

Steve Rathje

Curriculum Vitae

Contact

New York University
Department of Psychology
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Appointments

2022- **Postdoctoral Researcher**
New York University
Advisor: Jay Van Bavel

Education

2018-2022 **University of Cambridge (Trinity College)**
PhD student in Psychology
Advisor: Sander van der Linden
Gates Cambridge Scholar

2014-2018 **Stanford University (4.07 GPA)**
BA in Psychology (with Honors and Distinction)
Minor in Symbolic Systems
Junior Phi Beta Kappa

Selected Publications

Rathje, S., Van Bavel, J.J. & van der Linden, S. (2021) Out-group animosity drives engagement on social media. *Proceedings of the National Academy of Sciences*.
<https://doi.org/10.1073/pnas.2024292118>

Rathje, S., J., Roozenbeek, Van Bavel, J.J. & van der Linden, S. Accuracy and social motivations shape belief in (mis)information (2023). *Nature Human Behavior*.
<https://doi.org/10.1038/s41562-023-01540-w>

Rathje, S., He, J., Roozenbeek, Van Bavel, J.J., & van der Linden, S. (2022). Social media behavior is associated with vaccine hesitancy. *Proceedings of the National Academy of Sciences – Nexus*. <https://doi.org/10.1093/pnasnexus/pgac207>

Rathje, S., Robertson, C., Brady, W., Van Bavel, J.J. (2023). People think social media does (and should not) amplify harmful content. *Perspectives on Psychological Science*.
<https://doi.org/10.1177/17456916231190392>

All Publications

H_{index} = 18; i10_{index} = 19; Citations = 1458, see [Google Scholar](#)

24. Vlasceanu, M.*, Doell, K.*... **Rathje, S.**, Van Bavel, J.J. et al (2023, in press). Addressing Climate Change with Behavioral Science: A Global Intervention Tournament in 63 Countries. *Science Advances*.
23. Van Bavel, J.J., **Rathje, S.**, Vlasceanu, M., Pretus, C. (2023, in press). Updating the Identity-based Model of Belief: From False Belief to the Spread of Misinformation. *Current Opinion in Psychology*.
22. Robertson, C., del Rosario, K., **Rathje, S.**, Van Bavel, J.J (2023, in press). Changing the incentive structure of social media may reduce online proxy failure and proliferation of negativity. *Behavioral and Brain Sciences*.
21. Koppel, L., Robertson, C.E., Doell, K., Javeed, A., Rasmussen, J., **Rathje, S.**, Vlasceanu, M., & Van Bavel, J.J. (2023). Individual-level solutions may support system-level change if they are internalized as part of one's social identity. *Behavioral and Brain Sciences*.
<https://doi.org/10.1017/S0140525X2300105X>
20. Altay, S., Berriche, M., Heuer, H., Farkas, J., **Rathje, S.** A Survey of Expert Views on Misinformation: Definitions, Determinants, Solutions, and Future of the Field (2023). *Harvard Kennedy Misinformation Review*. <https://doi.org/10.37016/mr-2020-119>
19. Van Bavel J., Pretus C., **Rathje S.**, Pärnamets P., Vlasceanu M., Knowles, E. The Costs of Polarizing a Pandemic: Antecedents, Consequences, and Lessons (2023). *Perspectives on Psychological Science*. <https://psyarxiv.com/qdb97/>
18. **Rathje, S.**, Robertson, C., Brady, W., Van Bavel, J.J. (2023). People think social media does (and should not) amplify harmful content. *Perspectives on Psychological Science*.
<https://doi.org/10.1177/17456916231190392>
17. **Rathje, S.** & van der Linden, S. (2023). Shifting online incentive structures to reduce polarization and the spread of misinformation. *Research Handbook on Nudges and Society*.
16. Van Bavel, J.J., Robertson, C. del Rosario, K., Rasmussen, J., **Rathje, S.** Social Media and Morality (2023). *Annual Review of Psychology*.
<https://psyarxiv.com/ywevq>.

15. **Rathje, S., J.**, Roozenbeek, Van Bavel, J.J. & van der Linden, S. Accuracy and social motivations shape belief in (mis)information (2023). *Nature Human Behavior*.
<https://doi.org/10.1038/s41562-023-01540-w>.

