



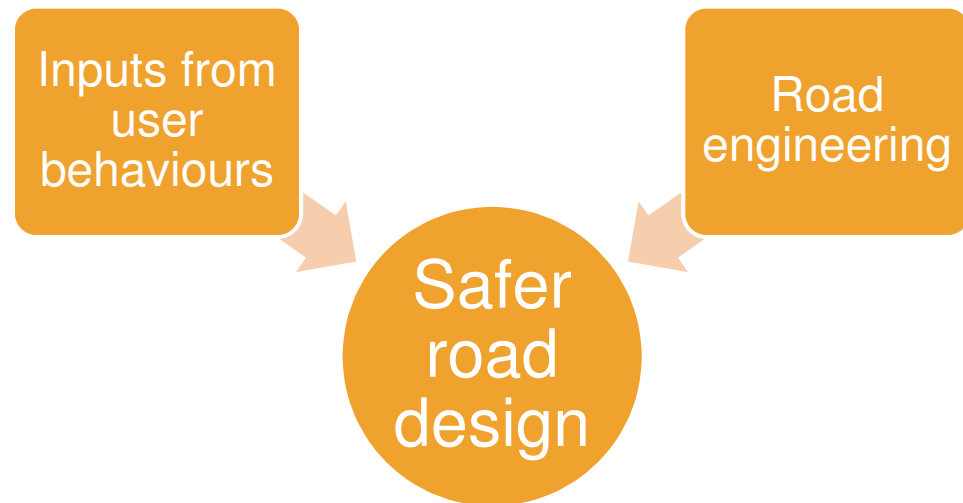
Effect of Right-Turn Lane on Motorcyclists' Gap Acceptance and Hazard Perception during Intersection Approach

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Motivation

- Motorcycle accidents at intersections are a major road safety concern
- Human error on the part of rider and driver of other vehicle is the primary accident contributing factor
- Need for better understanding of motorcyclists' behaviours at junction in terms of gap acceptance and hazard perception
- Limited numbers of related studies



Research Question

- An exclusive right turn lane is one of the treatment used to improve the traffic flow and safety at unsignalised junction
- The question is: Does providing an exclusive right turn lane improve the safety of motorcycle riders during the right turn?

Method

- A 100 cc motorcycle was installed with data acquisition system and sensors to record participants' riding speed, use of turn signal and surrounding video
- 20 participants ride the instrumented motorcycle on an 8 km route of actual road selected for the study
- Participants made three right turns at three different unsignalised junctions. An exclusive right-turn lane was available at one of the three junctions

Method-Instrumented Motorcycle



Method



Method-Software for data analysis



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