Work package vi

The debunking handbook 2020

Lewandowsky et al., 2020

June 14, 2022

Task: Please describe how misinformation should be debunked according to the authors on the basis of a self-chosen conspiracy theory (e.g., 5GCoronavirus conspiracy theory).

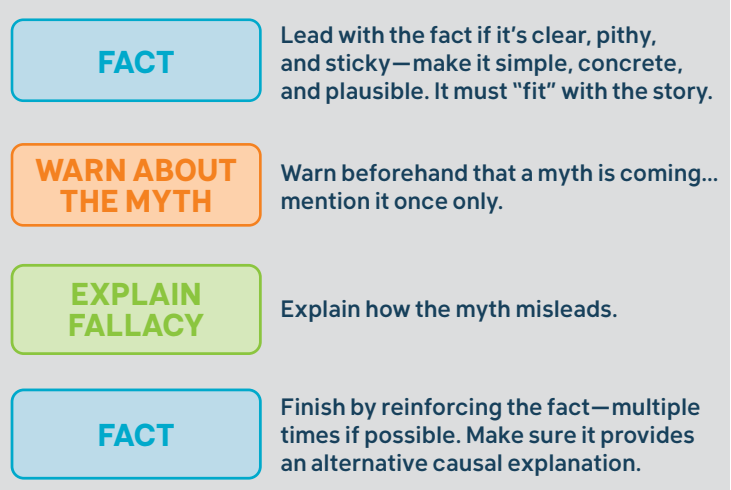
References

Lewandowsky, S., Cook, J., Ecker, U., Albarracin, D., Amazeen, M., Kendou, P., Lombardi, D., Newman, E., Pennycook, G., Porter, E., & al. (2020). *The debunking handbook 2020*. https://doi.org/10.17910/b7.1182

Debunk often and do it properly

Simple corrections on their own are unlikely to fully unstick misinformation. Tagging something as questionable or from an untrustworthy source is not enough in the face of repeated exposures.

Debunking is more likely to be successful if you apply the following 3 or 4 components:



FACT: State the truth first

If it's easy to do in a few clear words, state what is true first. This allows you to frame the message—you lead with your talking points, not someone else's.

The best corrections are as prominent (in the headlines, not buried in questions) as the misinformation.

Do not rely on a simple retraction ("this claim is not true").

Providing a factual alternative, that is an alternative that fills a causal "gap" in explaining what happened if the misinformation is corrected, is an effective method of debunking. Having a causal alternative facilitates "switching out" the inaccurate information in an individual's initial understanding and replaces it with a new version of what happened.

The alternative should not be more complex and should have the same explanatory relevance as the original misinformation [1, 80, 81].

There may, however, be circumstances in which the facts are so nuanced that they escape pithy summary. In those cases, it may be better to lead with an explanation of why the myth is false before explaining the facts.

MYTH: Point to misinformation

Repeat the misinformation, only once, directly prior to the correction. One repetition of the myth is beneficial to belief updating [27, 71, 82, 83].

But needless repetitions of the misinformation should be avoided: Although backfire effects are uncommon, we know that repetition makes information appear true [84, 85, 86].

Corrections are most successful if people are suspicious, or made to be suspicious, of the source or intent of the misinformation [87].

FALLACY: Explain why misinformation is wrong

Juxtapose the correction with the mistaken information. Ensure the rebuttal is clearly and saliently paired with the misinformation. It should be virtually impossible for the individual to ignore, overlook, or not notice the corrective element, even when skimming [27, 88, 89].

Rather than only stating that the misinformation is false, it is beneficial to provide details as to why. Explain (1) why the mistaken information was thought to be correct in the first place and (2) why it is now clear it is wrong and (3) why the alternative is correct [81, 90, 91]. It is important for people to see the inconsistency in order to resolve it [71, 83].

Such detailed corrections promote sustained belief change over time and protect against belief regression (i.e., a return to pre-correction beliefs [2, 52, 92]).

If possible, explain why the misinformation is wrong not only by providing a factual alternative but by pointing out logical or argumentative fallacies underlying the misinformation. A practical advantage of uncovering fallacies [66] is that they are not domain specific, and people can therefore benefit from the debunking in other content domains as well. Once you know that climate misinformation relies on cherry-picking [79] or incoherence [93], you may detect similar bad argumentation among anti-vaccination activists.

FACT: State the truth again

Restate the fact again, so the fact is the last thing people process.

Even with detailed refutations, the effects will wear off over time [3, 52], so be prepared to debunk repeatedly!

Example of a Refutation

FACT

Scientists observe human fingerprints all over our climate

The warming effect from greenhouse gases like carbon dioxide has been confirmed by many lines of evidence. Aircraft and satellites measure less heat escaping to space at the exact wavelengths that carbon dioxide absorbs energy. The upper atmosphere cools while the lower atmosphere warms—a distinct pattern of greenhouse warming.

Lead with the fact if it's clear, pithy, and sticky—make it simple, concrete, and plausible.

Provide a factual alternative that fills a causal "gap", explaining what happened if the misinformation is corrected.

Do not rely on a simple retraction ("this claim is not true").

MYTH

A common climate myth is that climate has always changed naturally in the past, therefore modern climate change must be natural also.

Warn that a myth is coming.

Repeat the misinformation, only once, directly prior to the correction.

FALLACY

This argument commits the single cause fallacy, falsely assuming that because natural factors have caused climate change in the past, then they must always be the cause of climate change.

This logic is the same as seeing a murdered body and concluding that people have died of natural causes in the past, so the murder victim must have also died of natural causes.

Explain how the myth misleads.

Point out logical or argumentative fallacies underlying the misinformation.

FACT

Just as a detective finds clues in a crime scene, scientists have found many clues in climate measurements confirming humans are causing global warming. Human-caused global warming is a measured fact.

Finish by reinforcing the fact.

Repeat the fact multiple times if possible.