

# Risk perception influenced less by media than previously thought: Study

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For decades, researchers have assumed that people overestimate the risk of dramatic causes of death, such as road traffic accidents. The reason given for this was that such deaths are the subject of far greater media

attention than more significant but less spectacular mortality risks.

However, a [study](#) at the Technical University of Munich (TUM) published in *Cognition* has now debunked this assumption. Although dramatic causes of death receive disproportionate media attention, deaths in the personal environment are more important for the risk perception.

From road traffic accidents to fires and murders, dramatic causes of death receive considerable media attention. The [scientific consensus](#) to date has been that, because the media report dramatic causes of death more frequently than "silent" causes such as heart attacks and diabetes, many people misjudge their prevalence. In specialist literature, this was considered one of the most settled findings in research into risk perception.

However, this assumption can ultimately be traced back to just a single [study](#). In 1978, a team led by Sarah Lichtenstein at the Oregon Research Institute asked respondents to estimate the number of annual deaths for around 40 different causes. The study compared these assumptions with real figures and also examined the extent to which these causes of death were reported in the media and how this reporting was perceived by the respondents.

In the course of his research into risk perception, Thorsten Pachur, professor of behavioral research methods at TUM, discovered something surprising: the study's conclusions were not underpinned by statistical analyses and had not been confirmed in subsequent studies.

With this in mind, Pachur reevaluated the data from the original study. In addition, he incorporated the two subsequent studies (in which he had participated) that had also examined risk perception and conventional media reporting with similar lists of causes of death, reevaluating their

data using the same method.

## **Results of influential study not replicable**

Thorsten Pachur's study has confirmed that dramatic causes of death have indeed been covered with disproportionate frequency in news reports given their actual prevalence, while unspectacular causes of death have been underrepresented.

However, Pachur's analysis called the prevailing assumptions about people's risk perception into question. His evaluation of the data confirmed that the respondents in the 1978 study inaccurately estimated the prevalence of seemingly spectacular risks. However, it was not possible to replicate this result with the data from the more recent studies. The results of a research experiment are only considered verified when they are replicable.

Instead, Pachur's evaluation of the two more recent studies showed that overestimation or underestimation of a risk is not dependent on whether the respective cause of death is dramatic or non-dramatic. This conclusion remains valid even when evaluating the aggregated data of all three studies. And, when Pachur integrated further studies examining perceptions of mortality risks (but not media reporting), his conclusion was confirmed again.

"These insights do not call into question the fundamental notion that the media can influence people's perception of risks," emphasizes Pachur. "However, we should stop believing that a distortion in the level of reporting necessarily leads to a distortion in risk perception."

## **Deaths in social environment are a more significant factor**

Pachur also found a different explanation for people's perceptions. Some of the studies he analyzed had also asked participants about their social environment. The new evaluation of this data has shown that the number of deaths of people known to an individual has a far more significant influence on the [risk perception](#) of the respective cause of death than the [media](#).

"An important finding is that we are not helpless in the face of distortions in reporting," says Pachur. "People are evidently quite capable of engaging consciously with news reports and incorporating other sources into their judgment."

**More information:** Thorsten Pachur, The perception of dramatic risks: Biased media, but unbiased minds, *Cognition* (2024). [DOI: 10.1016/j.cognition.2024.105736](#)

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