# MICHAEL GEERS

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## **EDUCATION**

Max Planck Institute for Human Development & HU Berlin	Expected 2024
Dr. rer. nat. (Ph.D.) in Psychology	
Dissertation: Rebalancing Human and Algorithmic Decision Making	
Advisors: Stefan M. Herzog, Ralph Hertwig	
University of Pennsylvania	2019
Master of Behavioral and Decision Sciences	
Trinity Business School, Trinity College Dublin	2018
M.Sc. in Marketing, with Distinction	
Provadis School of International Management and Technology	2017
B.A. in Business Administration	

## VISITING POSITIONS

# Network Science Institute, Northeastern University

Aug-Sep 2022

Visiting Ph.D. Student

Host: Briony Swire-Thompson

## RESEARCH INTERESTS

Consumer Psychology of Technology, Digital Marketing, Consumer Empowerment (Boosting)

#### **PUBLICATIONS**

Geers, M., Swire-Thompson, B., Lorenz-Spreen, P., Herzog, S.M., Kozyreva, A., & Hertwig, R. (in press). The Online Misinformation Engagement Framework. *Current Opinion in Psychology*.

Geers, M. (2023). Linking lab and field research. Nature Reviews Psychology, 2(8), 458.

Sultan, M., Tump, A.N., **Geers, M.**, Lorenz-Spreen, P., Herzog, S.M., & Kurvers, R.H.J.M. (2022). Time pressure reduces misinformation discrimination ability but does not alter response bias. *Scientific Reports*, 12(1), 1-12.

Roozenbeek, J., Maertens, R., Herzog, S.M., Geers, M., Kurvers, R.H.J.M., Sultan, M., & van der Linden, S. (2022). Susceptibility to misinformation is consistent across question framings and response modes and better explained by myside bias and partisanship than analytical thinking. *Judgment and Decision Making*, 17(3), 547–573.

Lorenz-Spreen, P.\*, **Geers, M.**, Pachur, T., Hertwig, R., Lewandowsky, S., & Herzog, S.M.\* (2021). Boosting people's ability to detect microtargeted advertising. *Scientific Reports*, 11(1), 1-9. \*denotes equal contribution

#### MANUSCRIPTS UNDER REVIEW

Geers, M., Fischer, H., Lewandowsky, S., & Herzog, S.M. The political (a)symmetry of metacognitive insight into detecting misinformation. Revise and resubmit at *Journal of Experimental Psychology: General*.

Kozyreva, A., Lorenz-Spreen, P., Herzog, S.M., Ecker, U.K.H., Lewandowsky, S., Hertwig, R., Ayesha, A., Bak-Coleman, J., Barzilai, S., Basol M., Berinsky, A.J., Betsch, C., Cook, J., Fazio, L.K., **Geers, M.**, Guess, A.M., Huang, H., Larreguy, H., Maertens, R., Panizza, F., Pennycook, G., Rand, D., Rathje, S., Reifler, J., Schmid, P., Smith, M., Swire-Thomson, B., Szewach, P., van der Linden, S., & Wineburg, S. Toolbox of interventions against online misinformation. Revise and resubmit at *Nature Human Behaviour*.

## SELECTED RESEARCH IN PROGRESS

Lorenz-Spreen, P., Kozyreva, A., Arslan, R.C., Swire-Thompson, B., **Geers, M.**, Herzog, S.M., & Hertwig, R. Assessing the motives for sharing on Twitter. Finalizing manuscript to submit to *Nature Human Behaviour*.

Straub, V., Burton, J., **Geers, M.**, & Lorenz-Spreen, P. How to design more ethical social media field experiments. Finalizing manuscript to submit to *Social Media + Society*.

**Geers, M.\***, Fischer, H.\*, Lewandowsky, S., & Herzog, S.M. Confidence in detecting misinformation increases with political extremism, not conservatism. Data analysis. Target: *Journal of Experimental Psychology: General.* \*denotes equal contribution

Geers, M., Lorenz-Spreen, P., Teich, P.\*\*, Hertwig, R., Lewandowsky, S., & Herzog, S.M. Boosting consumers' resilience against microtargeted advertising. Early-stage data collection. Target: *Journal of Consumer Psychology*. \*\*denotes student mentee

Geers, M. & Lorenz-Spreen, P. Social cues and news persuasiveness. Conceptualization. Target: Journal of Consumer Research.

Building a better toolkit (for fighting inaccurate health information): Large collaborative project to compare misinformation interventions. With L. Fazio, D. Rand, S. Lewandowsky, and about 80 others.

