

Did you look at the moose? Driver gaze behaviour while searching for hazards in dynamic road scenes

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APPLY LAB

Under ideal conditions, drivers look directly at hazards right before reporting their location most of the time.



Misses are associated with looking too late, or not at all.

Gaze behaviour during real driving is likely less optimal.

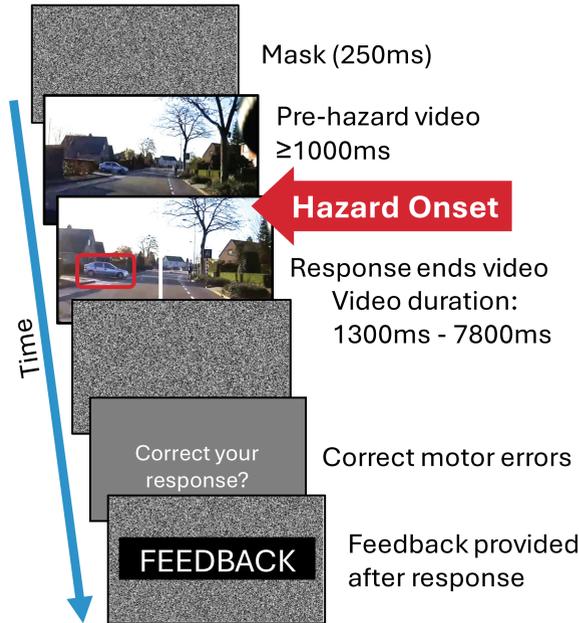
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Where and when do drivers look while searching for road hazards?

Methods

Task - 261 road videos
 As soon as the hazard appears, indicate its location (left or right)



