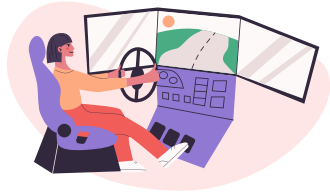


EARLY INSIGHTS

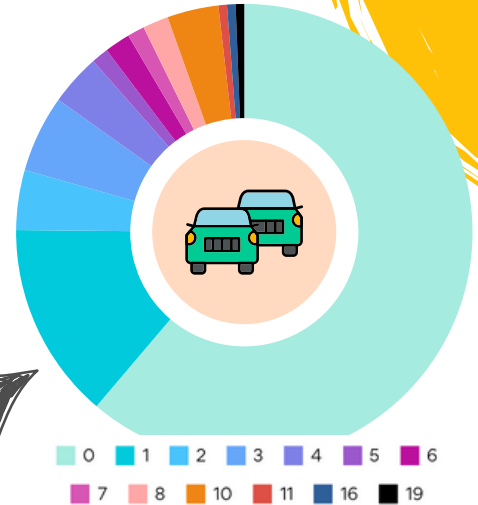
Preliminary results and emerging trends from 32 participants who completed 165 simulated driving scenarios involving overtaking.

Note: a larger sample is needed to determine statistical significance.



Driving simulator scenarios:

- **TRUCKS:** Single lane highway behind trucks travelling slightly below the speed limit. Varied frequency of oncoming cars.
- **TAILGATING:** Driving behind cars travelling under the speed limit on a single lane rural road or urban highway.
- **TAILGATED:** Driving while being tailgated by other vehicles on a single lane rural road or urban highway.



Total overtaking

Out of the 165 scenarios that drivers participated in, 101 had no instances of overtaking. While most of the remaining scenarios had only 1 recorded overtake, others had over 10 instances of overtaking. One participant was recorded **overtaking 19 times** in one scenario (~10mins).



31 instances of dangerous overtaking

(when not clear and/or with oncoming vehicles)

On average...

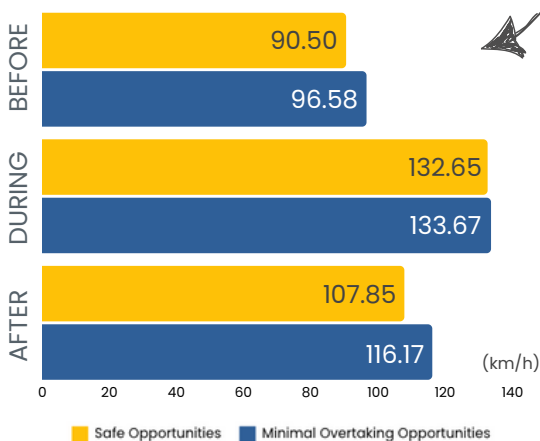
- More overtaking of trucks when there were fewer opportunities to do so safely. 😊
- More overtaking on rural roads compared to urban highways.

On a real road, each of these could have led to a serious or even fatal crash. Misjudged overtaking decisions have life-threatening consequences.

Speeding while overtaking

On average, participants exceeded the 100km/h speed limit while overtaking in both safe scenarios and scenarios with minimal overtaking opportunities. Even the participant with the lowest recorded speed whilst overtaking (104km/h) **exceeded the speed limit**. After overtaking, speeds remained high, especially in minimal opportunity scenarios, suggesting that drivers not only overtook at faster speeds, but also maintained a faster speed afterward, possibly to compensate for the perceived difficulty of the overtaking scenario.

Average Speeds Before, During, and After Overtaking



COMING SOON

Participants wore a Hexoskin vest during the driving simulation, capturing real-time heart activity. This data provides insight into driver fatigue, alertness, stress, and cognitive load. Findings will be discussed in future reports, alongside data from the eye-tracking device.

