

Studded tyres for bikes in Germany

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In Germany, the modal share of cycling is much higher in summer than in winter. This is also true for utility purposes like cycling to work or for errands. Studded tyres for bikes are relatively unknown and not very common in Germany, even among cyclists. Studded tyres might make cycling in winter safer for those persons who cycle when there is or might be ice. Studded tyres might make cycling in winter more attractive for persons who do not use their bike when they know that their route is or might be partly frozen over. Up to now no information is available about the differences between users and non-users of studded tyres. The study was intended to identify relevant differences between these groups.

We programmed an online-survey about cycling in winter and use of studded tyres. We selected those respondents who cycle at temperatures of 0°C and less because ice and thus studded tyres might be relevant for them. In this subgroup we compared cyclists who do not use studded tyres and never have used them with users of studded tyres. The non-users were 128 female, 336 male, and 3 diverse cyclists who had not used studded tyres; the users were 46 female, 280 male, and 1 diverse cyclist.

The main difference between the groups was the agreement with the statement "If I want to cycle with studded tyres in winter I can do this", showing perceived behavioural control. Users of studded tyres cycled more often in winter than non-users, and the difference between bike use in summer and winter was smaller than in non-users. Users are more willing to cycle when they know that there is ice or snow on their route, they are less affected by lower temperatures. Users think that cycling with studded tyres is safer on ice – but not on snow. They are more likely to have family members, friends and colleagues who also use studded tyres. Practical barriers have some relevance: Users find it easier to change a tyre or a wheel. Among users the proportion of men is higher than among non-users.

Contrary to our expectations practical barriers have some but only little relevance for not using studded tyres. The key factors are perceived improvements of safety by studded tyres and perceived behavioural control to use tyres. Use of studded tyres is correlated with cycling more in winter, when it is cold and in ice and snow. The survey does not answer the question whether encouraging cyclists to use studded tyres might motivate them to cycle more in winter. Studded tyres might also be a safe solution for persons who want to cycle all year long for utility purposes.