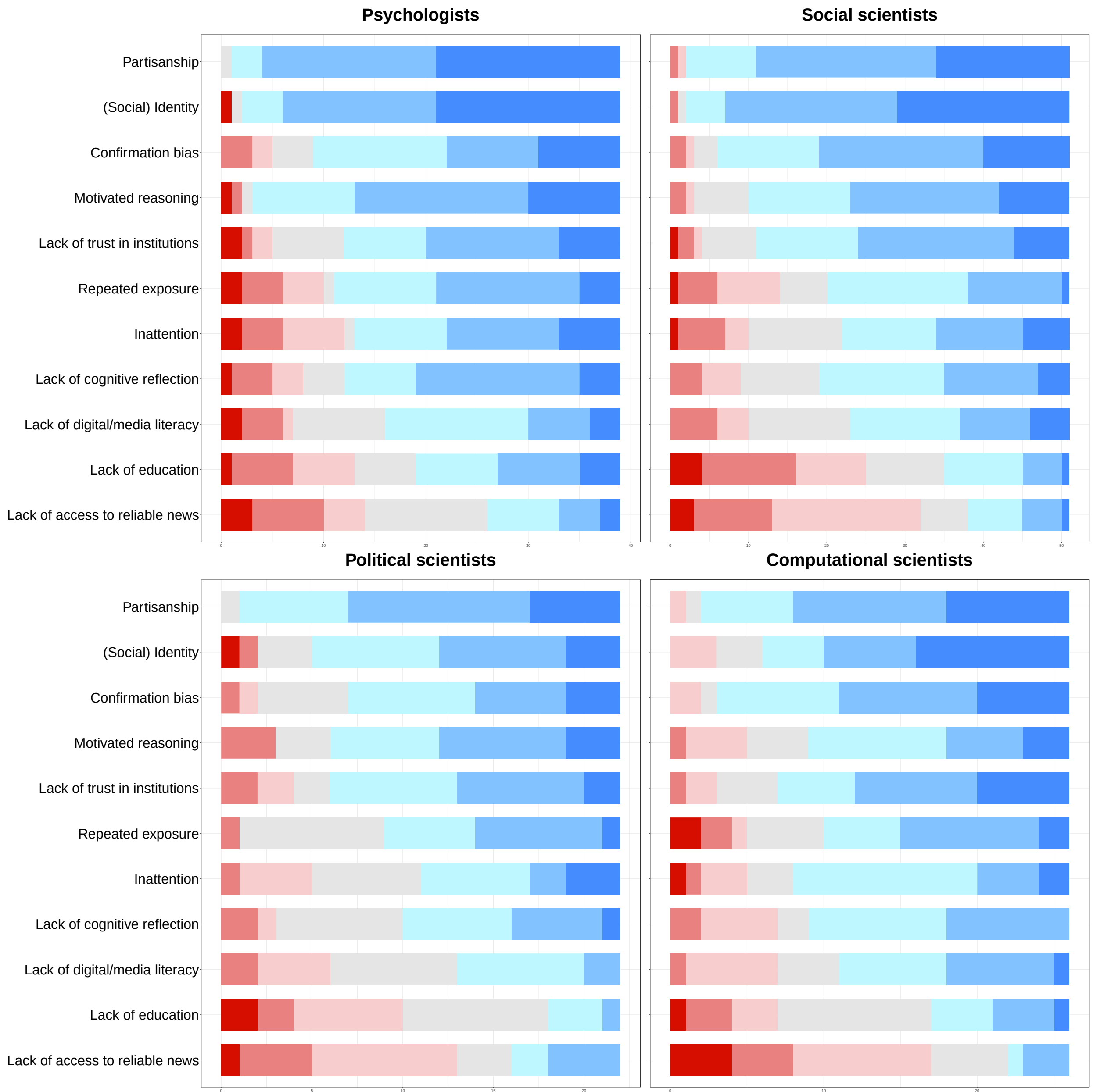

Figure 10. Determinants of misinformation sharing: differences across disciplines.

