

Our perception of risk depends on our personal experience, says psychologist Dr Peter Wiedemann. He is an adjunct professor at Monash University, Melbourne and he studies how people assess risk. He is a member of the Advisory Board in the communication project MIRKKOMM, which is coordinated by the BfR.

Mr Wiedemann, whether it's mercury in fish, microplastics in the air, or the coronavirus: surveys on the assessment of health risks aim to probe and reflect public opinion. Do they always succeed?

It's not easy to find out how people assess a health risk. Whether the topic under consideration is really important or rather irrelevant in the everyday lives of respondents is a decisive aspect.

#### How can that be discovered?

You can find out how often a person thinks about a topic, let's say microplastics. For example: How often have you thought about microplastics in recent days - not at all, rarely, quite often, very often?

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# "The key factor is personal relevance: Does this risk play a role in my life?"

Psychologist Dr Peter Wiedemann

#### What does that mean for the survey result?

I surveyed 1,583 people about risk as part of a BfR investigation. 677, so less than half of those surveyed, were concerned to a greater or lesser degree. Under closer analysis only 98 of those 677 were "genuinely" concerned. I call those the "concerned concerned". They tend to be fearful. And they ignore the fact that the risk posed by, for example, a chemical always depends on the dose. Instead, they stress that it is inherently dangerous. So when you look more closely, you can see that the degree of concern in the population is often lower than the survey results would initially suggest.

## What determines whether a risk matters to a person?

The key indicator is its relevance to the individual: Does this risk play a role in my life? Other factors are also involved: Is this a new problem? Are we talking about something strange and unfamiliar or a potentially major threat such as cancer? Do I already have "coping strategies" or does this issue require reorientation? Are other concerns more important? In a nutshell, it's all about the everyday relevance of the risk.

### What factors underpin everyday risk perception?

What we call risk perception really refers to judgements or assessments of risk. Here too, the relevance to one's own life is paramount: Do I have experience with this risk?

The individual is the key factor when it comes to risk assessment. Alongside personal experience, the experience of friends or acquaintances also plays a role. Media information is another source. This might take the form of scientific statistics. However, such sources are less important than personal experience.

## And what happens if there is a lack of both subjective and objective information on a risk?

In this case heuristics, or intuitive reasoning, takes over. For example: Things with complicated names are risky. "Acetylsalicylic acid" sounds more dangerous than "aspirin", although it's the same substance. Heuristic thinking can also be derived from political views. For example, people assume that the pursuit of profit and the protection of health are incompatible. Therefore: sugar is a product of the profit-focused sugar industry, meaning it poses a risk.

## Can you influence a risk assessment using fact-based arguments?

Risk assessments based on experience are hard to influence. They are more open to influence when based on media information or heuristics. As a rule, it's hard to change a gut feeling. —

#### More information



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