



## **Negative headlines affect us even when we do know better**

New HU study on the "success" of "fake news" against better knowledge

New findings from neurocognitive studies by researchers at Humboldt-Universität zu Berlin (HU) show why emotional messages in headlines are often "successful". We seem to be particularly susceptible to negative messages, even when they come from untrustworthy media sources. This susceptibility is lower for positive contents. The results described provide initial indications of how we could better protect ourselves against the influence of emotional "fake news."

We are often good at correctly assessing the trustworthiness of news sources. This simple indication can help us distinguish misleading half-truths and false information from facts. Therefore, it is reasonable to explicitly assess the trustworthiness of the source as a remedy against mis- and disinformation: Can we thereby protect ourselves from the emotional contents?

### **Actively assessing the trustworthiness of sources before exposure to headlines**

In the study of the Berlin School of Mind and Brain and the Psychological Institute of the HU, subjects were first asked to assess the trustworthiness of well-known German media sources. This was supposed to encourage them ("nudging") to pay more attention to the credibility of the sources when confronted with social-emotional or comparatively neutral headlines about people in the respective online layout of the media sources. For example, one person was reported to have embezzled taxpayer funds, and another was reported to have shown outstanding moral courage. After a short break, the brain activity of the subjects was measured while they judged the persons presented on the basis of their faces.

### **Judgments and brain responses are dominated by negative headlines - even in the absence of credibility**

The negative content of the headlines had a strong impact on judgments, even when the subjects previously attested to a lack of credibility of the source. People about whom negative headlines had appeared were judged to be very negative and unlikable, regardless of the trustworthiness of the news source.

The brain activity of the subjects was recorded using an electroencephalogram while they made judgments about the individuals. The dominance of negative content was evident in

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rapid, involuntary brain responses. Even the visual perception of faces was affected by negative headlines. An effect of the assessment of trustworthiness was expected in slower, controlled brain responses. However, those also showed dominant influences of negative headlines independent of trustworthiness.

### **Lower receptivity to positive headlines lacking credibility**

Positive headline contents also affected judgments, such that individuals who were reported as positive were rated as positive and likable, regardless of the source. However, there was also evidence that the assessment of trustworthiness tended to have an influence here. Subjects were slower to make judgments when positive headlines came from untrustworthy sources. Both fast, involuntary and slower, more controlled brain responses showed the effect of positive headlines from credible sources, but no effect of those from untrustworthy sources.

### **What to do about dis- and misinformation?**

The results show that emotional headlines, especially those with negative content, influence our thinking and judgments even when we do know better. Simple measures against "fake news" aimed at considering the credibility of the source do not seem to be sufficient as the sole measure to counteract the influences of negative emotional messages. In the case of positive messages, the effects of actively considering the trustworthiness of the source provide initial indications of possible countermeasures.

### **Publikation**

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