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# New Study Highlights Importance of Mental Health in the Safety of Automated Driving

**Automated driving is expected to reduce road deaths and cut carbon footprint. A study published today, involving Prof. Gunther Meinlschmidt of the International Psychoanalytic University (IPU) Berlin, found that 41% of respondents anticipate experiencing symptoms of phobia when using an autonomous car. Findings highlight the importance of mental health considerations in the safety evaluation of these systems and the need to address mental health concerns for the successful integration of autonomous cars into society.**

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Nationally representative survey indicates that anxiety towards automated driving is common

The study, conducted by Prof. Gunther Meinlschmidt and colleagues from the IPU Berlin, the Universities of Basel and Zurich, and the RWTH Aachen University, used a nationally representative face-to-face household survey to assess anticipated levels of anxiety towards using cars with an activated advanced automated driving system (ADS), that is for example an autonomous car, which is fully taking over accelerating, braking, and steering, while in charge of monitoring the driving environment. The authors examined these fears and anxiety that they termed 'automatophobia', based on specific phobia criteria, using structured diagnostic interviews.

The team found that 41% of the more than 2,000 respondents surveyed anticipated experiencing some symptoms of phobia of ADS, 15% anticipated subthreshold phobia, and 3% anticipated full-blown phobia of ADS. Further, results indicated that automatophobia appears to be distinct from fears related to non-automated driving and other specific phobias.

Mental health considerations should come into focus to ensure safety of autonomous cars

"We already knew from aviation that new modes of transport can come with impeding fears and anxiety", says Meinlschmidt, first author and Professor of Clinical Psychology and Cognitive Behavioral Therapy at the IPU Berlin and Head of the Department of Digital and Blended Psychosomatics and Psychotherapy at the University Hospital Basel, "yet, we were rather surprised to learn about the large proportion of the population that is expecting to experience fears and anxiety towards automated driving; with a considerable part having symptoms that impede daily living, notably both while using an autonomous car as well as while cycling or walking in traffic consisting of autonomous vehicles".

The authors of the study note that their findings call for prevention and treatment of phobia of ADS as they become increasingly ubiquitous in our society. “Understanding and addressing the mental health concerns associated with automated driving systems is crucial for ensuring the safe and successful integration of this technology into our society”, says Gunther Meinlschmidt.

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Originalpublikation:

Meinlschmidt, G., Stalujanis, E., Grisar, L., Borrmann, M., & Tegethoff, M. (2023). Anticipated fear and anxiety of Automated Driving Systems: Estimating the prevalence in a national representative survey. International Journal of Clinical and Health Psychology, 23(3). doi:10.1016/j.ijchp.2023.100371

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Automated Driving
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