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Review

Awake together: Sociopsychological processes of engagement in conspiracist communities

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Sylvain Delouvée³ and Sebastian Dieguez¹**Abstract**

Research on conspiracy theories tends to frame conspiracy believers as isolated individuals falling prey to irrational beliefs caused by a variety of pathological traits and cognitive shortcomings. But evidence is accumulating that conspiracy theory believers are also linked together in social movements capable of effectively coordinated collective action. We propose that conspiracy theory beliefs evolve over time, as part of a process of increasing disengagement from mainstream groups, and concomitant engagement in a community of like-minded individuals, capable of coordinated collective action. This approach allows portraying extreme conspiracism as attractive not despite its apparent irrationality, but precisely *because* of it. As such, conspiracy theories could not only be conceived as “beliefs” but also as “social signals” advertising a subversive “counter-elite” posture.

Addresses¹ University of Fribourg, Switzerland² University of Neuchâtel, Switzerland³ University of Rennes, LP3C (Laboratoire de Psychologie), FranceCorresponding author: Wagner-Egger, Pascal (pascal.wagner@unifr.ch)**Current Opinion in Psychology** 2022, 47:101417This reviews comes from a themed issue on **Conspiracy Theories (2023)**Edited by **Jan-Willem van Prooijen** and **Roland Imhoff**For complete overview about the section, refer [Conspiracy Theories \(2023\)](#)

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Introduction

In the past decades, cognitive, differential, and social psychologists have tried to identify the psychological factors that could explain beliefs in conspiracy theories (CTs; for reviews, see Refs. [1–5]). Cognitive biases (e.g., conjunction fallacy, anthropomorphism, jumping to conclusions, and proportionality bias), personality traits (e.g., narcissism, anxiety, paranoia, and schizotypy), and social factors (e.g., education, anomia, precarity, objective

and perceived economic inequalities, extreme right and left political positions) have all been linked to CT beliefs. Studies about motivated cognition have shown, for example, that Democrats and Republicans in the USA use CTs as tools to vilify their opponents [6]. In a similar vein, it was found that supporters of political parties currently not in power endorsed more conspiratorial beliefs [7].

For some authors, personality factors, cognitive biases, motivated cognition, and political ideology are seen as mutually exclusive explanations of conspiracy belief endorsement, and some explanations are favored on a priori grounds. For example, Refs. [8,9] criticize “pathologization” of CT beliefs by psychologists. Although an explanation of CT beliefs solely in terms of “pathological” cognitive and personality factors would indeed be reductionistic (because of the numerous studies showing the importance of social factors), psychological factors should not be dismissed out of hand, given the empirical data. Hence, individual and social perspectives are not mutually exclusive, but may be theoretically integrated. One way to do this is to explore varying levels of endorsement of CT beliefs as expressions of individuals’ life-course trajectories unfolding over time. Studies have employed designs with multiple waves of measurement to demonstrate how the link between CT beliefs and outcomes develops over time [e.g., Ref. [10]]. Such an approach complements earlier studies using cross-sectional designs. However, a thorough temporal perspective that links CT beliefs to individuals’ development is currently missing.

In a qualitative study of conspiracy believers, Ref. [11] described a progressive typology of believers in CTs, in which a fully-fledged conspiratorial worldview is the final step of a “spiritual journey”. The first type of believer is someone who starts initially questioning social and political orthodoxies. The second type is constituted by people who grow dissatisfied with the status quo ideologies and develop a sense that there is more at play in the world than is apparent to ordinary observers. The third type involves increasing concern with the deceptive nature of official narratives and a lack of trust in authority, which results in the endorsement of some CT beliefs. Believers of the fourth type report experiences of conversion or spiritual awakening, often

following a traumatic personal experience (disease, bereavement, collective events such as 9/11) or involving paranormal beliefs [e.g., Ref. [12]]. They use a conspiratorial worldview as a default frame of reference, in which quasi-supernormal agency in specific areas is ascribed to normal actors. Finally, the fifth step views the whole of reality as an illusion, sometimes directed by supernatural agents, such as aliens or reptilians. While the study classified individual respondents into one of these types, we propose here that they may represent cross-sectional snapshots of different *stages* of a longitudinal process of (1) increasing disengagement from mainstream groups and (2) concomitant engagement in a community of like-minded individuals capable of (3) coordinated collective actions. We review recent research of these processes in what follows, keeping in mind that they need not necessarily map perfectly into the five types highlighted in Ref. [11].