Hazard Examples



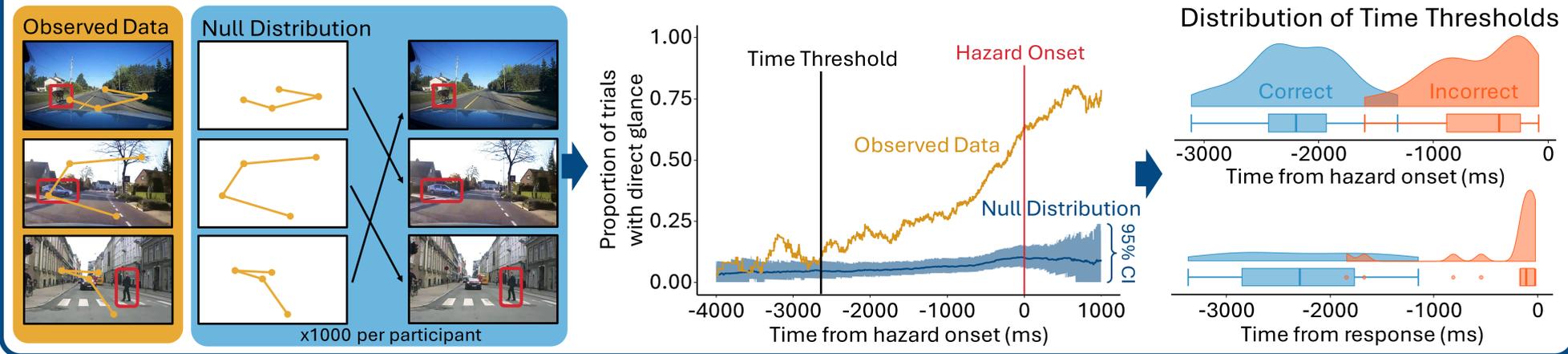
Road Hazard Stimuli¹

Eye tracking
 Direct glance: gaze position inside annotated hazard box

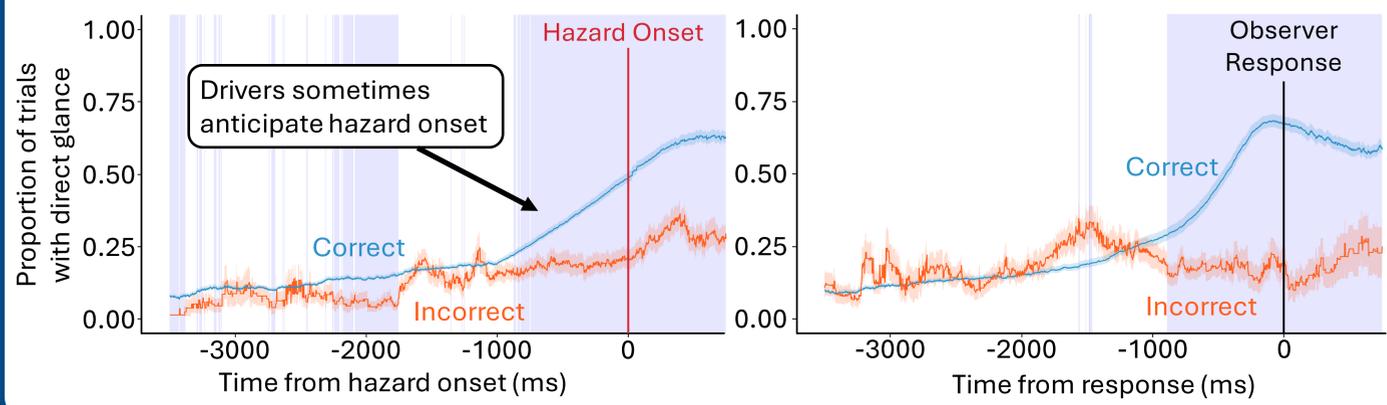
Sample
 30 licensed drivers
 Age 18-22, mean 18.83



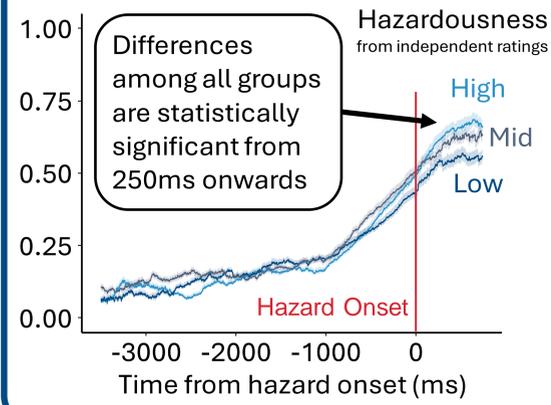
Driver gaze behaviour is not random before hazard onset



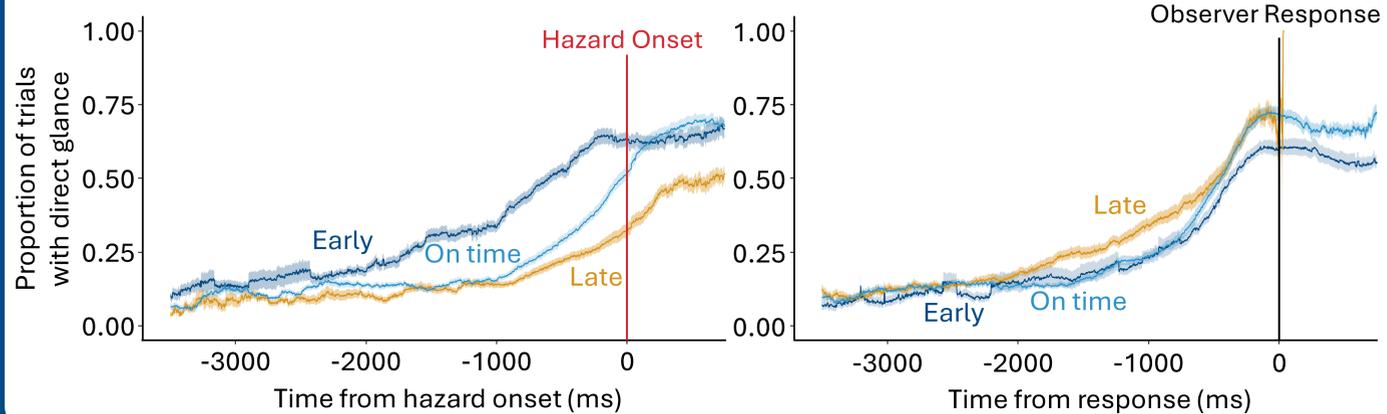
When correct, drivers look directly at hazards and respond immediately



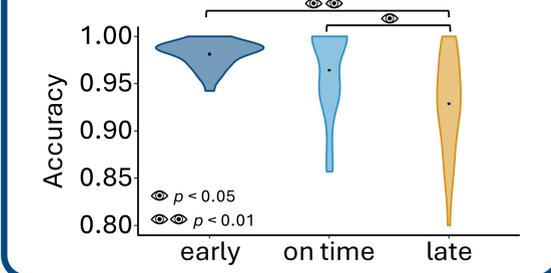
Is looking linked to hazardousness?



Drivers look at the hazard earlier when they respond earlier



Early responses are most accurate



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References [1] Song, J., Wolfe, B., Kosovicheva, A., *Behav Res* (2024).