Drivers of sustainable future mobility: Understanding young people’s travel trends and the mediating factors of individual mobility intentions

This PhD thesis presents three complementary studies that aimed to enhance knowledge of young people’s longitudinal mobility trends and the factors influencing adolescents’ future mobility intentions. First study was an analysis of Danish national travel survey data (TU) from 1995 to 2012. The sample consisted of young people divided into four age groups: 15-19 year old, 20-24 year old, 25-29 year old and 30-34 year old. The analysis explores the development of gender gaps for rural and urban living location. The mobility indicators analysed were; driving licence status, travel mode, distance travelled, number of trips, duration travelled and purpose of trips. The findings show that driving licence holding has increased, in particular for females in urban areas and car accessibility has increased sharply in rural areas. The development licensure rate is somewhat unique as it is in contrast to mainstream trends for many countries. However, since females bear the majority of this increase, it can be seen as sign of increased gender equity as the gender gap is near closed for the groups in question. The gender gaps have narrowed or closed in many cases over the time period explored, but where there is a gender related gap in transport behaviour, the gap progresses across age groups and is different for rural and urban areas. The convergence trends are in line with mainstream trends but there is still a pattern of gendered mobilities observable for the older groups. The findings highlight that gender is still an important subject in transportation research and future development for young people should be monitored closely. The second study was an internet based survey with the aim to explore a range of mediating factors influencing 15 year old adolescents’ intentions to commute by means of car or bicycle in the future. This study employed structural equation modelling (SEM) in order to statistically test the proposed theoretical behavioural framework, which was inspired by the Theory of planned behaviour (TPB) (Ajzen, 1991), the Social cognitive theory (SCT) (Bandura, 1986) and a socioecological model (McLeroy et al., 1988). Intentions to commute by car were positively related to car passenger experience, general interest in cars, and car ownership norms, but are negatively related to willingness to accept car restrictions and perceived lack of behavioural control. Intentions to commute by bicycle were related to positive cycling experience, willingness to accept car restrictions, negative attitudes towards cars, and bicycle-oriented future vision, but are negatively related to car ownership norms. Attitudinal constructs are related to individual characteristics, such as gender, residential location, current mode choice to daily activities, and parental travel patterns. The findings reveal that environmental concern has no impact on intentions but mediates willingness to reduce car use in future. The behavioural framework proposed highlights the influences behind the adolescents’ intentions from a broad aspect and identifies several distinct targets in domains outside the intra- and interpersonal domains. This distinction gives potential to guide behavioural interventions as it provides both a distinction between levels of intervention and the targets of intervention. The third study was a qualitative interview study where 50 in-depth interviews were carried out in order to explore the motivation behind 15 year olds adolescents’ intention to obtain a driving licence and to own a car in the future. The interviews were analysed using thematic-analysis to identify the underlying factors shaping the semantic content of the data, to create a data driven conceptual model. Three segments of pre-drivers were identified: car enthusiasts, who would like to be early car users, car pragmatists, who would like to have the license at an early stage and a car at a later stage, and car sceptics, who are late license holders and car users. Among the three groups, the car pragmatists have the highest potential to be affected by policy measures for delaying the driving license and owning a car.

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