14. Harris, E.*, **Rathje, S.***, Robertson, C., Van Bavel, J.J. (2023). The SPIR Model of Social Media and Polarization: Exploring the Role of Selection, Platform Design, Incentives, and Real-World Context. *International Journal of Communications*.
*co-first authors

13. **Rathje, S.**, He, J., Roozenbeek, Van Bavel, J.J., & van der Linden, S. (2022). Social media behavior is associated with vaccine hesitancy. *Proceedings of the National Academy of Sciences – Nexus*.
<https://doi.org/10.1093/pnasnexus/pgac207>

12. Roozenbeek, J., van der Linden, S., Golberg, B., **Rathje, S.**, Lewandowsky, S. Psychological inoculation improves resilience against misinformation on social media (2022). *Science Advances*.
[10.1126/sciadv.abo6254](https://doi.org/10.1126/sciadv.abo6254)
*Altmetric score: 2936

11. Robertson, C. Pretus, C. **Rathje, S.**, Harris, E., Van Bavel, J.J. (2022). How social identity shapes conspiracy beliefs. *Current Opinion in Psychology*.
[10.1016/j.copsyc.2022.101423](https://doi.org/10.1016/j.copsyc.2022.101423)

10. Pavlović, T., Cichocka, A., Capraro, V., Sjøstad, H., Nezlek, J. B., Alfano, M.,... **Rathje, S.**, ... Hudecek, M. F. C. (2022). Predicting attitudinal and behavioral responses to COVID-19 pandemic using machine learning. *PNAS Nexus*.
<https://doi.org/10.1093/pnasnexus/pgac093>

9. **Rathje, S.**, Shariff, A., & Schnall, S. (2022). Ideology Trumps Self-Interest: Continued Support for a Political Leader Despite Disappointing Tax Returns. *Journal of Elections, Public Opinion, and Parties*.
<https://doi.org/10.1080/17457289.2022.2051148>

8. Van Bavel, J. J., **Rathje, S.**, Harris, E., Robertson, C., & Sternisko, A. (2021). How social media shapes polarization. *Trends in Cognitive Sciences*.
<https://doi.org/10.1016/j.tics.2021.07.013>

7. **Rathje, S.**, Roozenbeek, J., Steenbuch Traberg, C., Van Bavel, J.J., & van der Linden, S. (2021) Meta-analysis reveals that accuracy nudges have little to no effect for US conservatives: Regarding Pennycook et al. (2020). *Psychological Science*.
<https://journals.sagepub.com/page/pss/letters-to-the-eds>

6. **Rathje, S.**, Van Bavel, J.J. & van der Linden, S. (2021) Out-group animosity drives engagement on social media. *Proceedings of the National Academy of Sciences*.

<https://doi.org/10.1073/pnas.2024292118>

*Altmetric score: 2416

5. Van Bavel, J. J., Cichocka, A., Capraro, V., Sjästad, H., Nezlek, J. B., Alfano, M.,... **Rathje, S.**, ... Hudecek, M. F. C. (2021). National identity predicts public health support during a global pandemic: Results from 67 nations. *Nature Communications*.

<https://doi.org/10.1038/s41467-021-27668-9>

4. **Rathje, S.**, Hackel, L., Zaki, J. (2021). Attending live theatre improves empathy, changes attitudes, and leads to pro-social behavior. *Journal of Experimental Social Psychology*.

<https://doi.org/10.1016/j.jesp.2021.104138>

3. Van Bavel, J. J., Harris, E. A., Pärnamets, P., **Rathje, S.**, Doell, K., & Tucker, J. A. (2021). Political psychology in the digital (mis)information age. *Social Issues and Policy Review*.

<https://doi.org/10.1111/sipr.12077>

2. Van der Linden, S., Roozenbeek, J., Basol, M., Kacha, O., Martins, R., **Rathje, S.**, Traberg, C. (2021). How can psychological science help counter the spread of fake news.

Spanish Journal of Social Psychology.