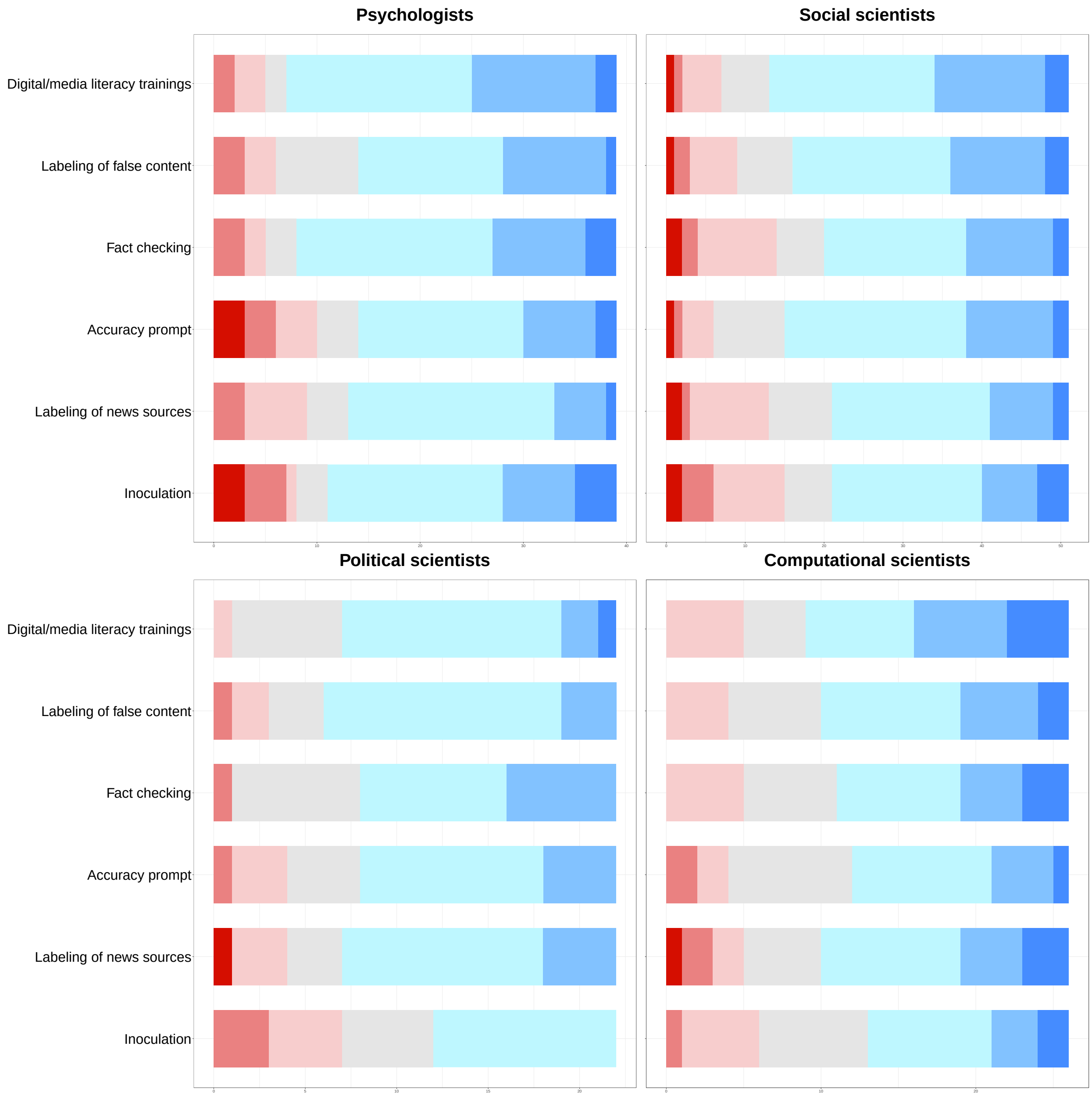

Figure 11. Effectiveness of interventions against misinformation: differences across disciplines.

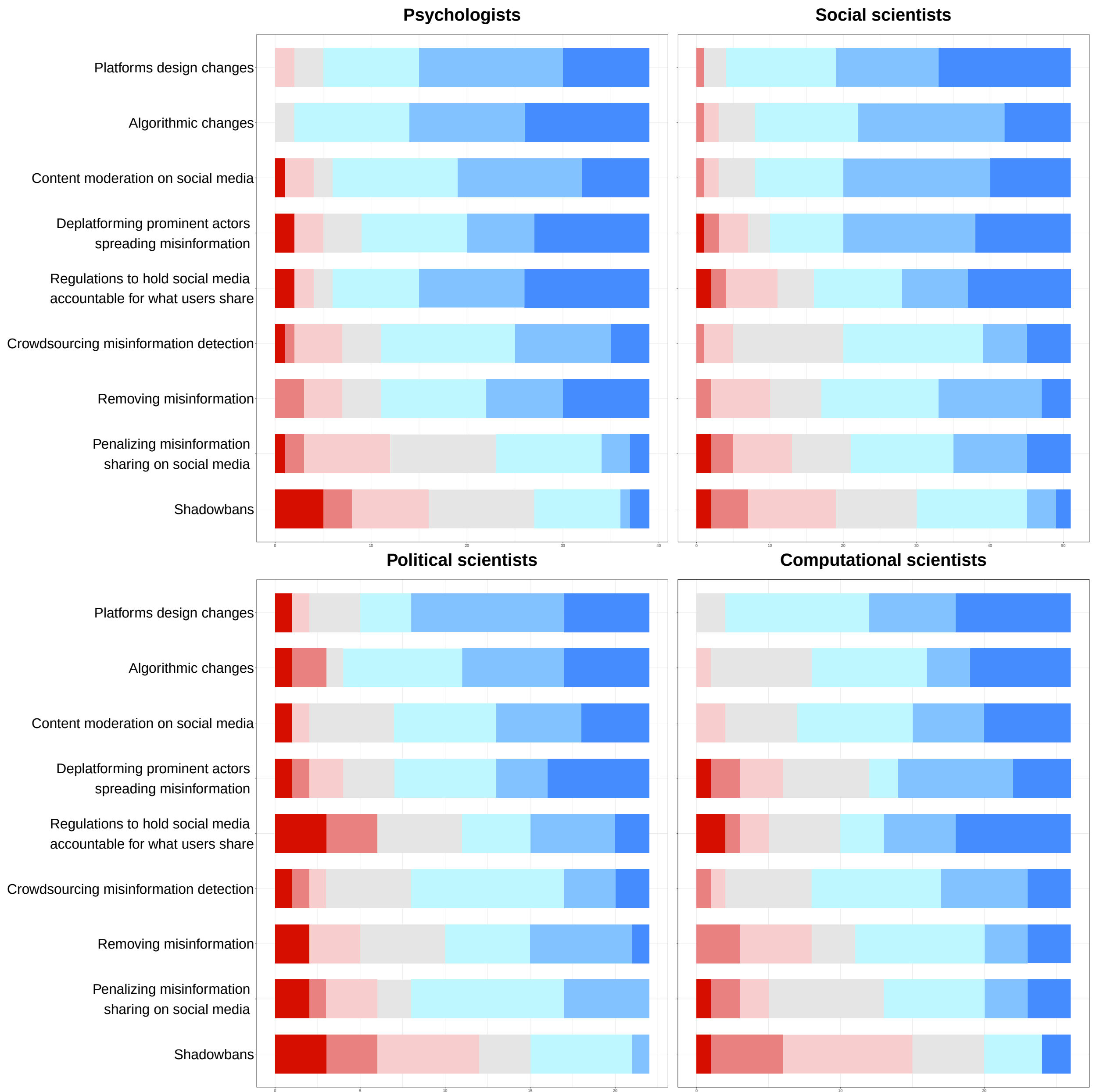

Figure 12. Effectiveness of system-level actions against misinformation: differences across disciplines.

