

Analyse des Besitzes von Pedelecs in Deutschland

Daniel Stärker

Abstract

The aim of this study is to analyze the spread of pedelecs in Germany and to identify key socio-demographic and spatial factors influencing pedelec ownership. Against the background of climate policy objectives, the pedelec is increasingly coming into focus as a climate-friendly alternative to the car and the number of units has been rising sharply in Germany for years. Based on a comparison of international studies, relevant influencing factors were identified and then empirically examined using data from the "Mobility in Germany 2017" study.

As part of the statistical analysis, using chi-square tests and multinomial logistic regression, variables such as age, level of education, economic status, household size, number of cars in the household, activity status and type of residence were considered. The results show that age, income and place of residence in particular are decisive factors for pedelec ownership. The likelihood of owning a pedelec increases significantly with age, as does the likelihood of owning a pedelec in middle to higher income groups and in rural areas. Pedelecs are more often used as a complementary means of transport to the car than as a substitute. At the same time, low explanatory values indicate that other influencing variables could play a role.

The hypothesis test confirmed most of the assumptions, with the exception of the expectation that people without a car are more likely to own a pedelec. The international comparison highlights both similarities and country-specific differences, for example with regard to the role of gender. Finally, support measures for underrepresented groups and the expansion of cycling infrastructure are highlighted as central starting points for the promotion of cycling. The work thus makes a contribution to the understanding of sustainable mobility and shows potential for future research.

Supervisors

Univ.-Prof. Dr. Heather Kathis
Dipl.-Ing. Leonard Arning

Study Programme

B.Sc. Verkehrswirtschaftsingenieurwesen