Disengagement

When conspiracy believers talk about their “spiritual journeys” [11; see also 9, [13]], they often mention specific events as starting points. The first steps of disengagement from mainstream groups may thus be triggered by an unexpected event that motivates sense-making processes. These processes may be biased toward conspiracist conclusions by cognitive or personality traits. For example, during the COVID-19 pandemic, people may have started entertaining COVID-19-related conspiracy beliefs via reasoning errors, such as overinterpreting the conjunction between vaccination and adverse outcomes as being causally related [14]. The next steps may involve increasingly active search for CT-related information, e.g., on social media. Initial belief in one conspiracy theory may serve as a “gateway” to belief in other conspiracy theories [15]. Some CTs may be more accessible gateways than others. Popular CTs like the belief that the JFK assassination was not the work of a lone gunman may lead novice conspiracy theorists “down the rabbit hole” to more outlandish CTs-like flat earth theory [16].

As individuals become increasingly engaged in multiple CTs, they may seek to share their ideas with their entourage, on one hand, to receive positive social feedback from other believers [17], and on the other hand, to provoke, display intellectual superiority, or express emotions such as anger or outrage. At this stage, the widely recognized negative connotation of the term “conspiracy theory” [18] may lead to imagined or real social exclusion [19,20]. For example, expressing conspiracist ideas on social media may lead to negative feedback or exclusion by content moderators [21]. The experience of social exclusion may itself increase superstitious [22] or conspiracist ideation [23]. The social costs incurred by exclusion may be partly compensated by the psychological benefit of fulfilling a heightened

need for uniqueness (knowing more than the majority of other people) among CT believers compared to non-believers [24–27].

Engagement

Engagement refers to the processes of approaching communities of like-minded individuals (“awake” or “enlightened”, in contrast to the “sheeple” standing in darkness, i.e., the majority of the population). Social identity motives [1–3,28], more than cognitive biases or personality factors as such, may become central to this next stage of the “spiritual journey.” Social identity [i.e., [29]] is indeed related to CTs that target hated outgroups [28,30–32] or minorities [20,33].

Since many conspiracist communities interact online, it is possible to leverage computational research to study interactions reflecting engagement processes over time. Ref. [34] conducted a comprehensive automatic analysis of interactions between over 60,000 users of Reddit. The authors found that novice conspiracists that moved further along the path to conspiracy communities were influenced by social factors (availability of confirmed conspiracists, informational pressure, reputational pressure, emotional snowballing, group polarization, and self-selection). The most important factor affecting the trajectory of novices was direct interactions with confirmed conspiracists. In further research [21], the authors explored differential pathways of engagement, progressing through to radicalization, but also processes of recovery from conspiracism [see also [35], on ex-believers in chemtrails conspiracy theories].

During engagement processes, CT beliefs may acquire a social function of signaling, as described in recent philosophical analyses of belief based on signaling theory [36,37]. By this logic, CTs [and other ideas commonly viewed as subversive or absurd; 38] are endorsed (or *advertised*) not *despite* their apparent irrationality, but *because* of it. As the irrationality of CT beliefs provokes derision or ostracism, their holders incur reputational damage [39]. This damage functions as a costly, and thus credible signal of commitment to the group [38]. By “burning bridges” to mainstream groups [40], conspiracists credibly demonstrate their loyalty to a conspiracist community or to the ideology conspiracism serves to justify. In this sense, CT beliefs may have similar functions as religious rituals [41] or “credences” [42], and their very status as “beliefs” could be questioned [16,43]. The signaling hypothesis is consistent with the finding that endorsing flat earth CTs is high only for individuals who believe in many other CTs, as well as other non-conventional ideas [16]. Flat earth CTs (and probably other such extreme claims) may thus function as a credible signal of bridge burning among conspiracists, and as such has little to do with the true shape of the Earth *per se*. On the other hand, a recent test of the signaling

hypothesis failed to show that public endorsement of conspiracist statements is used to categorize their authors, that is, they are not perceived as coalitional signals, at least by outsiders [44].