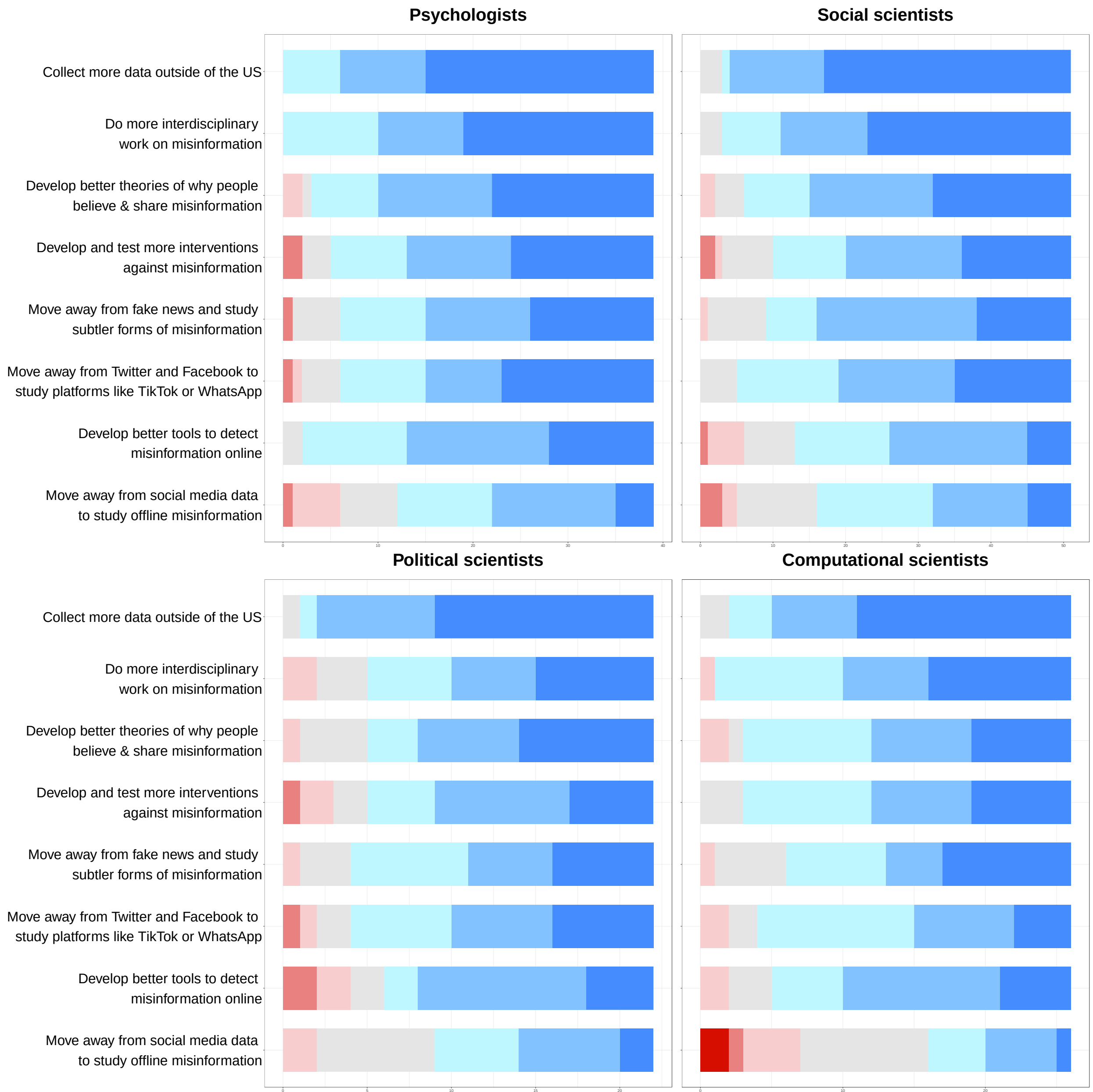

Figure 13. Future directions for the field: differences across disciplines.

