

Motorcyclists' Speed and "Looked-but-Failed-to-See" Accidents

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Abstract

Previous research on motorcycle crashes has shown the frequency and severity of accidents in which a non-priority road user failed to give way to an approaching motorcyclist without seeing him/her, even though the road user had looked in the approaching motorcycle's direction and the motorcycle was visible. These accidents are usually called "looked-but-failed-to-see" (LBFS) accidents.

This article deals with the effects that the motorcyclist's speed has in these accidents. It is based on the in-depth study and precise kinematic reconstruction of 44 accident cases involving a motorcyclist and another road user, all occurring in intersections. The results show that, in urban environments, the initial speeds of motorcyclists involved in "looked-but-failed-to-see" accidents are significantly higher than in other accidents at intersections.

In rural environments, the difference in speed between LBFS accidents and other accidents is not significant, but further investigations would be necessary to draw any conclusions. These results suggest that speed management, through road design or by other means, could contribute to preventing "looked-but-failed-to-see" motorcycle accidents, at least in urban environments.

Key Points:

- In this study, we examined the influence of motorcyclists' speed on their involvement in 'looked-but-failed-to-see' (LBFS) accidents at junctions.
- This study is based on in-depth study and precise kinematic reconstruction of accident cases involving motorcyclist and another road user.
- The results showed that in urban environments, motorcyclists' speeds involved in LBFS accidents are significantly higher than in other accidents.
- In rural areas, the results are not significant.
- Speed management, through different means, could contribute to preventing LBFS motorcycle accidents at junctions, at least in urban areas.