Coordinated collective action

CT beliefs are related to decreased political engagement [45], but to increased *non-normative* (more radical and illegal) political actions, such as the use of violence in demonstrations [46,47]. Anomia (a correlate of CT belief) is related to normative (e.g., peaceful demonstrations) and non-normative (e.g., violence) political collective actions [48–51]. However, action tendencies or actual behavior of individuals (e.g., as a result of the Pizzagate CT, a lone gunman attacked a pizzeria in the USA, ostensibly to verify whether it was the headquarters of a pedophile ring) are different from coordinated collective action. Conspiracist communities have recently shown themselves to be capable of the latter, one example being the insurrectional attack by about 2000 supporters of Donald Trump on the US Capitol on January 6, 2020. Also, during the COVID-19 pandemic, many anti-vaccine groups aimed at fighting the “sanitary dictatorship” in sometimes violent demonstrations. In Switzerland, a group known as the Freiheitstrychler (“freedom bell-ringers”) led spectacular weekly protests around the country against COVID policies by wearing heavy traditional cow bells. The Social Identity Model of Collective Action [SIMCA; [52]] identifies emotionally tinged perceptions of injustice (e.g., anger), perceived efficacy of collective action and identification with the group as factors increasing the likelihood of engaging in collective action.

Conspiracism may serve all three SIMCA factors. Perceptions of injustice are at the core of CTs. They have, for instance, been recently defined as “serious accusations of conspiracy (of elites or outgroups) without sufficient proofs” [4] and labeled as “injustice without evidence” [53]. Again, recent research on these processes often emerges from automatic analyses of textual data gathered from online discussions of conspiracist communities. In Italy, anti-vaccine social movements used (fallacious) rhetoric strategies to delegitimize vaccination actors [54]. Group identification can be tracked over time using plural first-person pronouns (“we”, “us”) in search volume data (Google Trends) — such measures indeed predict the volume of real-life protests [55]. Beyond the SIMCA factors, more research is required on coordination, a concrete precondition of effective collective action. The social signaling function of CT beliefs may also facilitate coordination, as when fake stories are shared as a prelude to riots [56]. In turn, coordination (synchronization) may increase perceptions of unity and formidability of coalitions by outsiders [57].

Conclusion

Going beyond psychological correlates, which may serve as initial triggers of questioning social and political orthodoxies, we have highlighted how conspiracy theories may further serve social and ideological functions, by facilitating engagement, disengagement, and coordination processes. The emergence of conspiracist communities and their actions “on the ground”, including increased involvement in political processes and the use of violence, paints a very different picture than the classic stereotype of the lone and cranky “conspiracy theorist” standing at the margins of society. Individual differences and cognitive specificities should of course not be neglected, but recent and ongoing research demonstrates the need to integrate these factors into a broader picture, which can be achieved using a diverse array of methods and disciplines, such as computational modeling, automated discourse and narrative analysis, longitudinal surveys, and field studies (e.g., Ref. [58]).

Far from shortcutting psychological approaches to conspiracism, examining the phenomenon through the lenses of its social, expressive, and militant functions would only enrich our understanding of the conspiracist mind. It raises, for instance, doubts about the doxastic character of conspiracy theories. If their main purpose is to signal allegiance to a worldview or a community and to enforce group dynamics and coordinated action, then it is not so obvious that they should be labeled “beliefs” at all. As such, we view the present proposal as a dynamic and flexible process rather than a strict model involving increasing levels and intensities of conspiracist “beliefs”. What matters more, to us, is the level of engagement and the types of social practices associated with involvement in conspiracist communities, which might involve very varied personal views for each individual, but still be able to coordinate against common enemies. In fact, this suggests a promising area for research, namely to carefully examine disagreements *within* such communities, specifically how they emerge and how they are negotiated.