Appendix D: Visualizing differences across methods

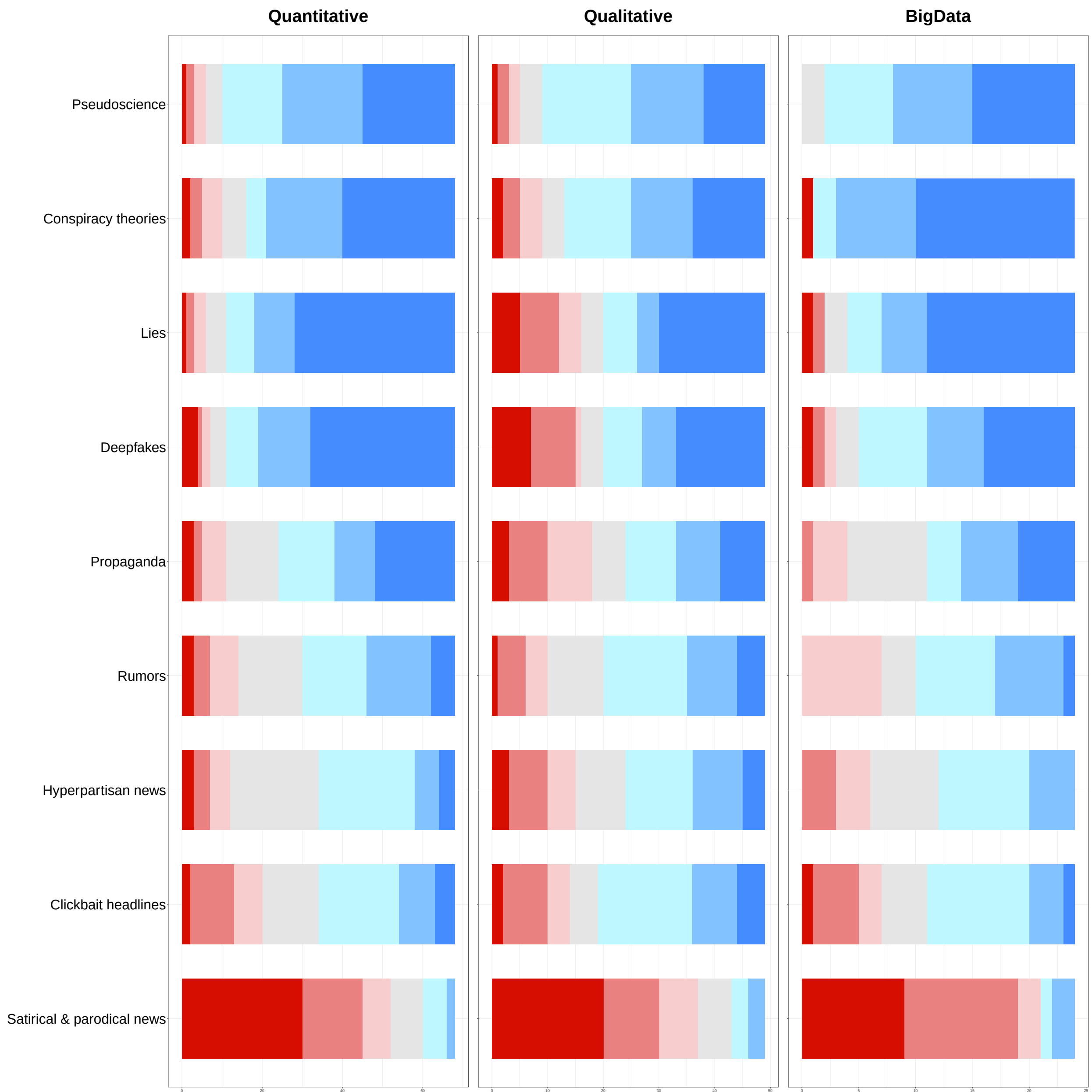

Figure 14. Defining misinformation: differences across methods.

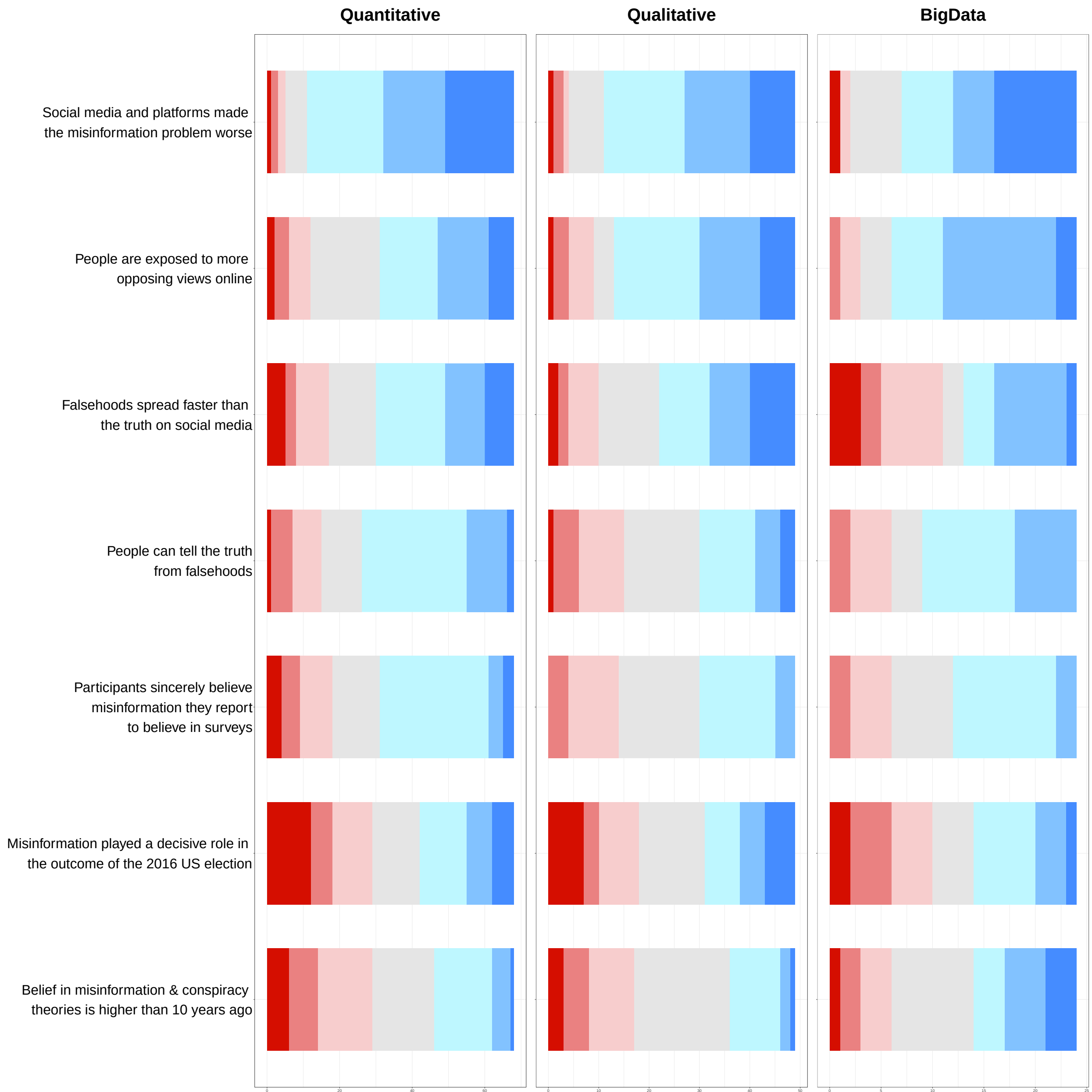

Figure 15. Opinions about misinformation and digital media: differences across methods.