## HONORS AND GRANTS

Society for Personality and Social Psychology Graduate Travel Award (\$500)	2023
Joachim Herz Add-On Fellowship for Interdisciplinary Business Administration (€12,500)	2022
Psychonomic Society Graduate Student Conference Award (\$1,000)	2022
Volkswagen Foundation, "AI and the Future of Societies" (€1,440,000; team member)	2021 – 2025
SSRC/Summer Institutes in Computational Social Science Research Grant (\$1,764)	2021
Max Planck Ph.D. Fellowship (IMPRS LIFE)	2020-2023
Trinity Business School Scholarship (€1,000)	2017

# INVITED TALKS

University of Bristol, TeDCog (Technology, Democracy, and Cognition) Group	2023
Northeastern University, Lazer Lab	2022
University of Cambridge, Cambridge Social Decision-Making Lab (Virtual)	2021

#### CONFERENCE PRESENTATIONS

Assessing the motives for sharing on Twitter

• Conference of Experimental Psychologists (TeaP) 2023

The political (a)symmetry of metacognitive insight into detecting misinformation

<ul> <li>Society for Personality and Social Psychology</li> </ul>	2023
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• Psychonomic Society, Virtual (Poster) 2022

• International Society of Political Psychology, Virtual 2021

• Conference of Experimental Psychologists (TeaP), Virtual (Poster)

2021

Boosting people's ability to detect microtargeted advertising

- PERITIA International Conference: Trust in Expertise in a Changing Media Landscape, Virtual 2021
- Society for Judgment and Decision Making, Virtual (Poster)

• Psychonomic Society, Virtual (Poster)

2020 2020

## CHAIRED SYMPOSIA

Misinformation Research - Quo Vadis? Conference of Experimental Psychologists (TeaP), Trier, Germany, 2023.

New Frontiers in Misinformation Research (Symposium Co-Chair: Rakoen Maertens). Society for Personality and Social Psychology, Atlanta, GA, 2023.

#### TEACHING EXPERIENCE

Instructor

 $\bullet$  Reading Group "Cognition in Online Environments", MPI for Human Development 2020–Present

Organizer

• Summer Institute on Bounded Rationality, MPI for Human Development

2022

• Colloquium (weekly seminar), MPI for Human Development

2020 - 2021

## TEACHING INTERESTS

Consumer Behavior, Judgment and Decision Making, Managerial Decision Making, Computational Social Science, Marketing Analytics, Digital Marketing, Consumer Psychology of Technology, Influence and Persuasion in the Digital Age, Consumer Behavior Research Methods

# UNDERGRADUATE ADVISING

Bachelor Thesis Co-Supervision (with Stefan M. Herzog): Madlen Hoffstadt (Humboldt University, 2021), Eric Neumann (Free University of Berlin, 2020)

Research Assistants and Interns: Amanda Fink (Technical University Berlin, 2022), Paula Teich (University of Potsdam, 2021), Johanna Forbriger (University of Konstanz, 2021)

#### ADDITIONAL TRAINING

European Summer School on Computational and Mathematical Modeling of Cognition, ESCoP	2022
PhD Workshop on AI/ML Research and Democracy, University of Tübingen	2022
Nature Masterclass in Scientific Writing and Publishing, Nature	2021
Summer Institute in Computational Social Science, UCL School of Management	2021
Linking Twitter & Survey Data, GESIS Leibniz Institute for the Social Sciences	2021
Summer Institute on Bounded Rationality, Max Planck Institute for Human Development	2019

#### PROFESSIONAL SERVICE

Reviewer, Summer Institute on Bounded Rationality, MPI for Human Development	2022 – 2023
Program Fellow Speaker, International Max Planck Research School on the Life Course	2021 - 2022

## PROFESSIONAL MEMBERSHIP

Association for Consumer Research (ACR)

European Association for Decision Making (EADM)

European Marketing Academy (EMAC)

German Psychological Society (DGPs)

Psychonomic Society (PS)

Society for Consumer Psychology (SCP)

Society for Judgment and Decision Making (SJDM)

Society for Personality and Social Psychology (SPSP)

## RESEARCH EXPERIENCE PRIOR TO PHD

Intern	Center for Adaptive Rationality, MPI for Human Development (Stefan M.	Herzog) 2019
R.A.	The Wharton School, University of Pennsylvania (Barbara Mellers)	2018 – 2019
R.A.	Trinity Business School, Trinity College Dublin (Kristian Myrseth)	2017 – 2018

#### **SKILLS**

Computer Skills	R, Git, Qualtrics, formr, LATEX
Languages	German (native), English (fluent)

# REFERENCES

# Stefan M. Herzog

Ph.D. Co-Advisor
Senior Research Scientist
Center for Adaptive Rationality
Max Planck Institute for Human Development
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# Kristian Myrseth

