Studia Psychologica, Vol. 67, No. 1, 2025, 3-7

Editorial

Disinformation in Politics and Science: Attitudes, World Views, and their Determinants

Zoltán Jakab
Institute for Psychology of Special Needs, Loránd Eötvös University, Budapest, Hungary

In recent years, the spreading of deliberately created misinformation (or disinformation) on the internet and social media has created a significant challenge for the operation of democratic societies. At present, this process is being viewed as an opportunity to undermine democratic political systems by a number of autocracies, and outright dictatorial governments. Currently there seem to exist no forceful methods to counteract these tendencies. In a way, this is a problem that the controversial operation of contemporary democratic societies (e.g., poverty, lack of social mobility, limited accessibility to high quality education, and immense wealth differences within even the wealthiest societies) has made room for. Mechanisms behind these changes are complex, and at the political level, the changes themselves have been quite fast in recent years. Since this special issue was advertised to authors in 2023, elections in a number of countries have resulted in either a significant change in political course (including Poland, Slovakia, Austria, and the United States) or a threat to the operation of parliamentary democracies (e.g., in Moldova and Romania; Harward, 2024; Erizanu, 2024; Chin & Overby, 2025). All these socio-political processes were influenced by professionally generated and/or spread disinformation (Mukherjee et al., 2024; Bērzkalne, 2024; DeSisto & Pop-Eleches, 2024), although other effects were also identifiable (Fujiwara, Müller, & Schwarz, 2024).

There is a long-standing question: What can social sciences do to alter these unfavorable directions in social evolution? A modest affirmative claim along these lines seems reasonable. For example, studies in social psychology have identified methods that do, and those that do not, work to reduce the chances of juvenile delinquency, drug abuse, prejudice, or teenage pregnancy (Wilson, 2011). Making good use of this kind of insight, although itself a matter of political

Correspondence concerning this article should be addressed to Zoltán Jakab, Institute for Psychology of Special Needs, Loránd Eötvös University, 1097 Budapest, Ecseri út 3., Hungary.
E-mail: zjakab64@gmail.com

decision, can indeed have beneficial effects on the functioning of societies. On the other hand, whether social scientists will ever be able to convince the very rich to pay more taxes and share their other privileges more widely remains questionable, to say the least. Strengthening people's critical reception of more or less reliable information (about history, politics, society, or science) is probably somewhere in between. At present, few practically applicable methods are available (although see Bambals et al., 2022), still our knowledge in this area is growing fast.

The present special issue is meant to fit in this broad context. It comprises six studies in the area of social and political psychology all of which address, directly or indirectly, the problem of disinformation. However, in this issue we are not making suggestions about how to deal with disinformation; all studies herein are destined to enrich our understanding of this realm of phenomena.

The first two studies address the social psychological aspects of the COVID-19 pandemic. In his study, Peter Halama examined the relationship between personality traits measured by the Big Five questionnaire, and COVID-19 vaccination status. In addition to the Big Five questionnaire and the dependent variable (binary: vaccinated vs. not), the author measured agreement with COVID-19-related conspiracy theories and pseudoscientific beliefs, and trust in medical institutions. He found that of the five personality dimensions two predicted the participants' vaccination status: *agreeableness* and *negative emotionality* (*neuroticism*). Participants with higher levels on these dimensions were more likely to be vaccinated. Results also showed that the effect of agreeableness was entirely mediated by 1) trust in medical institutions, 2) COVID-19 pseudoscience beliefs, and 3) COVID-19-related conspiracy theories. Negative emotionality predicted vaccination entirely via trust in medical institutions. Demographic variables (age, level of education, and social status) were also positively related to vaccination. Interestingly, neither conscientiousness nor extraversion acted as a predictor of vaccination status, contrary to earlier findings. An explanation offered for the case of conscientiousness is that medical professionals in Slovakia intensely discussed the safety of COVID-19 vaccines. This may have blurred the moral consequences of being vaccinated, for many people.

Merva, Šrol, and Čavojová offer a case study in what is sometimes called circular causation in psychology, in the context of institutional distrust, and Covid-19-related conspiracy theories and pseudoscientific beliefs. The question is, do unfounded beliefs induce institutional distrust, or is there a reverse relationship, namely, institutional distrust causes unfounded beliefs? These are the two rival hypotheses that the authors examined. On the one hand, institutions represent authorities and authorities play key roles in virtually all conspiracy theories. Thus, believing in conspiracy theories leads to distrust in authorities. On the other hand, prior distrust may trigger unfounded beliefs and conspiracy theories. In the study, political and scientific institutions were treated separately as there may exist different levels of trust toward these two types of institutions in the population. To tackle the problem of uncovering causal relationships, the authors used the cross-lagged panel model (CLPM) to analyze the data collected in a three-wave longitudinal design. Four correlational models were examined: government vs. experts were crossed with conspiracy theories vs. pseudoscientific beliefs. Conspiracy theories and pseudoscientific beliefs seemed to behave similarly, in both institutional contexts, but the two types of institutions differed. In the context of the government, a bidirectional influence was observed between institutional distrust and unfounded beliefs. With respect to scientific experts, the influence was unidirectional, from increased susceptibility to unfounded beliefs to lowered

trust in experts. The authors suggest that distrust in political institutions may have been caused primarily by the chaotic operation of the Slovak government at the time of data collection, whereas trust in experts was shaken by prior exposure to different types of unfounded beliefs.