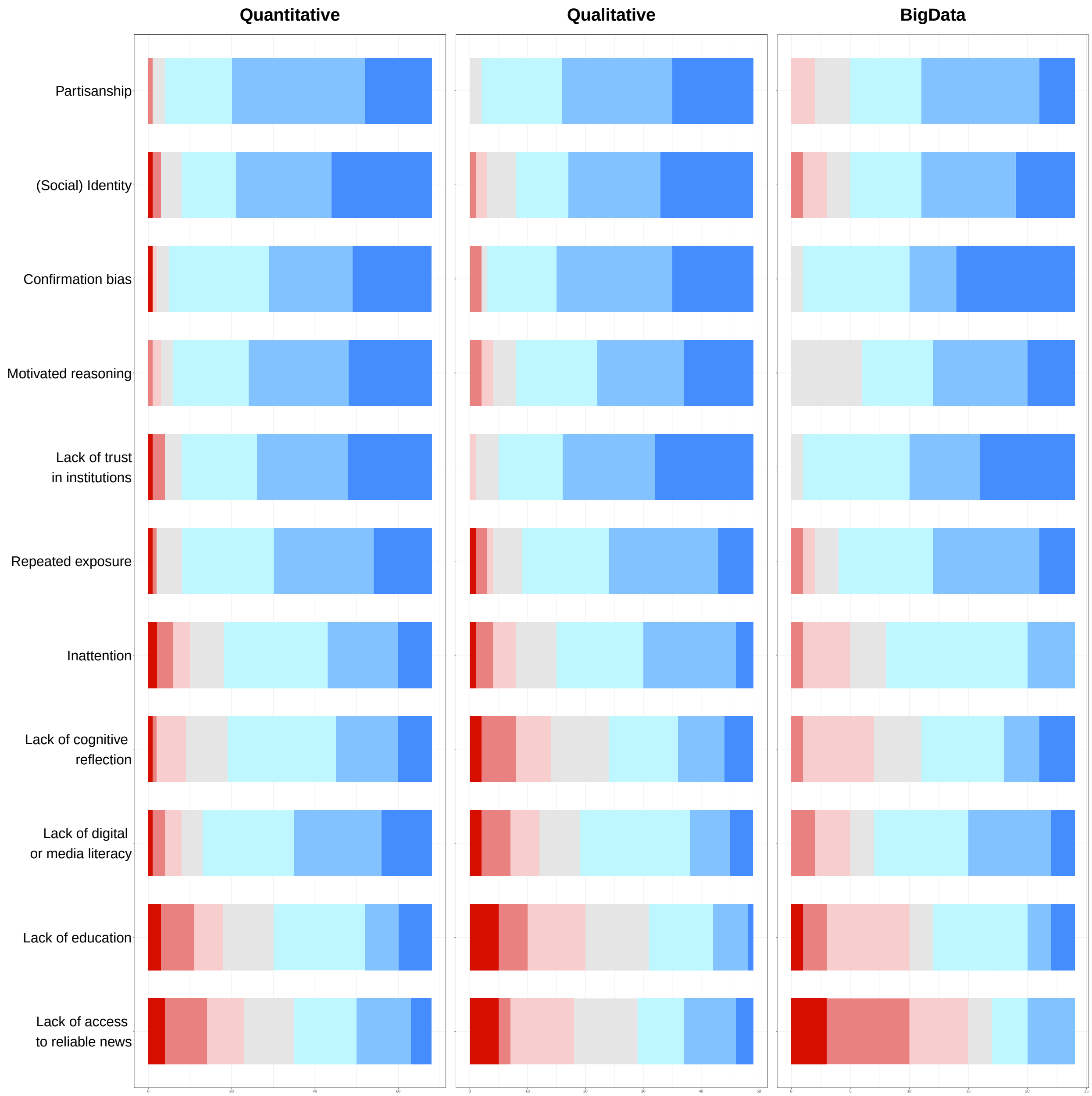

Figure 16. Determinants of misinformation belief: differences across methods.

