Human factors influencing motorcyclists' risk-taking in traffic and the potential impact of being at fault for a crash

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Method

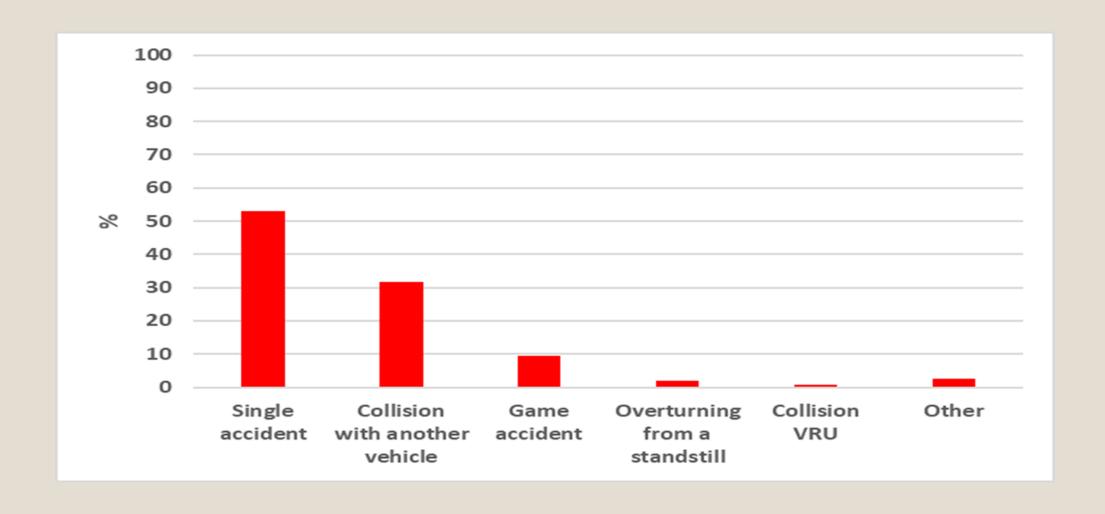
Data from the Swedish Traffic Accident Data Acquisition and a register over owner of motorcycles.

A survey with 446 motorcyclists who had been involved in an accident and 415 with no accidents.

Questions influenced by the Theory of Planned Behaviour.



Serious accidents (n=438) period 2015-2019



Scenario

Imagine driving on a curvy country road on a summer afternoon where the speed limit is 70 km/h and you are driving at 90 km/h. Do you agree or disagree with the following statements?



Regression – intention to speed

	Variables	β
	Positiv attitudes	0.11**
	Accident	-0.10***
	Fines	-0.06***
	Subjective norm	0.19*
	Control beliefs	0.41*
	Age	0.09*
	Annual mileage	0.05*
Adj R ²	0,56	

Speeding on a rural road — at fault or not at fault

	At fault, wholly or partly (n=69)	Not at fault (n=101)
My friends think it's ok to drive at 90 km/h	4.12	2.97*
It gives me a sense of freedom	3.64	2.85**
To drive like this is fun	4.18	3.15*
To drive like this gives me a sense of control	3.18	2.46*
In the near future, or the next season, then I intend to drive as described in the scenario (90 km/h on a curvy road signposted 70 km/h)	3.43	2.30*
It would be very easy for me to drive like this	4.30	3.43*
Driving like this with my motorcycle friends would be fun	3.45	2.55*

1=strongly disagree/very unlikely; 7=strongly agree/very likely

Conclusion

- Motorcyclists speeding in rural areas are many times deliberate and could therefore be described as a traffic violation, rather than a mistake.
- The attitude towards speeding can remain positive even if the riders have been involved in a road crash. This would indicate that the experience of a crash (even if they were at fault) does not necessarily generalize to a more negative attitude towards speeding.
- The desire to speed appears to overrule everything else, especially when external conditions are perceived as non-hazardous.

Conclusion

 A great deal of work is required to increase compliance with speed limits and reduce road crashes. Education, training, and high-quality campaigns are important elements to achieve this aim.

 Most studies addressing this topic are conducted in upper- to higher-income countries. Hence, more studies need to be conduced in lower- to middle-income countries to address this critical gap.

Reference

Forward, S., Henriksson, P., Forsman., & Nyberg. (2022). Motorcyklister – utbildning, erfarenhet, syn på risk och olycksinblandning (*Motorcyclists – education, experience, perception of risk and accident involvement*). VTI report 1119. Swedish National Road and Transport Research Institute, Linköping; Sweden.

Thank you

