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# Ralph Hertwig

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Geers, M., Fischer, H., Lewandowsky, S., & Herzog, S.M. The political (a)symmetry of metacognitive insight into detecting misinformation. Revise and resubmit at *Journal of Experimental Psychology: General.* 

Political misinformation poses a major threat to democracies worldwide, often inciting intense disputes between opposing political groups. Despite its central role for informed electorates and political decision making, little is known about how aware people are of whether they are right or wrong when distinguishing accurate political information from falsehood. Here, we investigate people's metacognitive insight into their own ability to detect political misinformation. We use data from a unique longitudinal study spanning 12 waves over 6 months that surveyed a representative U.S. sample (N = 1.191) on the most widely circulating political (mis)information online. Harnessing signal detection theory methods to model metacognition, we found that people's knowledge accuracy and confidence accuracy were closely aligned: People were equally adept at reasoning about the accuracy of political information as they were at reasoning about the accuracy of their own evaluation of the information. This level of metacognitive insight was symmetrical across the political and ideological spectrum, with one exception: Levels of metacognitive insight were considerably lower for Republicans and conservatives for incongruent news—that is, when the information in question challenged their ideological commitments. These results reveal the intricate and systematic ways in which political preferences are linked to the accuracy with which people assess their own truth discernment. More broadly, by identifying a specific political asymmetry—for incongruent relative to congruent news—our findings highlight the role of metacognition in the persistence and aggravation of ideological divides.

Geers, M., Swire-Thompson, B., Lorenz-Spreen, P., Herzog, S.M., Kozyreva, A., & Hertwig, R. (in press). The Online Misinformation Engagement Framework. *Current Opinion in Psychology*.

Research on online misinformation has evolved rapidly, but organizing its results and identifying open research questions is difficult without a systematic approach. We present the Online Misinformation Engagement Framework, which classifies people's engagement with online misinformation into four stages: selecting information sources, choosing what information to consume or ignore, evaluating the accuracy of the information and/or the credibility of the source, and judging whether and how to react to the information (e.g., liking or sharing). We outline entry points for interventions at each stage and pinpoint the two early stages—source and information selection—as relatively neglected processes that should be addressed to further improve people's ability to contend with misinformation.

Lorenz-Spreen, P.\*, **Geers, M.**, Pachur, T., Hertwig, R., Lewandowsky, S., & Herzog, S.M.\* (2021). Boosting people's ability to detect microtargeted advertising. *Scientific Reports*, 11(1), 1-9. \*denotes equal contribution

Online platforms' data give advertisers the ability to "microtarget" recipients' personal vulnerabilities by tailoring different messages for the same thing, such as a product or political candidate. One possible response is to raise awareness for and resilience against such manipulative strategies through psychological inoculation. Two online experiments (total N=828; female UK residents) demonstrated that a short, simple intervention prompting participants to reflect on an attribute of their own personality—by completing a short personality questionnaire—boosted their ability to accurately identify ads that were targeted at them by up to 26 percentage points. Accuracy increased even without personalized feedback, but merely providing a description of the targeted personality dimension did not improve accuracy. We argue that such a "boosting approach," which here aims to improve people's competence to detect manipulative strategies

themselves, should be part of a policy mix aiming to increase platforms' transparency and user autonomy.

Kozyreva, A., Lorenz-Spreen, P., Herzog, S.M., Ecker, U.K.H., Lewandowsky, S., Hertwig, R., Ayesha, A., Bak-Coleman, J., Barzilai, S., Basol M., Berinsky, A.J., Betsch, C., Cook, J., Fazio, L.K., **Geers, M.**, Guess, A.M., Huang, H., Larreguy, H., Maertens, R., Panizza, F., Pennycook, G., Rand, D., Rathje, S., Reifler, J., Schmid, P., Smith, M., Swire-Thomson, B., Szewach, P., van der Linden, S., & Wineburg, S. Toolbox of interventions against online misinformation. Revise and resubmit at *Nature Human Behaviour*.

The spread of misinformation through media and social networks threatens many aspects of society, including public health and the state of democracies. One approach to mitigating the impact of misinformation focuses on individual-level interventions, equipping the public and policy-makers with essential tools to curb the spread and influence of falsehoods. Here we introduce a toolbox of individual-focused interventions aimed at reducing harm from online misinformation. Comprising an up-to-date account of the interventions featured in 81 scientific papers from across the globe, the toolbox is a resource for scientists, policymakers, and the public. It provides both a conceptual overview of the breadth of interventions—including their target, scope, and examples—and a summary of the empirical evidence supporting the interventions—including the methods and experimental paradigms used to test them. The toolbox covers nine categories of interventions: accuracy prompts, debunking and rebuttals, friction, inoculation, lateral reading and verification strategies, media-literacy tips, social norms, source-credibility labels, and warning and fact-checking labels.