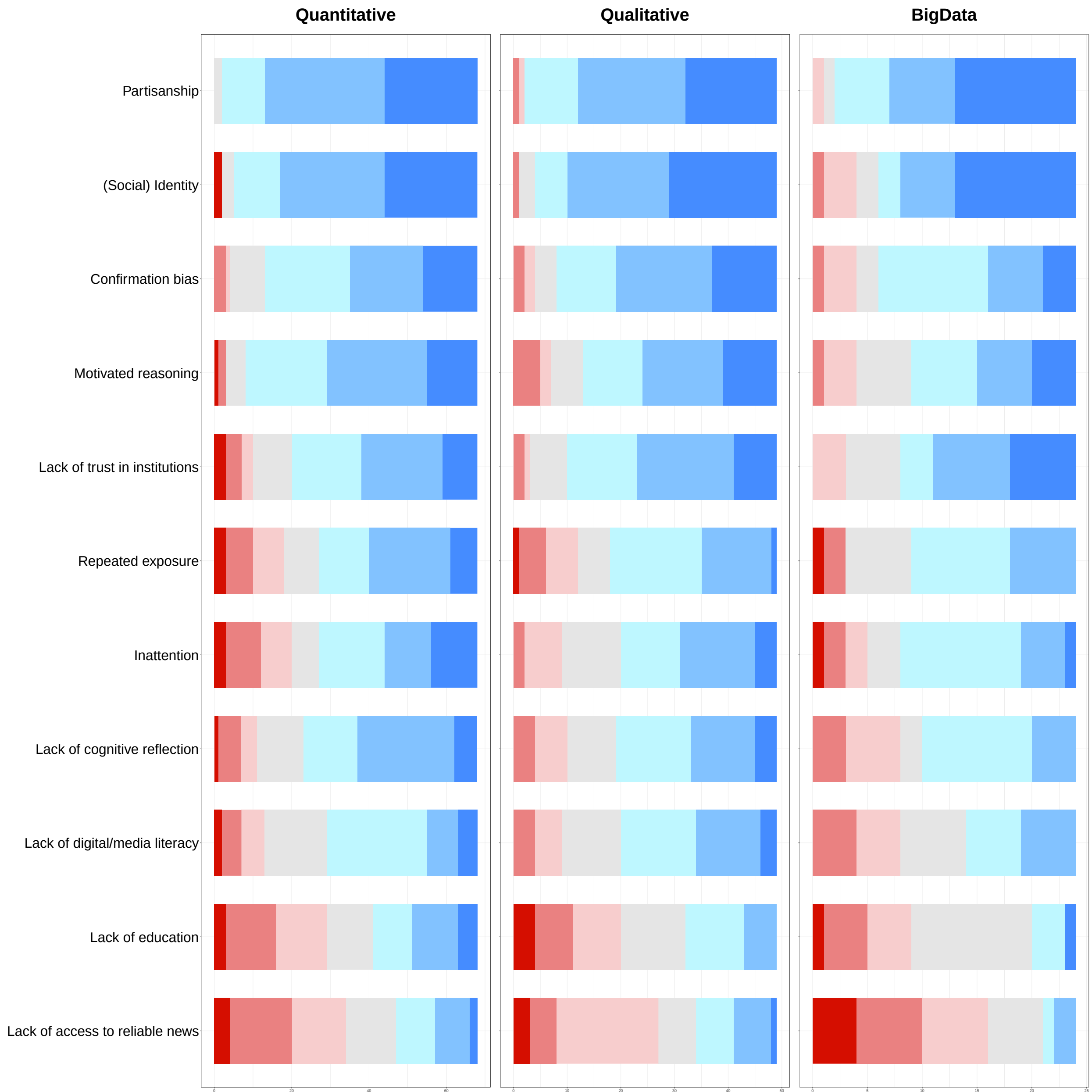

Figure 17. Determinants of misinformation sharing: differences across methods.

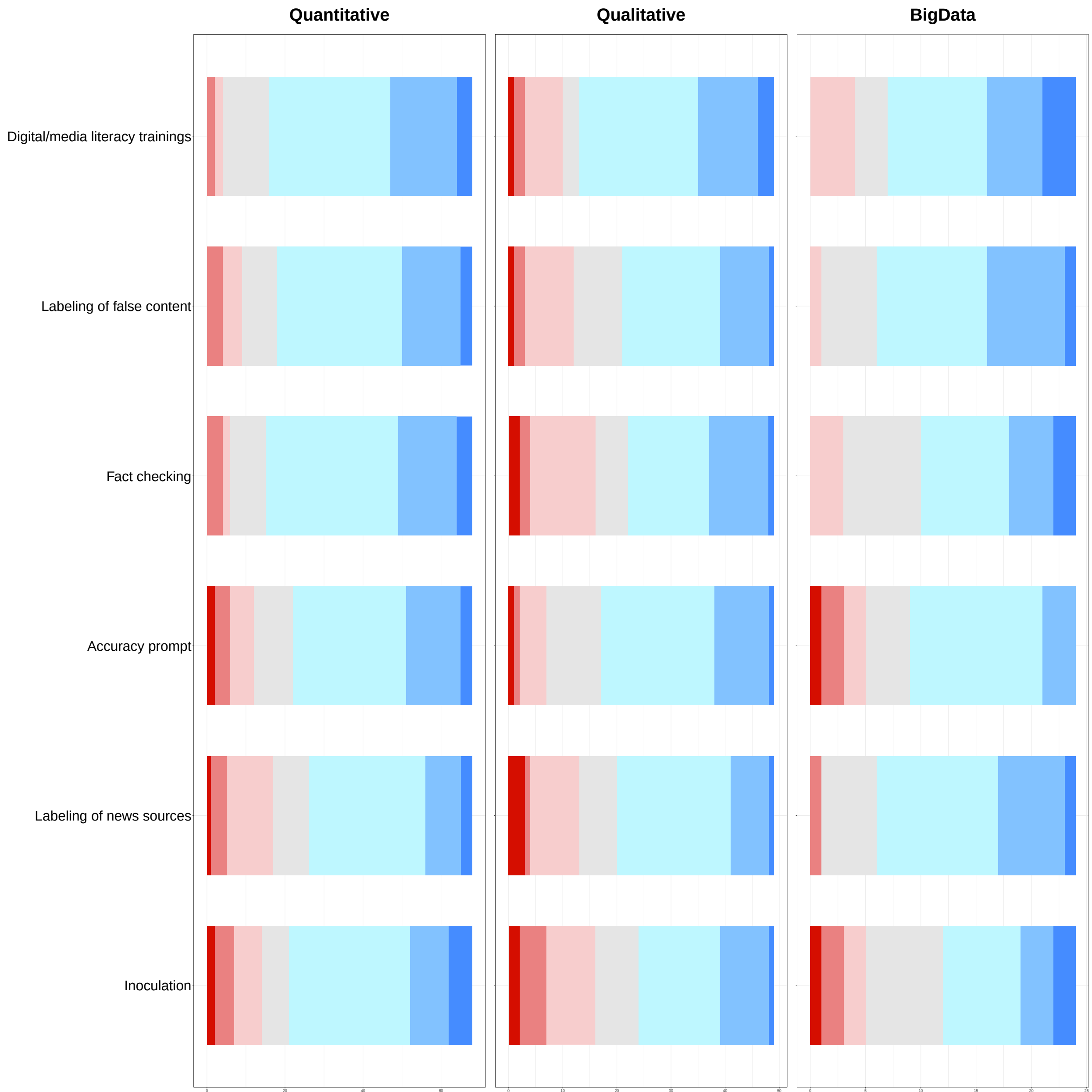

Figure 18. Effectiveness of interventions against misinformation: differences across methods.