<https://doi.org/10.1017/SJP.2021.23>

1. Fong, A., Roozenbeek, J., Goldwert, D., **Rathje, S.**, & van der Linden, S (2021).

The language of conspiracy: A psychological analysis of speech used by conspiracy theorists and their followers on Twitter. *Group Processes and Intergroup Relations*.

<https://doi.org/10.1177/1368430220987596>

Manuscripts under review

Rathje, S.*, Mirea, D. M.*, Sucholutsky, I., Marjeh, R., Robertson, C., & Van Bavel, J. J.

(2023). GPT is an effective tool for multilingual psychological text analysis. Revise and resubmit at *Proceedings of the National Academy of Science*. <https://doi.org/10.31234/osf.io/sekf5>

*Co-first authors

Martel, C., **Rathje, S.**, Pennycook, G., Clark, C., Roozenbeek, J., Van Bavel, J.J., Rand, D., van der Linden, S. (in prep). Do Accuracy Nudges Improve Sharing Discernment Across the Political Spectrum? An Adversarial Multiverse Analysis. Revise and resubmit at *Psychological Science*.

Voelkel, J., Stagnaro, M., Chu, J., Pink, S., Mernyk, J., Redekopp, C.... **Rathje ...** & Willer, R. (2023). Megastudy identifying successful interventions to strengthen Americans' democratic attitudes. Revise and resubmit at *Science*.

Yang, X., Schultz, J., ... **Rathje, S.**, ... Dunham, Y. (2023) Large-scale cross-societal examination of real- and minimal-group biases. Minor revisions at *Nature Human Behavior*.

Kozyreva, A., Lorenz-Spreen, P., Herzog, S., Ecker, U., Lewandowsky, S., & Hertwig, R... **Rathje, S.**, Wineburg. (2022). Toolbox of Interventions Against Online Misinformation and Manipulation. Under Review at *Science Advances*. <https://psyarxiv.com/x8ejt/>

Manuscripts in preparation

Rathje, S., Nejla, A., Robertson, C., Tucker, J., ... Van Bavel, J.J. (In prep). Testing the causal effect of social media usage around the globe. Invited as a Registered Report submission at *Nature*.

Rathje, S., He, J., Harjani, T., Roozebeek, J., Pretus, C., Gray, K., van der Linden, S., & Van Bavel, J.J. (In prep). The causal effect of social media (un)following behavior on affective polarization: results from a digital field experiment.

Harris, E.*, Reiner, D.*, **Rathje, S.**, Duke, A., Van Bavel, J.J. (In prep). Partisans are more likely to entrench their beliefs in misinformation when political outgroup members provide fact checks. <https://osf.io/preprints/psyarxiv/z4df3>

Roozenbeek, J., Biddlestone, M., Scheider, C., **Rathje, S.**, Neilson, K., Azevedo, F., Maertens, R., Gunderson, A., van der Linden, S. (In prep). The effect of (mis)information on voting outcomes.

Hu, T., Kyrychenko, Y., **Rathje, S.**, Collier, N., van der Linden, S., & Roozenbeek, J. (In prep). Generative language models exhibit social identity biases.

He, J., Wallis, F., & **Rathje, S.** (In prep). Homophily in An Artificial Social Network of Agents Powered by Large Language Models.

Grants

- | | |
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| 2023 | National Science Foundation (\$1,199,751)
Contribution: Project lead author. “Secure and Trustworthy Cyberspace: CORE: Medium: Testing the causal influence of social media on well-being and animosity.” Co-PI: Joshua Tucker. PI: Jay Van Bavel |
| 2023 | Collaborator, Google Jigsaw (\$200,000)
Contribution: Collaborator. “Trust in generative AI.” PI: Jay Van Bavel. |
| 2023 | Templeton World Charity Foundation (\$250,000)
Contribution: Project lead author. “Testing the causal impact of social media on polarization around the globe.” PI: Jay Van Bavel. https://doi.org/10.54224/31570 |
| 2023 | Alliance for Public Interest Technology Seed Grant (\$25,000)
Contribution: Project lead author. “Testing the causal impact of social media on polarization around the globe.” PI: Jay Van Bavel. |

