Title: On site observation of driver`s and pedestrian`s interaction at zebra crossings

Matus Sucha

Author: Palacky University in Olomouc
Email: matus.sucha@upol.cz

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Background
Our work is based on the social psychological theory of power distribution. We assume, that this distribution between driver and pedestrian is unbalanced, in favour of driver (the one who can force his way with his car as a shell). This affects drivers and pedestrians behaviour and interaction while encountering at zebra crossings.

Aim
The aim of this work is to describe pedestrians` and drivers` behaviour at zebra crossing and their mutual interaction. Further more, to understand strategies, which pedestrians and drivers use to maximize their benefits (whether it means to safe time, feel safely or something else). Implications of this work are in identification of risky factors on drivers and pedestrians behaviour and especially identification of combination of these behaviours (or strategies) which may lead to conflicts, near misses or accidents.

Research design
Mixed methods design was used, following these steps:

1. Exploration of pedestrian and driver needs and conflict situations (identification of the problem) – focus groups with pedestrians and drivers (separately).
2. Pilot study (spots, questionnaire, observation sheet, camera recordings).
3. Data collection: on site observations (4 spots - zebra crossing, in urban area, 3 observers, at each spot 50 hours), camera recordings (24 hour), speed measurement, interviews (on site rapid interviews with pedestrians).
4. Exploration and generalisation – expert workshops

On site observations were carried out during December 2013 – March 2014, observation times: 7.00 – 9.00, 12.00 – 13.00, 16.00 – 17.00. No snow, ice or wet conditions. Cameras recording – from selected spots, 24 hours, car and pedestrian densities were counted. Speed measurement at selected spots during observing times.
All together 1584 observations (observed situations at 4 spots) were analysed.

Outcomes
The expected outcome is a description of situational factors which may lead to a traffic accident in the future, focusing on pedestrians' and drivers' behaviour, communication and their strategies in situations where their ways cross. Exploration of pedestrians' attitudes and behaviour is summarized based on interviews.