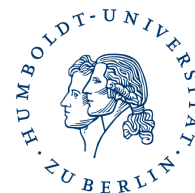


Press release
21 december 2020



Emotional headlines have an impact regardless of the credibility of the source

New HU study on the influence of 'fake news' on the brain

Neurocognitive studies by researchers at the Humboldt-Universität zu Berlin (HU) show that headlines with emotional content influence our judgments about other people even when we consider the media source to be untrustworthy.

Rumours, half-truths and misinformation can be consumed and shared non-stop online and have an enormous reach. Although their truthfulness is questionable, they can have a significant impact on personal opinions and public discourse. Until now, however, little was known about the consequences of confrontation with such information on how it is processed in our brains and to what extent this neural process influences our judgments. New findings from neurocognitive psychology show that emotionally charged headlines exert a major influence on the way we process information and form judgments of others, even when we do not consider the news source credible.

Exposure to headlines from trustworthy and untrustworthy sources

The credibility we ascribe to news sources seems to be a simple cue for judging or classifying the truthfulness of information. But does such classification also protect us from the influence of emotional headlines? To investigate this, subjects in the study by the Berlin School of Mind and Brain and the HU's Department of Psychology were confronted with fictitious headlines in the particular online layouts of well-known German media sources. There, they read headlines with social-emotional or comparatively neutral information about fictitious persons. For example, one person was reported to have embezzled tax revenues and another, to have shown outstanding civil 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.

Emotions influence our judgments – the credibility of the media source has no effect

Although the participants rated the media sources as having different levels of credibility, these ratings did not play a role in the formation of their opinions. The emotional content of the headlines, on the other hand, had a strong impact on their judgments: even when subjects did not trust a news source, they made extreme judgments about people whose negative or positive behaviour was reported in the headlines. Participants rated people whose behaviour was described as negative as

Humboldt-Universität zu Berlin

Department of Communications,
Marketing and Events
Media and Communications Office

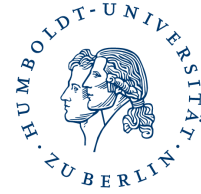
Unter den Linden 6
10099 Berlin
Tel.: +49 30 2093-2946
Fax: +49 30 2093-2107
www.hu-berlin.de/en

Press Spokesperson

Hans-Christoph Keller
Tel.: +49 30 2093-2946
hans-christoph.keller@hu-berlin.de

Expert database

www.hu-berlin.de/en/press-portal/experts



unlikable and negative, while they rated people who made headlines due to good deeds as very likable and positive.

Brain activity shows the impact of emotional headlines

The subjects' brain activity was recorded using an electroencephalogram (EEG) while they made judgments about the individuals. Fast, involuntary brain responses can be distinguished here from slower, more controlled responses. The researchers had expected the latter to involve consideration of the source's credibility in addition to emotion, and thus that credibility might factor into people's judgments, whereas emotion should dominate in early and more involuntary responses. However, both late and early brain responses showed dominant influences of headline emotionality independent of credibility.

These new findings show that news content that triggers emotions such as excitement or outrage does not simply bounce off us, even when the trustworthiness of the source is judged to be low. Rather, reservations about the reliability of a source have no effect when emotional content dominates our judgment. Recognising and further exploring these consequences of emotionally charged news is an essential first step in protecting against the potentially damaging ramifications of rumours, half-truths, and misinformation.

Publication

Baum, J. & Abdel Rahman, R. (2020). Emotional news affects social judgments independent of perceived media credibility. *Social Cognitive and Affective Neuroscience*.
<http://doi.org/10.1093/scan/nsaa164>

Contact

Prof. Dr Rasha Abdel Rahman
Neurocognitive Psychology
Department of Psychology
rasha.abdel.rahman@hu-berlin.de
Tel.: 030 2093-9413

Julia Baum
Neurocognitive Psychology
Department of Psychology
julia.baum@hu-berlin.de