- 2022 **Russel Sage Foundation Grant (\$175,000)**
Contribution: Project lead author. “Reducing and understanding polarization online: a computational social science approach.” PI: Jay Van Bavel.
- 2021 **Alliance for Decision Education Grant (\$180,000)**
Contribution: Collaborator. “Exploratory research on the mechanisms of the backfire effect.” PI: Jay Van Bavel.
- 2021 **Collaborator, Google Trust & Safety Team (\$160,000)**
Contribution: Collaborator. “Measuring and fighting misinformation, extremism, and polarization online.” PIs: Sander van der Linden & Jon Roozenbeek
- 2021 **Synergy Scholar, Center for the Science of Moral Understanding (\$50,000)***
Contribution: Project lead author. Proposal Title: “Improving Moral Understanding Online.”
- 2021 **Increasing Open Inquiry on College Campuses (\$30,000)**
Contribution: Project lead author. “Can changing one’s online social network increase open-minded cognition?” PI: Jay Van Bavel.
- 2019 **Psychology Department Field Work Funding (\$6,000)**

Selected Awards

- 2023 **SESP Dissertation Award Finalist**
- 2022 **Strengthening Democracy Challenge**
Co-developed 3rd most successful intervention (out of 252 submissions) in a mega-study evaluating the best interventions for reducing partisan animosity.
- 2021 **Psychology of Technology Institute Dissertation Award (\$1,000)**
- 2021 **Top 10 Insights from the “Science of A Meaningful Life”**
- 2019 **1st Place, Trinity College Hooper Declamation Public Speaking Prize (£450)**
- 2018 **Gates Cambridge Scholarship (Full PhD Funding)**
- 2018 **Louis and Valerie Freedman Studentship (Full PhD Funding)**
- 2018 **Finalist, Rhodes Scholarship**
- 2018 **J.E. Wallace Sterling Award for Scholastic Achievement**
Awarded to top 25 graduating seniors at Stanford University.
- 2017 **Phi Beta Kappa (Elected as a Junior)**

Awarded to top 2% of Stanford students.

- 2015 **President's Award for Academic Excellence**
Awarded to top 5% of Stanford's freshman class.
- 2018 **People's Choice Award, California Cognitive Science Conference**
- 2017 **Oregon New Play Prize (\$10,000 Playwriting Award)**
- 2017 **Ozy Genius Award (\$10,000 Grant)**
- 2017 **Undergraduate Advising and Research Grant (\$7,000 Research Grant)**
- 2016 **Strauss Public Service Scholarship (\$10,000 Grant)**
- 2016 **Chappell-Lougee Scholarship (\$6,400 Research Grant)**
- 2016 **Finalist, Eugene O'Neill Playwriting Competition**
- 2014 **Winner, Psychology One Scholar Award**

Teaching Experience

- 2023 **Tutorial on using GPT for text analysis**
NYU Artificial intelligence working group
- 2023 **Tutorial on analyzing social media data**
For regression course taught by Professor Madalina Vlasceanu
- 2022 **Supervisor/Teaching Assistant, Applied Behavioral Insights (Winter Term)**
Taught by Sander van der Linden at the University of Cambridge
- 2021 **Supervisor/Teaching Assistant, Applied Behavioral Insights (Fall Term)**
Taught by Lee De-Wit at the University of Cambridge
- 2020 **Supervisor/Teaching Assistant, Applied Behavioral Insights (Winter Term)**
Taught by Lee De-Wit at the University of Cambridge
- 2017-2018 **Stanford Psychology One Teaching Fellow**
Taught by James Gross (Fall Semester) and Jamil Zaki (Spring Semester)
- 2015-2017 **Stanford Oral Communication Tutor**
One-on-one public speaking tutor for Stanford undergraduate students
- 2016 **Stanford Splash Social Psychology Seminar**
Taught introduction to psychology to high school students.