I would like to add a minor supplement to this explanation (which is also relevant to Halama's study). There is an important similarity between conspiracy theories and pseudoscientific beliefs: at least many pseudoscientific beliefs are reasonably considered special cases of conspiracy theories. That is, pseudoscientific beliefs (e.g., "Ivermectin cures COVID-19") typically come with a tacit conspiracy assumption (e.g., "Ivermectin cures COVID-19, yet doctors do not approve it, instead they force on us the vaccines – that's malicious!"). It appears uncommon to find people who hold a pseudoscientific belief (of this kind) without the corresponding conspiracy framework (e.g., "I am sure Ivermectin cures COVID-19, but no problem, I am prepared to take the vaccine instead."). This might help to explain the subtly similar patterns of results for conspiracy theories and pseudoscientific beliefs, in both institutional settings.

Secară and Opre investigated the cognitive factors behind people's susceptibility to health-related fake news. Since this is not an unexplored territory, the authors chose a new type of content in this context (health-related fake news), and a new predictor (memory overconfidence), in addition to previously established ones (reflexive and reflective thinking). The participants, in addition to completing thinking style questionnaires plus memory tasks (for working memory and general knowledge) also rated the trustworthiness of 12 untrustworthy and 6 trustworthy articles (drawn from the Internet or generated by the authors) about health-related topics. In an intricate design including an intervention stage they demonstrated that overconfidence with respect to working memory and long-term memory both predicted fake news vulnerability. Reflective and reflexive thinking, however, did not, contrary to earlier findings. The intervention followed a first block of data collection (article rating plus memory tasks) and it consisted of giving feedback to participants about their performance on the memory tasks. This made it possible to manipulate participants' confidence levels, and news article rating, in a second block of data collection. Interestingly, although the intervention did affect participants' memory confidence, it did not alter their trustworthiness ratings of the second set of health-related articles. This was explained by a supposedly weak effect of the feedback procedure which did not carry through to the dependent variable. The authors also argued that the limited success to reproduce the effects of thinking style may be due to the non-western character of the society where the data were collected. This seems to deserve further attention. With respect to overconfidence, the results showed that it was overconfidence, regardless of memory performance, that predicted fake news vulnerability.

Benza, Kun, and Szabó examined the relationship between media consumption (pro-government, independent, both, and neither), system justification beliefs (SJB), and beliefs about efficacy of political action. They hypothesized that 1) system justification and beliefs about political efficacy exhibit a nonlinear relationship, namely an inverted U-shape curve; 2) independent media consumers show lower values on the system justification scale; 3) the relationship between media consumption and efficacy beliefs is mediated by system justification as the latter factor has an influence on political efficacy. They found that higher levels of system justification were associated with lower levels of political efficacy beliefs; the nonlinear component was not demonstrated. Pro-government media consumers did indeed show higher SJB levels than consumers of independent media. Finally, mediation analysis showed that the direct and indi-

rect effect between media consumption and efficacy beliefs work in opposite directions: the direct effect is negative (independent media consumers have a lower sense of political efficacy) whereas the mediation via system justification tends to counteract this tendency. One way the authors explain this finding is by suggesting that independent media consumption may enhance people's motivation to resist, instead of strengthening their belief that political action would be efficacious (a slight ambiguity inherent in the items used to measure perceived efficacy). Note that since there is solid evidence that media outlets operated by the far-right Hungarian government propagate disinformation, the results of this study also imply (although this is not stated overtly) that disinformation may play a role in enhancing system justification, and consequently shape attitudes toward political efficacy.

Pseudoscientific beliefs have been intensely investigated in recent years; however, scientism, a type of attitude that is in many respects the opposite of pseudoscientific views, has received little attention. This is the focus of the work by Lukić and Žeželj. Scientism, contrary to pseudoscientism, is an uncritically positive view of science and scientists. However, scientism may serve a purpose similar to that of pseudoscientific views, namely provide quick answers to difficult questions, and alleviating anxiety. Lukić and Žeželj report two empirical studies. In both, uncritical trust in *science* and that in *scientists* were measured separately. In the first study they showed that a large proportion of the general population holds scientistic views; more than those endorsing pseudoscientific beliefs. In multivariate analysis, uncritical trust in science was predicted by extrasensory beliefs, whereas uncritical trust in scientists was predicted by conspiracy mentality and magical health beliefs (all three regression coefficients being negative). The second study was based on a pair of rival hypotheses, namely that 1) scientists are more inclined to accept scientism, because they trust science more than lay people; 2) scientists are less inclined to accept scientism because they understand the nature of scientific research better. No difference of an interesting size was found between scientists and laypeople in terms of uncritical trust in science, nor in terms of uncritical trust in scientists. This may perhaps be because both hypothesized effects are in play; this awaits further investigation. Beyond this, a complex correlational analysis demonstrated that scientistic and pseudoscientific beliefs share a common cognitive footprint, which is also modulated by the participants' cognitive ability.