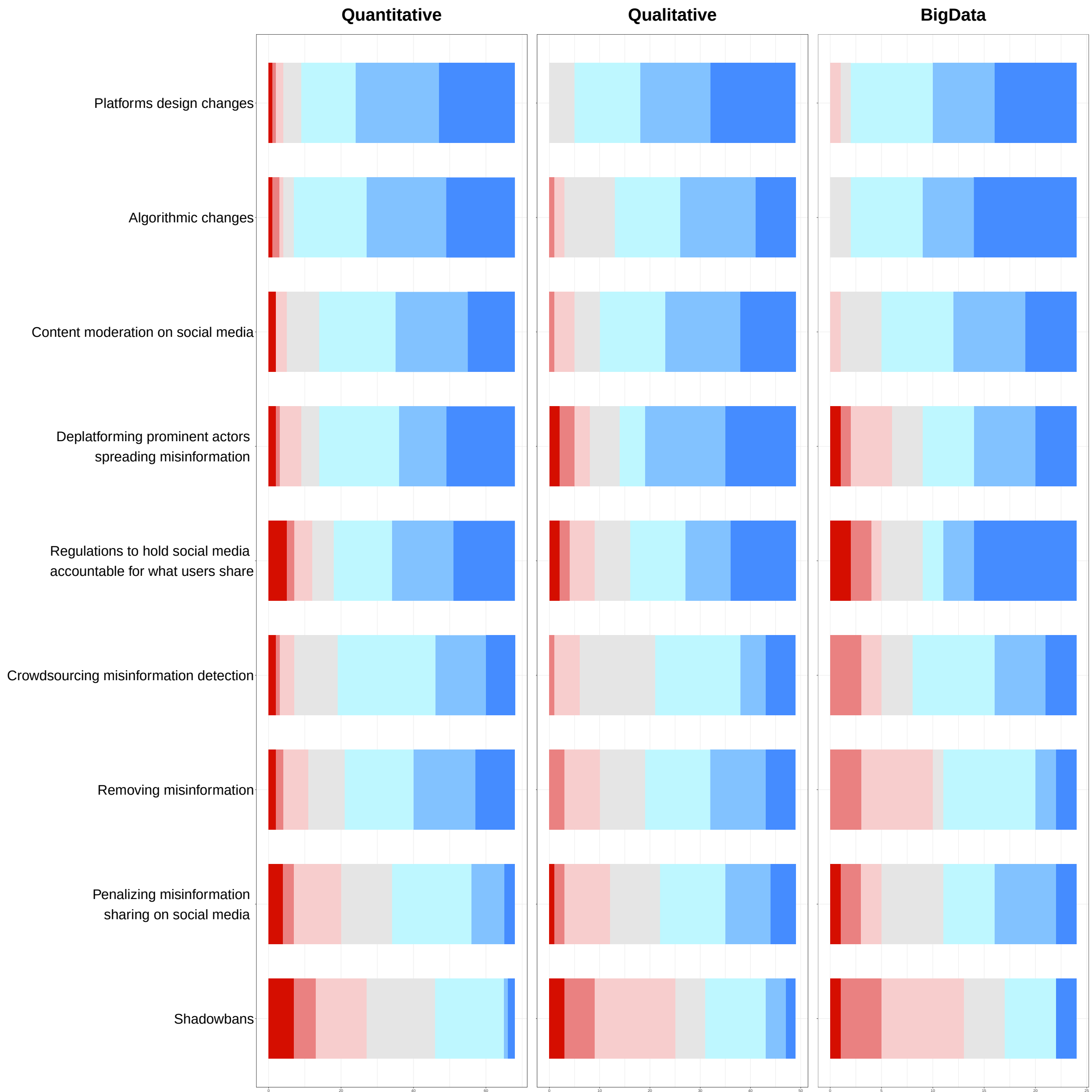

Figure 19. Effectiveness of system-level actions against misinformation: differences across methods.