Invited Talks

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| 2023 | Harvard University (Upcoming)
“The paradox of virality” |
| 2023 | Columbia University
“Identity-based motivations for sharing (mis)information” |
| 2023 | University of Southern California, Marshall School of Business
“The paradox of social media virality” |
| 2023 | New York University
“The paradox of social media virality” |
| 2023 | Stanford University, Graduate School of Business
“The paradox of social media virality” |
| 2023 | Deepest Beliefs Lab, UNC Chappell Hill
“People think (but do not want) divisive content to go viral” |
| 2023 | UK Government
Presentation about polarization and misinformation for the UK MOD |
| 2023 | Media and Democracy Conference, SRCC
Discussion on building trust online. |
| 2023 | Social Learning and Cognition Lab Meeting, USC
“People think (but do not want) divisive content to go viral” |
| 2023 | American Physical Society Annual Leadership Meeting
Panel discussion on leadership and science communication |
| 2022 | Work and Play Lab, University of Toronto
“Out-group animosity drives engagement on social media” |
| 2022 | Collective Cognition Lab, New York University
“Accuracy and Social Incentives Shape Judgements of (Mis)Information” |
| 2022 | Mental Sciences Club, University of Cambridge
“Understanding and reducing polarization on social media” |
| 2021 | Politics and Evolution Lab Meeting, Aarhus University
“Understanding and reducing polarization on social media” |
| 2021 | Designing for Empathy Summit |

“Attending live theatre changes attitudes, increases empathy, and leads to pro-social behavior”

2021 **Human Cooperation Lab Meeting, MIT**

“Accuracy and social motivations shape perceptions of (mis)information”

2021 **How Theatre Teaches Empathy**

Conversation with Hamilton star Phillipa Soo and Professor Jamil Zaki about research on theatre and empathy.

2019 **Arts and Pro-Social Research Group, University of Kent**

“Attending live theatre changes attitudes, increases empathy, and leads to pro-social behavior”

2019 **Gates Day of Research, University of Cambridge**

“Attending live theatre changes attitudes, increases empathy, and leads to pro-social behavior”

Conference Presentations

2024 **Society for Personality and Social Psychology (Upcoming)**

“Large Language Models and the Future of Social Psychology” Co-Chaired Symposium. Rathje, S., Ashokumar, A., Dillon, D., Brisbee, J.

2023 **Society for Experimental Social Psychology**

Symposium Presentation: Rathje, S., He, J., Harjani, T., Roozebeek, J., Pretus, C., Van Bavel, J.J. & van der Linden, S. The causal effect of social media (unfollowing) behavior on affective polarization: results from a digital field experiment.

2023 **European Association for Social Psychology**

Symposium Presentation: Rathje, S., He, J., Harjani, T., Roozebeek, J., Pretus, C., Van Bavel, J.J. & van der Linden, S. The causal effect of social media (unfollowing) behavior on affective polarization: results from a digital field experiment.

2023 **Society for Personality and Social Psychology**

Symposium Presentation: Rathje, S., He, J., Harjani, T., Roozebeek, J., Pretus, C., Van Bavel, J.J. & van der Linden, S. The causal effect of social media (unfollowing) behavior on affective polarization: results from a digital field experiment.

2022 **Center for the Science of Moral Understanding**

“Social Media and Moral Understanding.”

2022 **SPSP Psychology of Technology Pre-Conference**

Flash Talk: Rathje, S, Van Bavel, J & van der Linden, S. Outgroup animosity drives engagement on social media.

2021 **Association for Psychological Science**

Flash Talk: Rathje, S, Van Bavel, J & van der Linden, S. Accuracy and Social Motivations Shape Perceptions of (Mis)Information.

2021 **Society for Personality and Social Psychology**

Single Presenter Panel: Rathje, S, Van Bavel, J & van der Linden, S. Outgroup animosity drives engagement on social media.

2020 **Association for Psychological Science (APS) Annual Convention**

Poster Presentation: Rathje, S, Hackel, L, Zaki, J. Seeing theatre improves empathy, changes attitudes, and leads to pro-social behavior.

2018 **Association for Psychological Science (APS) Annual Convention**

Poster Rathje, S, Santoro, E, Dweck, C, Crum, A. How the subtle use of metaphorical language shapes our mindsets.

2018 **California Cognitive Science Conference**

Rathje, S, Santoro, E, Dweck, C, Crum, A. How the subtle use of metaphorical language shapes our mindsets.