Vincze, Németh, Amrein-Werner, Kokorin, and Bigazzi add another important factor to the picture: collective victimhood as a source of conspiracy theories and system justification. In their model tested by mediation analysis, both victimhood and conspiracy theories are layered. A historical and a contemporary subtype are separated in the case of conspiracy theories, and for victimhood, a historical and a comparative subclass are distinguished. The comparative aspect itself is two-faceted: it can be exclusive (e.g., "We suffered more than any other nation in history") or inclusive (e.g., "We help Ukraine because we went through similar hardships some time ago" – as politicians in Czechia and Poland recently justified their support for Ukraine). Conspiracy theories and system justification are considered as longer-term defensive strategies against threats to one's nation and identity, and they are mediated by a certain worldview comprising a sense of injustice, vulnerability, and distrust toward relevant outgroups. The mediation model built around this conceptual scheme confirmed the theory for victimhood in historical perspective. Historical victimhood was related to holding both historical and contemporary conspiracy theories, and this relation was mediated by distrust and injustice. The central mediating role of distrust is explained by its being a key consequence of victimhood as well as a core

characteristic of conspiracy theories. Historical victimhood beliefs also affected system justification but did so via vulnerability. All this scheme, however, was not confirmed for comparative victimhood. I wonder whether this is because, although exclusive and inclusive victimhood have quite different implications (e.g., with respect to solidarity or distrust), in the authors' measuring instrument exclusive and inclusive items were united in a single subscale (comparative).

The overall picture emerging from these studies focuses on pressing concerns in contemporary social sciences, and includes some innovative approaches. Interestingly, the majority of the papers investigates misconceptions related to health and science (Halama; Merva et al.; Secară & Opre; Lukić & Žeželj). Two are focused on political topics (Vincze et al.; Benza et al.). Not surprisingly, conspiracy theories and pseudoscientific beliefs are a central theme in five out of six studies (Halama; Merva et al.; Secară & Opre; Lukić; Vincze et al.), and overall these articles address factors such as personality, cognitive style, historical trauma, institutional trust, and the differences and similarities between scientific vs. pseudoscientific thinking as determinants of unfounded beliefs. Finally, media consumption, system justification, political efficacy, and victim attitudes as focal points (Benza et al.; Vincze et al.) may be particularly interesting in the current political and historical context lived and experienced by these authors (i.e., Hungary), but they are by no means specific to that environment.

Author's ORCID
Zoltán Jakab
https://orcid.org/0000-0001-8357-2642

References

Bambals, R., Biteniece, N., Hiršs, M., Zellis, K., Krūmiņš, G., Sauka, A., Miļūna. I., Rostoks, T., Andžāns, M., & Djatkoviča, E. (2022). *Rokasgrāmata pret dezinformāciju: Atpazīt un pretoties (Handbook against disinformation: Recognize and resist)*. Valsts kanceleja (State Chancellery), Riga. ISBN 978-9934-8225-5-1

Bērzkalne, A. (2024). Sowing chaos: The strategy behind Russia's interference in Romania. https://platformraam.nl/artikelen/2730-sowing-chaos-the-strategy-behind-russias-interference-in-romania

Chin, J., & Overby, N. (2025). Moldova versus Russian sharp power. https://theloop.ecpr.eu/moldova-versus-russian-sharp-power/

DeSisto, I., & Pop-Eleches, G. (2024). The high stakes in Moldova's 2024 election. https://daviscenter.fas.harvard.edu/insights/high-stakes-moldovas-2024-election

Erizanu, P. (2024). Romania's 'rigged' election shows Europe the dangers of Russian disinformation. https://www.theguardian.com/commentisfree/2024/dec/11/romania-presidential-election-russia-disinformation-europe

Fujiwara, T., Müller, K., & Schwarz, C. (2024). The effect of social media on elections: Evidence from the United States. *Journal of the European Economic Association, 22*(3), 1495–1539. https://doi.org/10.1093/jeea/jvad058

Harward, C. (2024). *Likely Kremlin-backed election interference against Romania Threatens Bucharest's continued support for Ukraine and NATO*. Institute for the Study of War. https://www.understandingwar.org/backgrounder/likely-kremlin-backed-election-interference-against-romania-threatens-bucharests

Mukherjee, P., Pascarella, J. A., Rentschler, L., & Simmons, R. (2024). Social media, (mis)information, and voting decisions. *Political Behavior, 46*, 1563–1588. https://doi.org/10.1007/s11109-023-09884-9

Wilson, T. D. (2011). *Redirect: The surprising new science of psychological change*. Little Brown and Company.