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Executive summary:

Over the past four years, researchers at the Institute of Experimental Psychology CSPS of the Slovak Academy of Sciences have conducted two interrelated projects (APVV-20-0335 and APVV-20-0387) examining the psychological and social roots of epistemically suspect beliefs, particularly conspiracy theories and disinformation. These projects responded to the increased salience of such beliefs during the COVID-19 pandemic and the war in Ukraine.

The first project focused on the long-term psychological and social impacts of the COVID-19 pandemic, particularly how it fostered conspiracy beliefs, institutional distrust, and maladaptive behaviors. Through a three-wave longitudinal design and experimental manipulation, the research identified key cognitive and demographic predictors of susceptibility to unfounded beliefs and examined how message framing influences discernment of true versus false information.

The second project investigated cognitive, personality, and social factors contributing to the acceptance and spread of disinformation and epistemically suspect beliefs (ESBs). It systematically tested four intervention strategies: promoting scientific thinking, inoculation via counterarguments, enhancing analytical thinking, and manipulating situational factors affecting information sharing. Importantly, the project aimed to move beyond correlational findings by experimentally testing causal mechanisms and identifying vulnerable groups for targeted interventions.

Together, these projects produced novel insights into the vicious cycle of conspiracy beliefs, distrust, and emotional distress, highlighting the interplay between cognitive biases, emotional factors like anxiety and powerlessness, and broader societal dynamics such as economic precarity and political polarization. The findings have both theoretical significance and practical relevance, providing evidence-based recommendations on how to mitigate the spread of misinformation and enhance societal resilience through targeted communication and education strategies.

Epistemically suspect beliefs and conspiracy theories[1]

Epistemically suspect beliefs =

beliefs unsupported or directly contradicted by most current scientific evidence

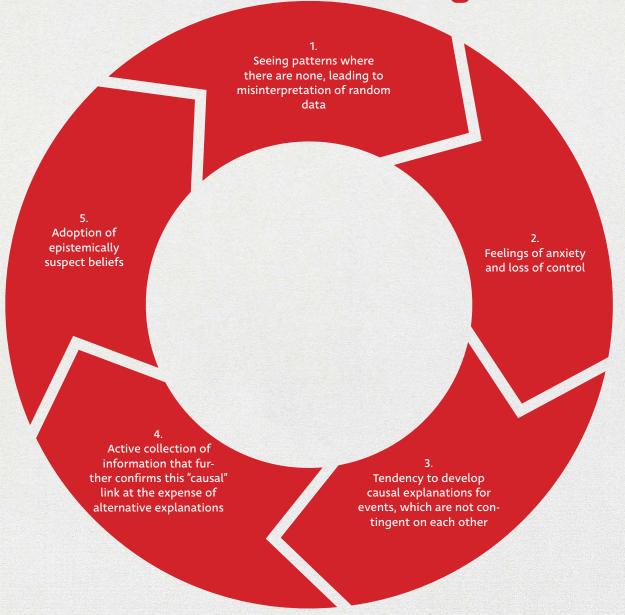
belief in paranormal phenomena

endorsement of conspiracy theories

acceptance of pseudoscience

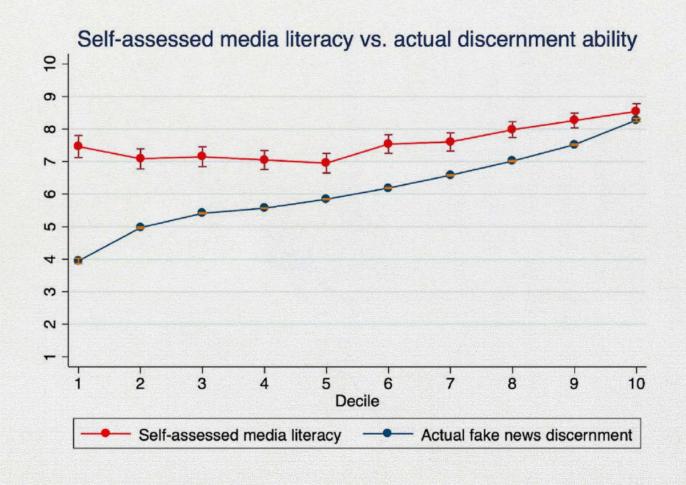
Conspiracy theories belong to a broader category of epistemically suspect beliefs.