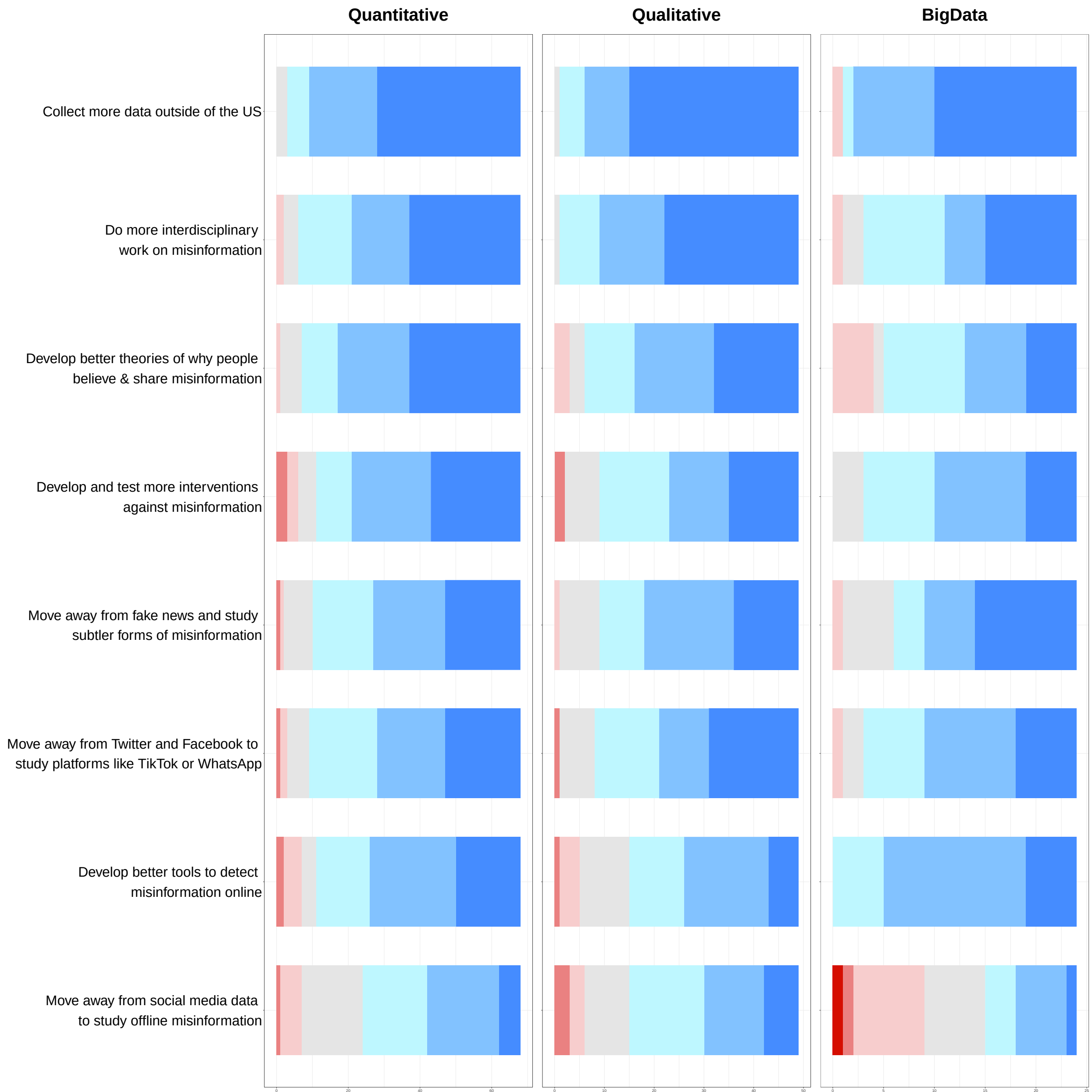

Figure 20. Future directions for the field: differences across methods.

Appendix E: Statistical analyses

In all the statistical analyses reported on OSF, we exclude the "Other" categories because the number of observations was small to allow meaningful statistical comparisons (N=9 for methods, and N=12 for disciplines). We conducted chi-2 tests to investigate the differences in definition of misinformation (e.g., false information) across disciplines and methods. For all the other statistical comparisons, we transformed the data from wide to long, such that one line corresponds to one response. The responses on the 7-point Likert scale were treated as continuous. We conducted linear mixed-effect models with participants as random effects using the Lme4 R package. The R syntax of our models had the following structure:

```
lmer(Response ~ Methods * Question + (1|ResponseId), data = Data_Block_1)
lmer(Response ~ Disciplines * Question + (1|ResponseId), data = Data_Block_1)
```

The interaction between Methods and Question, and the interaction between Disciplines and Question, allowed us to estimate differences in survey responses across disciplines and methods for each question of the survey. We ran such models for each block (e.g., for belief in misinformation, for sharing misinformation, etc.).

Given our small sample size, the high number of comparisons across groups, and the lack of correction for multiple comparisons, we invite readers to take these statistical analyses with a grain of salt. Our survey was not designed to test differences across subgroups. We mainly relied on these statistical analyses to guide our descriptive understanding of the data and to identify the strongest and most reliable differences between subgroups.

Appendix F: Do differences in how researchers define misinformation explain differences in opinions across disciplines?

We do not formally test whether all differences in opinions across methods and disciplines can be explained by differences in definitions of misinformation. Instead, we focus on one of the most polarizing questions in the survey: whether misinformation played a decisive role in the outcome of the 2016 US election. It is a particularly interesting case because (i) psychologists and political scientists had diverging views on the role of misinformation in the 2016 election, and (ii) they also had diverging views on what constitutes misinformation. Finally, there are good reasons to expect that these differences in definitions of misinformation could cause differences in opinions about the 2016 election. Psychologists had much broader definitions of misinformation, including, for instance, hyperpartisan news, while political scientists had much more conservative definitions, excluding hyperpartisan news. Given the importance of partisan news in elections, it is possible that psychologists answered the questions about the influence of misinformation on the election thinking about hyperpartisan news, while political scientists did not.

First, a linear regression on the full dataset showed that agreeing that misinformation played a decisive outcome in the 2016 U.S. presidential election was associated with agreeing that hyperpartisan news is misinformation (b = .36, $p < .001$). This effect becomes non-significant (b = .15, $p = .09$) when adding experts' disciplines as a predictor in the model (difference between psychologists and political scientists: b = 1.58, $p < .001$).

Second, we formally investigated whether differences in definitions of misinformation mediate the difference in opinions about the influence of misinformation among psychologists and political scientists. To do so, we restrict the data set to only responses from psychologists and political scientists. We find no evidence of mediation. Discipline had a direct effect on opinions about the influence of misinformation (ADE = 1.66, $p < .001$), but differences in definitions of misinformation only mediated 3% of this effect ($p = .79$).

However, in addition to the important limitations of mediation analyses, it should be noted that our sample size is very small (22 political scientists and 29 psychologists). Thus, these results should thus not be taken as evidence that how experts define misinformation does not influence their views about misinformation. We felt compelled to add this section because the results reported in the main text lend themselves to the interpretation that such mediation exists. Ultimately, we believe that our results are inconclusive on the existence of mediation.