More traffic deaths in wake of 9/11

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In the wake of the terrorist attacks of September 11, 2001, many Americans started driving more due to a fear of flying – and lost their lives in traffic accidents. But why did this happen more frequently in some states than in others? And why didn't Spanish driving habits change in the same way following the 2004 train bombings in Madrid? Wolfgang Gaissmaier and Gerd Gigerenzer from the Harding Center for Risk Literacy at the Max Planck Institute for Human Development in Berlin present new findings on this topic in the journal *Psychological Science*.

As we all know, the terrorist attacks of September 11, 2001 changed the world: The feeling of vulnerability led to the so-called "war on terror." New laws were passed and surveillance intensified to reduce the risk of direct damage resulting from terrorism. But terrorist attacks also cause indirect damage. This comes about through people's thoughts and fears in reaction to such attacks. In the case of 9/11, it was primarily severe losses in the aviation and tourism industries. Earlier studies showed that, following the terrorist attacks, more people chose to drive rather than fly, feeling it was safer. The result was not just a greater risk of traffic congestion: in the twelve months following September 11, 2001, there were an estimated 1,600 more accident-related deaths on American roads than would have been expected statistically.

But why would such an increase in traffic and, with it, also in traffic deaths, be observed only in some states and not in others? And why was no increase in driving and in traffic accidents seen following the likewise devastating train bombings in Madrid in 2004? Psychologists Gaissmaier

and Gigerenzer from the Max Planck Institute for Human Development and the Harding Center for Risk Literacy based there present new analyses, which will soon be published in the journal Psychological Science.

In the analyses, they show that car traffic increased particularly in the New York vicinity. The main attacks were focused on the World Trade Center located there. These images, and thus also the fear, were presumably particularly present for people who lived in the surrounding area; other studies also support this assumption. However, the authors further identify a second, even stronger factor that could explain why the traffic volume increased sharply even in some states far away from New York, especially in the Midwest: there, the infrastructure was simply very well suited to replace flying with driving. The streets were very well developed in relation to the number of inhabitants, and many cars were registered.

"Our study findings support the assumption that the fear created by terrorist attacks can cause potentially risky behaviour. But they also make it clear that fear alone is not enough to understand where indirect damage can occur in the wake fatal events like those of 9/11," says Wolfgang Gaissmaier. "To predict where the indirect damage of terrorist attacks can have particularly fatal consequences, and to possibly curb a secondary, psychological attack, we must pay very close attention to the general conditions that first make it possible for risky, fear-induced behaviours to express themselves – such as the respective infrastructure."

That could also explain why there were fewer Spanish train travellers following the train bombings in Madrid on March 11, 2004, but without any corresponding increase in car travel. Spain simply has a less pronounced car-driving culture, and Gaissmaier and Gigerenzer also express this in numbers: in 2001 in the US, there were around 800 cars

registered per 1,000 inhabitants, while in 2004 in Spain, this figure was just around 600.

More information: Gaissmaier, W. & Gigerenzer, G. (in press). 9/11, Act II: A Fine-grained Analysis of Regional Variations in Traffic Fatalities in the Aftermath of the Terrorist Attacks. *Psychological Science*.

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