

## 1. Title of the project

**Reading is Believing? Epistemic vigilance and perceived credibility of online information**

## 2. Coordinators

Inge van de Ven (DCU)

Myrthe Faber (DCC)

Ties van Gemert (DFI)

Mariana Dias da Silva (DCA)

Silvy Collin (DCA)

Marie Postma (DCA)

## 3. Project summary

In 2020 and 2021, the COVID-19 pandemic led to a significant rise in medical disinformation and conspiracy theories world-wide (Grimes, 2021). Online information can be offered by many different sources ranging from scientists and experts to public intellectuals, influencers, and celebrities. Some of these sources may be perceived as highly credible, in which case their opinions may be accepted at face value even if they are unlikely to be true (Sperber, 2010). In the case of other sources, however, being presented with new information may not result in a belief change (even if the information appears to be supported by evidence). What makes people change their minds? The goal of our research is to determine which factors influence potential belief update/revision of existing beliefs, given the perception of the information source and its credibility, in relation to processes of attention in reading and their relation to memory retrieval. We aim to address this question from the following four perspectives and their interplay:

1. *Cognitive*: Does perceived lack of source credibility lead to a higher degree of vigilance during reading, with possible impacts on memory? (E.g., slower reading times, higher recall/recognition, and/or better reproduction/reconstruction of information).
2. *Social psychological*: Which individual traits are likely to influence whether or not information will be perceived as credible, even when conflicting with prior beliefs? (E.g., dispositional awe, openness, and socio-demographic profiles).
3. *Cultural*: How does the perception of algorithmic media and a pervasive climate of skepticism affect processing of online information? (E.g., digital literacy, and digital skepticism)
4. *Philosophical*: From an epistemological point of view, how can we account for information updates that violate epistemic rationality? (E.g., beliefs that conflict with previous epistemic commitments of a person, and hypotheses that can be supported both by true/false evidence)

The project will be a collaborative effort between supervisors from each of the four departments within TSHD. Our **overall objective** is to understand a common and important real life phenomenon, namely how we consciously and unconsciously deal with evidence and source credibility in our daily lives. This complex question can only be answered by combining the four perspectives outlined above. We seek to **bridge the gaps between them by uniting qualitative and theoretical insights with quantitative and experimental approaches**.

Given the size and interdisciplinary nature of our team, we would like to apply for two research trainees who would each benefit from collaborating with researchers outside their core discipline. Specifically, we envision that trainees would be involved in the theoretical and practical development of an experiment aimed at

collecting questionnaire and behavioral data, providing them with hands-on experience with experimental work as well as theory development. In our research design, we make sure that the trainees do not work alongside each other, but in close collaboration, each from their specific disciplinary expertise. This will warrant the *inter-* (rather than multi-) disciplinary nature of the project.

#### 4. Project timeline

The focus of the project will be an empirical study in which participants will be presented with texts that support or contradict their prior medical beliefs about vaccinations. The methods employed to measure how readers process, reconstruct and reproduce the information will include questionnaire instruments, textual analysis, and behavioral measures of cognitive processes (eye tracking and mouse tracking).

Next to conducting a literature review and collecting empirical data, the two research trainees involved in the project will be asked to write a blog post reporting on their collaboration and findings, to be published on the website of the International Cognition and Culture Institute. They will report on the outcome of the project in an article, to be co-authored by the whole group.

Month	Trainee 1	Trainee 2	Milestone
Sept 2021	Preparatory phase: literature review and theoretical framework		Literature review manuscript
Oct 2021	Experiment preparation and data collection		Experimental environment setup
Nov 2021	Data analysis		Processed and analyzed data set
Dec 2021	Writing blog post <i>Cognition and Culture</i> and co-authoring an article		Public and scientific outreach through blog and article

#### 5. Research trainee profile

We are looking for two trainees on MA-level: one from DCA or DCC, another from DCU or DFI. The candidates should be enthusiastic about the prospect of receiving multidisciplinary training and working in close collaboration with scholars from other fields.

The DCU/DFI candidate is expected to take the lead in conducting a literature review and constructing a theoretical framework synthesizing scholarly work on misinformation in media, theories of reading, and mind wandering. They are asked to engage in the textual analysis of source materials for the experiment, and will assist the other candidate in analyzing the experimental data. In collaboration with the rest of the team, they will draft a report. As a requirement, the candidate should show interest in at least two of the following fields of study: literary studies, new media, health humanities, experimental philosophy, philosophical psychology, or epistemology. Experience with qualitative approaches like close reading and discourse analysis is expected; experience with quantitative methods and statistics is welcome but not mandatory.

The DCA/DCC candidate is expected to take the lead with respect to the experimental part of the study (setting up the experiment, collecting and analyzing data). They will assist the first candidate in drafting a literature review and formulating the theoretical framework, primarily focusing on the role of attention and individual

traits such as dispositional awe and openness. In collaboration with the rest of the team, they will draft a report. The ideal candidate will be interested in cognitive phenomena related to attention and want to become acquainted with lab techniques necessary to collect behavioral data. They would preferably have a sound knowledge of statistical analyses conducted in R or Python.

Applications, including a motivation letter and a CV, should be sent to:

Dr. Myrthe Faber [m.faber@tilburguniversity.edu](mailto:m.faber@tilburguniversity.edu)

Dr. Inge van de Ven [i.g.m.vdven@tilburguniversity.edu](mailto:i.g.m.vdven@tilburguniversity.edu)