*Winner of the “Best Poster” People’s Choice Award

Ad-Hoc Reviewer

Nature Communications (2x)

Science Advances

Psychological Science

Journal of Personality and Social Psychology (Co-Reviewer)

Journal of Experimental Psychology: General

Nature Scientific Reports

Social Psychological and Personality Science

PNAS Nexus (3x)

Neuroscience

Cognition

Journal of Politics

Political Psychology

Cortex

Journal of Personality

Applied Developmental Science

Palgrave MacMillon

Applied Cognitive Psychology

Media Psychology

Professional Memberships

Member, Society for Personality and Social Psychology (SPSP)
Member, Association for Psychological Science (APS)

Professional Service

NSF Study Group for sharing Technology, Innovation and Partnerships directorate (2023)
Diversity, Equity, and Inclusion Steering Committee Postdoc Representative, NYU (2023-2024)
Created online tutorial about using GPT for text analysis (2023)
Board Member, Clarity Foundation (2023-)
Created “meet the post-docs” event at NYU (2022-)
Post-doc representative for social psychology post-docs, NYU (2022)
Led tutorials on analyzing social media data and on science communication for the Social Identity and Morality Lab (2022; 2021)
Guest speaker for Santa Fe Community College about Science Communication (2022)
Panel discussion about PhD life at Stanford University (2021)
Gates Cambridge Scholarship orientation council (2019)

Science Communication

2020-Present **Verified Content Creator on TikTok (1.1 million+ followers).**
@stevepsychology on TikTok.

2018-Present **Contributor at Psychology Today**
Contributor for blog “Words Matter.”

Op-Ed: Why we click on stuff we know we won’t like (2023). *Boston Globe*.
Op-Ed: Why Facebook really, really doesn’t want to prevent extremism (2021). *Washington Post*.
Op-Ed: Why theater makes us better people. Bring it back (2021). *Los Angeles Times*.
The Science of Live Theatre (2021). *Psychology Today*.
The Psychology of Live Theatre: Can Seeing Theatre Increase Empathy? (2021). *SPSP Blog*.
The power of framing: it’s not what you say, it’s how you say it (2017). *The Guardian*.
Metaphors can change our opinions in ways we don’t even realize (2018). *Quartz*.
Will the Coronavirus Bring Us Together or Pull Us Apart? (2020). *Psychology Today*.
Why People Ignore Facts (2018). *Psychology Today*.
You Know Less Than You Think (2019). *Psychology Today*.
How to Get More People to Vote (2018). *Psychology Today*.
Do We Need a Common Enemy? (2018). *Psychology Today*.
The Danger of Searching for One True Cause (2019). *Psychology Today*.
When Correcting a Lie, Don’t Repeat It. Do This Instead (2018). *Psychology Today*.
Can Art Change Minds? (2019). *Gates Scholars Magazine*.

Selected Podcasts

Guilty as charged: how we contribute to polarizing content on social media (2023). *APS’s Under the Cortex Podcast*.
A lot of angry reactions (2023). *Outrage Overload Podcast*.

Social Science on TikTok (2022). *Opinion Science Podcast*.
Why is the U.S. Media So Negative? (2021). *Freakonomics*.
How Animosity Drives Social Media Engagement with Steve Rathje (2021) *Break Thru Radio*.
Steve Rathje on Identity and Reason (2019). *Know Thyself History Podcast*.
Lab Lockdown #3: Steve Rathje (2020). *Cognitive Revolution Podcast*.

Selected Media Coverage

The Politics of Delusion Have Taken Hold (2023). *New York Times*.
Here's Hoping Elon Musk Destroys Twitter (2022). *New York Times*.
We're Staring at Our Phones, Full of Rage for 'the Other Side' (2022). *New York Times*.
Google Finds 'Inoculating' People Against Misinformation Helps Blunt Its Power (2022). *New York Times*.
The feedback loop of social media (2022). *Sixty Minutes*.
Political trolling twice as popular as positivity, study suggests (2021). *BBC*.
How to go viral on social media? Attack a political opponent, study says (2021). *NBC*.
A Surprising Reason Why You Should Attend Live Theater (2021). *Wall Street Journal*.
Why The Past 10 Years Of American Life Have Been Uniquely Stupid (2022). *The Atlantic*.
From viral videos to Fox News: how rightwing media fueled the critical race theory panic (2021). *The Guardian*.

References

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