

Safety in Numbers – combining a panel design and cross cultural survey to examine the suggested mechanisms

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In many European countries, it is a political goal that future growth in local travel should be absorbed by sustainable transport modes. Concerns that increased walking and cycling produce more accidents have been countered by the “safety in numbers” (SIN) argument [1]. According to SIN, the more walkers/cyclists there are in a population, the lower their risk. SIN has only been demonstrated in cross sectional studies, and the mechanisms behind the effect have yet to be proven [2].

Previous studies have mostly relied on register data. The current study, carried out in 2013 and 2014 tests the existence of this effect in a more controlled manner. This is achieved through the use of two data sets: (1) a panel study with interviews of cyclists, pedestrians and car drivers, where participants are recruited from a time series study in Oslo (preliminary results presented at ICSC in 2013 [3]); (2) similar roadside survey data from Oslo, Aalborg and Gothenburg. By exploiting the natural seasonal variation in cycling frequency, and by using a repeated measures design we can further control for other factors suggested to lie behind the SIN mechanism. Results from the study show indicate that bicyclists experience increased levels of inattention from car drivers, whereas pedestrians do not. The cross national survey data explores the issue of safety culture differences between the three countries in order to further substantiate our findings.

Keywords: safety in numbers, cycling culture, interplay.**REFERENCES**

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