

# Fake scientific provenance as a driver for disinformation – Peoples' disinformation behavior in health contexts

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## FORMAT

Short paper

## ABSTRACT

Individuals learn about the world by searching, collecting, filtering, reviewing, and communicating information. Disinformation inhibits this process, as it challenges and hinders individuals to find correct information sources. The implications are far-reaching; without being able to identify reliable and accurate sources of information, people cannot make sound decisions or make decisions that harm themselves or others, e.g. regarding health choices as seen during the Covid-19 pandemic.

Disinformation is misleading, misunderstood or even false information that can harm a person, social group, organization or even a country and potentially has a dangerous impact (Fallis, 2015). Disinformation in the health context leads to poor health choices, inhibits efforts to relieve health crises, for example mistrust in vaccines against Covid-19, and impacts health information literacy (e.g. Baines and Elliot, 2020; De Gani et al, 2022). The need for strategies to counteract the harmful influences of disinformation in the health domain is inevitable. For that, we need to better understand the behavior that results in disinformation and its spread.

During the Covid-19 pandemic, there was a tremendous increase in the dissemination of scientific health information (Islam et al., 2020). Among other reasons, mimicking scientific appearance and provenance of misleading health information promotes its spread. The trust in scientific results and in scientific health experts can be considered major drivers for increased sharing of information (e.g. in person and/or digitally; Boutron et al., 2019) – which can be exploited to accelerate the spread of disinformation, too. This creates new challenges for citizens and the society, as it needs special abilities and skills to be able to recognize, identify, evaluate, and reject health disinformation with scientific characteristics and look.

However, the perceived scientific nature as a driver for (digital) disinformation campaigns has been little researched from information science perspective (Hahn et al., 2020). The *DESIVE<sup>2</sup>* research project aims at investigating underlying mechanisms of digital dissemination of supposedly scientific disinformation in the health context. To this end, longitudinal qualitative interviews, diary studies and surveys will be conducted to determine what critical events and subjective triggers lead individuals to disseminate scientific health disinformation. Based on the research findings and previous work in Information Science (e.g. Karlova & Fisher, 2013, Agarwal & Alsaedi, 2021), an information behavior model of peoples' health disinformation behavior will be developed by the research group.

The project results make an important contribution to the entire Information Science field as well as to (Health) information behavior research and can be applied in education and politics in the future.

In this presentation, we will introduce the objectives and research questions of the *DESIVE*<sup>2</sup> project as well as our research design. The project will follow the grounded theory method juxtaposing different data collection sources and their qualitative analyses. We will present definitions and concepts that we will work with around health disinformation and associated health information behavior as well as components of health disinformation that appear scientific. Goal is to stimulate a discussion within the Information Science community around our approach, definitions, and concepts. Feedback from the community will be incorporated into the research process.

## KEYWORDS

Disinformation, Health Information Behavior, Scientific Disinformation, Grounded Theory, Disinformation Behavior Model

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