The chain of biased reasoning[1]



Epistemically suspect beliefs may result from cognitive biases, such as those related to misperception of randomness.

Overconfidence^[3, 12]



People tend to overestimate their ability to discern true information from disinformation.

Their discernment can be improved by simple media literacy tips.

Conspiracy theories about COVID-19^[1, 2]

Conspiracy theories about health, vaccines and modern medicine

Examples:

medical industry and pharmaceutical industry work together to intentionally create new diseases

vaccines contribute to the development of autism spectrum disorder in children

powerful people work to make complementary and alternative remedies against cancer not accessible

COVID-19 is only a fabrication, it is and ordinary flu.

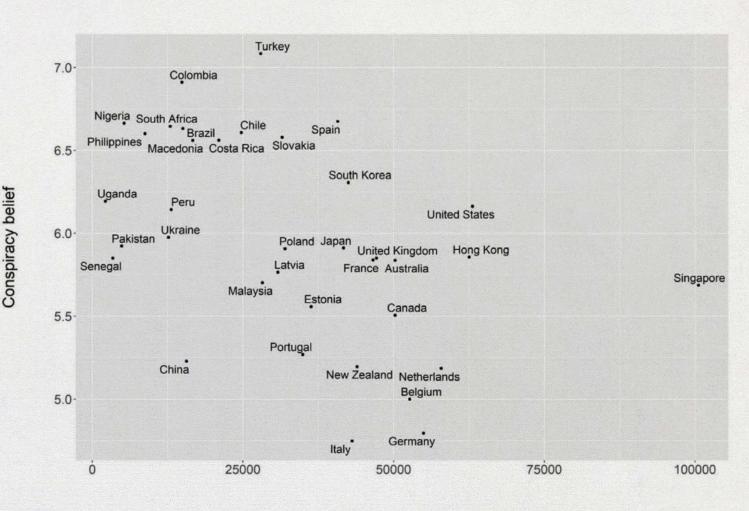
Conspiracy theories are attempts to explain the ultimate causes of significant social and political events and circumstances with claims of secret plots by a small group of people (the conspirators) acting for their own benefit, against the common good.

Conspiracy beliefs across the world^[4, 6]

Propensity to believe in conspiracy theories is linked to economic reality.

Across countries: conspiracy beliefs are stronger in countries with lower GDP, lower institutional trust, higher corruption and high socio-economic inequality.

Within a country: Both actual and subjective economic status plays a role. Objectively poorer people, and also those who believe they are poor (independently on whether they actually are) tend to have more conspiracy beliefs than wealthier people.



GDP per capita

Less conspiracy beliefs

Preference for analytical thinking

Ability to engage in scientific reasoning

Higher trust in science

Possessing more education and knowledge

More conspiracy beliefs

Preference for intuitive thinking

Tendency to jump to conclusions, failure to engage in open-minded thinking

Higher trust in social media

Possessing other epistemically suspect beliefs

The propensity to believe in disinformation and conspiracy theories can be inferred from certain attitudes and behavioral tendencies. [2,3,5,6,7,14]

Negative consequences of COVID-19 conspiracy beliefs^[2]

- Sympathy for violent radicalization
- Prejudice, discrimination, willingness to engage in violent actions
- More misguided behaviours, such as pseudoscientific practices
- More self-centred behaviours, such as hoarding goods
- Lower vaccination intentions
- Lower adherence to hygiene, physical distance, and mask-wearing guidelines

Beliefs in conspiracy theories can result in unfavorable behavioral outcomes.



East-west polarization^[8]



Attitudes towards Eastern / Western countries interact with beliefs in respective conspiracy theories and manifest in attitudes towards societal crises, such as war in Ukraine.

Vicious circle of conspiracy beliefs [2, 5, 9, 13]



Anxiety and negative emotions can result in conspiracy beliefs, which fuel even more anxiety and depression. The circle can lead to significantly lower psychological well-being.

To Prebunk or to Debunk a disinformation? [10, 11]



Refuting disinformation is more effective if used as a corrective, rather than preventive measure.

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