The processes we described raise other suggestions for future research. It will undoubtedly be affected by the environment of agents: for instance, in cases where conspiracist thinking is already the norm in a community, there will not be a group to disengage from and no need to engage in a new group, but still conspiracism will help coordination and mobilization, and signaling will ensure ingroup loyalty. The model, in fact, will be most useful when applied to stigmatized conspiracist communities with ostensibly heterodox views, but it needs not be seen as an overly rigid description of what *must* happen to the conspiracy-minded in all situations. Future research, indeed, could ask in more detail why some individuals follow the full path leading from

disengagement to collective action, while others tend to remain isolated or manage to stay engaged with multiple groups at the same time, and still others focus only on one specific conspiracy theory and find too extreme views unappealing to them.

Accordingly, future research could focus on redeemed conspiracists, for instance, those who have “left” the QAnon movement or flat earthers who have finally accepted that the Earth is a globe. Likewise, to our knowledge, no research has been done on conspiracists’ kin and close relationships, although they clearly could provide precious information unavailable from self-reports. Finally, it would be informative to examine more closely how the different processes of disengagement, engagement, and collective action are articulated and interact together, whether there are sufficient or necessary conditions allowing their deployment, and how the actual content of conspiracy theories will influence each component.

Conflict of interest statement

Nothing declared.

References

Papers of particular interest, published within the period of review, have been highlighted as:

* of special interest

** of outstanding interest

- Douglas KM, Sutton RM, Cichocka A: **The psychology of conspiracy theories**. *Curr Dir Psychol Sci* 2017, **26**:538–542, <https://doi.org/10.1177/0963721417718261>.
- Douglas KM, Uscinski JE, Sutton RM, Cichocka A, Nefes T, Ang CS, Deravi F: **Understanding conspiracy theories**. *Polit Psychol* 2019, **40**:3–35, <https://doi.org/10.1111/pops.12568>.
- van Prooijen JW, Douglas KM: **Belief in conspiracy theories: basic principles of an emerging research domain**. *Eur J Soc Psychol* 2018, **48**:897–908, <https://doi.org/10.1002/ejsp.2530>.
- Wagner-Egger P: *The noises of conspiracy: psychology of Beliefs in conspiracy theories*. 2022, March 24, <https://doi.org/10.31234/osf.io/v52e>. Manuscript submitted for publication.
- Dieguez S, Delouvé S: *Le complotisme: cognition, culture, société [Conspiracism: cognition, culture, society]*. Bruxelles: Mardaga; 2021.
- Smallpage SM, Enders AM, Uscinski JE: **The partisan contours of conspiracy theory beliefs**. *Research & Politics* 2017, **4**:1–7.
- Imhoff R, Zimmer F, Klein O, António JH, Babinska M, Bangertner A, ... Van Prooijen JW: **Conspiracy mentality and political orientation across 26 countries**. *Nat Human Behav* 2022:1–12, <https://doi.org/10.1038/s41562-021-01258-7>.
- Basham L, Dentith M: **Social science’s conspiracy theory panic: now they want to cure everyone**. *Social Epistemology Review and Reply Collective* 2016, **5**:12–19.
- Harambam J: *Contemporary conspiracy culture: truth and knowledge in an era of epistemic instability*. London: Routledge; 2020.
- Bierwiaczonek K, Kunst JR, Pich O: **Belief in COVID-19 conspiracy theories reduces social distancing over time**. *Appl Psychol: Health and Well-Being* 2020, **12**:1270–1285.
- Franks B, Bangertner A, Bauer MW, Hall M, Noort MC: **Beyond “Monologicality”? Exploring conspiracist worldviews**. *Front Psychol* 2017, **8**:861, <https://doi.org/10.3389/fpsyg.2017.00861>.
- Irwin HJ: *The psychology of paranormal belief. A researcher’s handbook*. University of Hertfordshire Press; 2009.
- Asprem E, Dyrendal A: **Conspirituality reconsidered : how surprising and how new is the confluence of spirituality and conspiracy theory**. *J Contemp Relig* 2015, **30**:367–382.
- van Mulukom V, Pummerer LJ, Alper S, Bai H, Čavojská V, Farias J, ... Žeželj I: **Antecedents and consequences of Covid-19 conspiracy beliefs: a systematic review**. *Soc Sci Med* 2022: 114912.
- Samayoa JG, Moore C, Ruisch B, Boggs ST, Ladanyi JT, Fazio R: **A gateway conspiracy? Belief in COVID-19 conspiracy theories prospectively predicts greater conspiracist ideation**. *PsyArxiv* 2022, <https://doi.org/10.31234/osf.io/q4gct>.
- Dieguez S, Wagner-Egger P: **Réflexions sur la forme de la Terre [Reflections on the shape of the earth]**. In *L’irrationnel aujourd’hui [Irrationality today]*. Edited by Baechler J, Bronner G, Paris: Hermann; 2021:323–400.
- Ren, Zhiying B, Dimant E, Schweitzer ME: **Social motives for sharing conspiracy theories**. Available at SSRN: <https://ssrn.com/abstract=3919364>.
- Thalman K: *The Stigmatization of conspiracy theory Since the 1950s : “a Plot to make us look foolish.”* Oxon, UK. 2019.
An outstanding historical perspective on the pejorative turn taken on conspiracy theories after World War II and during the Cold War era. The author convincingly shows that tracing the origins of the dismissal of conspiracism as a legitimate way of interpreting the world is crucial to understanding current debates on the topic.
- Lantian A, Muller D, Nurra C, Klein O, Berjot S, Pantazi M: **Stigmatized beliefs: conspiracy theories, anticipated negative evaluation of the self, and fear of social exclusion**. *Eur J Soc Psychol* 2018, **48**:939–954, <https://doi.org/10.1002/ejsp.2498>.
- Nera K, Wagner-Egger P, Bertin P, Douglas KM, Klein O: **A power-challenging theory of society, or a conservative mindset? Upward and downward conspiracy theories as ideologically distinct beliefs**. *Eur J Soc Psychol* 2021, **51**: 740–757, <https://doi.org/10.1002/ejsp.2769>.
- Phadke S, Samory M, Mitra T: **What makes people join conspiracy communities? role of social factors in conspiracy engagement**. *Proceedings of the ACM on Human-Computer Interaction* 2021, **4**:1–30.
- Graeupner D, Coman A: **The dark side of meaning-making: how social exclusion leads to superstitious thinking**. *J Exp Soc Psychol* 2017, **69**:218–222, <https://doi.org/10.1016/j.jesp.2016.10.003>.
- Poon KT, Chen Z, Wong WY: **Beliefs in conspiracy theories following ostracism**. *Pers Soc Psychol Bull* 2020, **46**:1234–1246.
A demonstration of the role of ostracism in increasing conspiracy beliefs, the effect being mediated by increased vulnerability. This study shows how conspiracy beliefs are related to disengagement from mainstream communities.
- Cichocka A, Marchlewska M, Golec de Zavala A: **Does self-love or self-hate predict conspiracy beliefs? Narcissism, self-esteem, and the endorsement of conspiracy theories**. *Soc Psychol Personal Sci* 2016, **7**:157–166, <https://doi.org/10.1177/1948550615616170>.
- Imhoff R, Lamberty P: **Too special to be duped: need for uniqueness motivates conspiracy beliefs**. *Eur J Soc Psychol* 2017, **47**:724–734, <https://doi.org/10.1002/ejsp.2265>.
- Kay CS: **The targets of all treachery: delusional ideation, paranoia, and the need for uniqueness as mediators between two forms of narcissism and conspiracy beliefs**. *J Res Pers* 2021, **93**, 104128, <https://doi.org/10.1016/j.jrp.2021.104128>.
- Lantian A, Muller D, Nurra C, Douglas KM: **“I know things they don’t know!” the role of need for uniqueness in belief in conspiracy theories**. *Soc Psychol* 2017, **48**:160–173, <https://doi.org/10.1027/1864-9335/a000306>.

