

## International Cycling Safety Conference (ICSC)

International Cycling Safety Conference (ICSC) er en internasjonal konferanse for forskere og fagekspertter som jobber med trafikksikkerhet for syklister. Konferansen ble i 2022 arrangert i Dresden 9-10. november.

Konferansen hadde noen fellespresentasjoner og flere parallelle sesjoner. Dette gjorde det mulig å velge sesjoner med innlegg som oppleves som særlig relevante. Jeg hadde fokus på innlegg som var relevant inn i mine arbeidsoppgaver, se under.

### Noen relevante innlegg

Under følger en oversikt over noen av innleggene som var relevante, samt viktige funn.

#### Mileage-based accident risks of pedelec riders

K. Gaster, T. Gehlert

Highlights:

- calculated mileage-based accident risks for pedelec and bicycle riders
- younger & older pedelec riders at higher mileage-based risk of accident involvement
- older riders at highest mileage-based risk of becoming seriously injured or killed
- elderly pedelec riders are at high risk and measures should be taken
- younger pedelec riders few in numbers, but with higher mileage-based accident risk

#### Development of German pedelec (and bicycle) accidents between 2012 and 2020

K. Schleinitz, T. Petzoldt

Highlights:

- more than 90,000 police reported injury accidents from three federal German states
- differences (and similarities) between pedelec and bicycle accidents mostly stable
- higher accident severity for pedelec riders compared to cyclists throughout the years
- consistently higher proportion of single vehicle accidents for pedelec riders
- decrease in mean age of the involved pedelec riders over time

#### Data for evidence: Defining, collecting and analysing specific data from pedelec accidents as an example of individual, targeted road safety work for new forms of mobility

T. Panwinkler

Highlights:

- A mixed method approach was used, reading and analysing 4,196 accident descriptions
- Qualitative analyses reveal existence of 13 pedelec-specific causes of accidents
- Quantitative analyses show: a) most conflicts occurred when pedelec was overlooked
- b) Highest accident severities found in connection with pedelec user's mistakes
- c) Accidents on cycling facilities were less severe than on the carriageway

## Risk perception and differences in self-reported cycling behavior between electric- and conventional-bike riders in Denmark (#114)

K. H. Janstrup, S. A. Useche, M. Møller, F. W. Siebert

### Highlights:

- 483 conventional bike (c-bike) and 74 electric bike riders were surveyed in Denmark
- Their risk perception and self-reported cycling behavior were assessed
- Higher safety-positive behavior is found for e-bike riders compared to c-bike riders
- E-bike riders report a higher knowledge of the traffic law compared to c-bike riders
- A higher risk perception is found for e-bike riders compared to c-bike riders

## E-cargo bicycles: on cycle path of carriageway?

R. Hulshof, P. Schepers

### Highlights:

- The Netherlands is working on an Approval Framework for Light Electric Vehicles (LEV framework).
- This includes heavy e-cargo bikes. The question is which place on the road is best for the traffic safety.
- In this study, options are compared with the zero option, in which the cycle path remains the starting point for the place of the heavy e-cargo bike on the road.

## Single-bicycle crashes in Finland – characteristics, risk factors, and safety recommendations

R. Utriainen, M. Pöllänen, S. O'Hern, N. Sihvola

### Highlights:

- Study analyses fatal injuries to cyclists caused by single-bicycle crashes (SBCs)
- SBCs commonly involved people aged 60–79, males, and cyclists not wearing a helmet
- Males were more often involved in SBCs than other cyclist crashes
- Risk factors related to illness and alcohol were highlighted in SBCs
- Human factors were the most reported risk factors before the bicycle and equipment

## Wider view over bicycle accidents: Complementing and extending bicycle accident statistics in urban areas using surveys

L. Ringel, C. Kielhauser, B. T. Adey

### Highlights:

- Our work shows that 86% of cycling accidents were not reported to the police.
- Actual accident type distributions vary from those known to the police.
- More efforts should be made to gather knowledge about not police reported accidents.
- Adding survey data to police reports helps to reveal key bicycle accident locations.
- The study shows a very clear difference in risk perception and actual risk.

## Drivers overtaking cyclists on rural roads: How does visibility affect safety? Results from a naturalistic study

A. Rasch, Y. Tarakanov, G. Tellwe, M. Dozza

### Highlights:

- Smart traffic sensors collected naturalistic data on a rural road in Sweden.
- We estimated lateral clearance and passing speed from drivers overtaking cyclists.
- In contrast to speed, lateral clearance decreased clearly under low visibility.
- A solid centerline may have caused more dangerous passing from the cyclist's view.

## Passing distance, speed and perceived risks to the cyclist and driver in passing events

E. Rubie, N. Haworth, N. Yamamoto

### Highlights:

- Non-cyclist drivers had poorer attitudes towards cyclists than cyclist-drivers
- Poorer attitudes did not lead to lower perceived risk for the cyclist
- Cyclist-drivers perceived higher risks to the cyclist in the passing event
- Perceived risk to the driver was higher for female than male driver participants
- Higher speeds increased perceived risk for both the portrayed cyclist and the driver

## Subjective Safety of Bicycle Infrastructure at Intersections and Roundabouts

S. Wachholz, D. Friel, T. Werner, L. Zimmermann, R. Stark

### Highlights:

- qualitative research on subjective safety for cyclists
- 4 different junction designs presented in a virtual environment
- most participants preferred Protected Intersection design

## Cyclists' choice of lateral position and feeling of safety between tram tracks, sharrows and parked cars

S. Ruf, J., M. Druba

### Highlights:

- Two online studies carried out on cyclists' lane positions and subjective safety
- First experiment to jointly investigate parked cars, sharrows, tram tracks & norms
- More central positions chosen in presence of parked cars, sharrows and tram tracks
- Cyclists felt safer in absence of parked cars and tram tracks
- Cyclists felt safer in the presence of sharrows

## **A mixed-methods exploration of the factors affecting bike riding participation in Victoria, Australia**

L. K. Pearson, S. Reeder, B. J. Gabbe, B. Beck

### **Highlights:**

- Most people (78%) living in Greater Melbourne, Victoria, are interested in riding a bike.
- The top three barriers reported by potential cyclists relate to having to ride a bike on the road.
- There was significant variance in the barriers to cycling reported by different population groups.
- Despite variance, all groups reported safety-related factors as their biggest barriers to cycling.

## **An experiment on the lateral steering behaviour of cyclists on narrow bidirectional cycle tracks**

P. Schepers, E. Theuwissen, W. Daamen, M. Hagenzieker, M. Nabavi<sup>4</sup>

### **Highlights:**

- Cyclists ride off the road in approximately a quarter of all single-bicycle crashes
- An increase of cycle track width causes cyclists to ride further away from the verge
- Cyclists keep more distance from oncoming cyclists at wider cycle tracks
- Sufficiently wide cycle track pavement is essential for cycling safety