

## Cyclists and traffic sounds: the results of an internet survey

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### ABSTRACT

Many cyclists, especially youngsters, listen to music and talk on their mobile phones while cycling [1]. As a result, auditory traffic information that can be used by cyclists to make safe decisions is less available [2]. Also the growing number of quiet (electric) vehicles on the road makes use of auditory cues more challenging for cyclists [3]. Although concerns have often been raised both about the impact of listening to music or having a phone conversation when on the road and about the impact of low sound emission of electric cars, the role of auditory information in cycling safety has not been systematically investigated yet. The present study examined to what extent and in which traffic situations, traffic sounds are important for safe cycling. Furthermore, the study investigated potential safety implications of limited auditory information caused by listening to music and talking on the phone while cycling and by quiet cars. An internet survey among 2250 cyclists in three age groups (16-18, 30-40 and 65-70 year old) was carried out to collect information on the following aspects: 1) frequency of listening to music and talking on a mobile phone while cycling and devices used to engage in these activities 2) cyclists' encounters with quiet vehicles 3) possible contributions of quiet vehicles, listening to music and phoning while cycling to self-reported bicycle crashes, while taking into account other potentially relevant factors such as demanding traffic situation, personality and risky cycling behaviour and 4) possible compensatory behaviours of cyclists who listen to music or talk on their mobile phones. Age differences in those four aspects will be analysed. Data are currently being collected. The results of the study and its implications will be discussed in the paper for ICSC2014.

**Keywords:** cycling safety, music, mobile phone, auditory perception, electric vehicles.

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