28. Sternisko A, Cichocka A, van Bavel JJ: **The dark side of social movements: social identity, non-conformity, and the lure of conspiracy theories.** *Current Opinion in Psychology* 2020, **35**: 1–6, <https://doi.org/10.1016/j.copsyc.2020.02.007>.
- Presents a model of two motivational allures of conspiracy theories: content and qualities. Social identity motives draw people foremost to contents of conspiracy theories while uniqueness motives draw people to qualities of conspiracy theories.
29. Tajfel H, Turner JC: **An integrative theory of intergroup relations.** In *The psychology of intergroup relations*. Edited by Austin WG, Worchel S, Monterey, CA: Brooks-Cole; 1979:33–47.
30. Grzesiak-Feldman M, Kaminska-Feldman M: **The role of personal and social identity in conspiracy stereotypisation.** *Pol Psychol Bull* 2005, **36**:205–212.
31. Mashuri A, Zaduqisti E: **The effect of intergroup threat and social identity salience on the belief in conspiracy theories over terrorism in Indonesia: collective angst as a mediator.** *Int J Psychol Res* 2015, **8**:24–35, <https://doi.org/10.21500/20112084.642>.
32. Mashuri A, Zaduqisti E, Sukmawati F, Sakdiah H, Suharni N: **The role of identity subversion in structuring the effects of intergroup threats and negative emotions on belief in anti-West conspiracy theories in Indonesia.** *Psychol Develop Soc* 2016, **28**:1–28, <https://doi.org/10.1177/0971333615622893>.
33. Uenal F, Bergh R, Sidanius J, Zick A, Kimel S, Kunst JR: **The nature of islamophobia: a test of a tripartite view in five countries.** *Pers Soc Psychol Bull* 2021, **47**:275–292, <https://doi.org/10.1177/0146167220922643>.
34. Phadke S, Samory M, Mitra T: **What makes people join conspiracy communities? role of social factors in conspiracy engagement.** *Proceedings of the ACM on Human-Computer Interaction* 2021, **4**:1–30.
- A large-scale longitudinal and computational exploration of the individual and social processes that drive engagement of people in conspiracist communities. The study has enormous potential for transcending the current emphasis on self-report methods in the study of conspiracism.
35. Xiao S, Cheshire C, Bruckman A: **Sensemaking and the chemtrail conspiracy on the internet: insights from believers and ex-believers.** *J ACM* 2021, **37**, <https://doi.org/10.1145/1122445.1122456>.
36. Funkhouser E: **Beliefs as signals: a new function for belief.** *Phil Psychol* 2017, **30**:809–831.
37. Funkhouser E: **A tribal mind: beliefs that signal group identity or commitment.** *Mind Lang* 2020.
38. Williams D: **Signalling, commitment, and strategic absurdities.** *Mind Lang* 2021.
- An overview and defence of the “Strategic Absurdity Hypothesis,” according to which the deliberate endorsement of ostensibly unpopular and dubious beliefs serve social, rather than epistemic, purposes, such as signalling in-group loyalty, building coalitions and increasing defection costs.
39. Altay S, Hacquin A-S, Mercier H: **Why do so few people share fake news? It hurts their reputation.** *New Media & Society*; November 2020, <https://doi.org/10.1177/1461444820969893>.
40. Mercier H: **Not born yesterday: the science of who we trust and what we believe.** Princeton University Press; 2020.
41. Irons W: **Religion as a hard-to-fake sign of commitment.** In *Evolution and the capacity for commitment*. Edited by Nesse RM, Russell Sage Foundation; 2001:290–309.
42. Van Leeuwen N: **Religious credence is not factual belief.** *Cognition* 2014, **133**:698–715.
43. Ichino, A. (forthcoming). Conspiracy theories as waltz-fiction. In J. Langkau and P. English (Eds.) *The philosophy of fiction: imagination and cognition*. London: Routledge.
44. Mus M, Bor A, Bang Petersen M: **Do conspiracy theories efficiently signal coalition membership? An experimental test using the “Who Said What?” design.** *PLoS One* 2022, **17**, e0265211.
45. Jolley D, Douglas KM: **The social consequences of conspiracism: exposure to conspiracy theories decreases intentions to engage in politics and to reduce one’s carbon footprint.** *Br J Psychol* 2012, **105**:35–56, <https://doi.org/10.1111/bjop.12018>.
46. Imhoff R, Dieterle L, Lamberty P: **Resolving the puzzle of conspiracy worldview and political activism: belief in secret plots decreases normative but increases nonnormative political engagement.** *Soc Psychol Personal Sci* 2021, **12**:71–79, <https://doi.org/10.1177/1948550619896491>.
47. Lamberty P, Leiser D: **Sometimes you just have to go in. The link between conspiracy beliefs and political action.** <https://doi.org/10.31234/osf.io/bdrcx>.
48. Adam-Troian J, Baidada O, Arciszewski T, Apostolidis T, Celebi E, Yurtbakan T: **Evidence for indirect loss of significance effects on violent extremism: the potential mediating role of anomia.** *Aggress Behav* 2019, **45**:691–703, <https://doi.org/10.1002/ab.21863>.
49. Adam-Troian J, Bonetto E, Araujo M, Baidada O, Celebi E, Dono Martin M, ... Yurtbakan T: **Positive associations between anomia and intentions to engage in political violence: cross-cultural evidence from four countries.** *Peace Conflict: Journal of Peace Psychology* 2020, **26**:217–223, <https://doi.org/10.1037/pac0000385>.
50. Mahfud Y, Adam-Troian J: **“Macron Demission!” Loss of significance generates violent extremism for the Yellow Vests through feelings of anomia.** *Group Process Intergr Relat* 2021, **24**:108–124, <https://doi.org/10.1177/1368430219880954>.
51. Wagner-Egger P, Adam-Troian J, Cordonier L, Cafiero F, Bronner G: **The yellow vests in France: psychosocial determinants and consequences of the adherence to a social movement in a representative sample of the population.** *International Review of Social Psychology* 2022, **35**:1–14, <https://doi.org/10.5334/irsp.556>.
52. Van Zomeren M, Postmes T, Spears R: **Toward an integrative social identity model of collective action: a quantitative research synthesis of three socio-psychological perspectives.** *Psychol Bull* 2008, **134**:504.
53. van Prooijen JW: **Injustice without evidence: the unique role of conspiracy theories in social justice research.** *Soc Justice Res* 2022, **35**:88–106, <https://doi.org/10.1007/s11211-021-00376-x>.
54. Orlandi LB, Veronesi G, Zardini A: **Unpacking linguistic devices and discursive strategies in online social movement organizations: evidence from anti-vaccine online communities.** *Inf Organ* 2022, **32**, 100409.
55. Adam-Troian J, Bonetto E, Arciszewski T: **“We shall overcome”*: first-person plural pronouns from search volume data predict protest mobilization across the United States.** *Soc Psychol Personal Sci* 2021, **12**:1476–1485.
- An original analysis of the relationship between internet searches indicating a group mindset (plural pronouns) and actual protest counts in the US (2017–2020). Social identification via the internet predicts collective action on the field.
56. Ganapini MB: **The signaling function of sharing fake stories.** *Mind Lang* 2021.
57. Fessler DM, Holbrook C: **Synchronized behavior increases assessments of the formidability and cohesion of coalitions.** *Evol Hum Behav* 2016, **37**:502–509.
58. Miani A, Hills T, Bangertner A: **LOCO: the 88-million-word language of conspiracy corpus.** *Behav Res Methods* 2021:1–24.