

**To:** Transport & Health Policy Makers, & Practitioners  
**From:** Professor Adrian Davis  
**Date:** 30<sup>th</sup> January 2025  
**Subject:** Essential Evidence 4 Scotland No.98 Obtaining a driving licence and interventions to influence the decision

---

Top Line: The decision whether to obtain a driving licence has a substantial effect on a person's travel behaviour for the rest of their life and on lifetime carbon emissions. In heavily motorised societies, non-drivers often decide to obtain a licence simply because others do. It is perceived as part of a 'rights of passage' into adult life. There is usually little awareness of the negative aspects of car use.

Fujii hypothesised that providing non-drivers with better information would influence their choice on whether to obtain a licence.<sup>1</sup> To obtain objective information, a field experiment involving 178 18 year old students in Japan was undertaken, and was followed by a survey. The students were assigned at random to a control group of 35 individuals and an experimental group of 143, in which the participants received information on the negative aspects of car use. The experimental groups was divided into four sub-groups:

- Cost information sub-group of 38, who received information on the financial costs
- Risk information sub-group of 34, in which the participants received information on the risks of traffic accidents
- Stress information subgroup of 35, in which participants received information about stress due to traffic congestion for leisure travel trips
- All information sub-group of 36, in which participants received information about costs, risks, and stress associated with car use.

After reading information allocated to each sub-group all participants answered a questionnaire evaluating their attitude towards life using a car and obtaining a driving licence. A follow-up survey 18 months after the intervention found that the proportion of licence holders in the control group was higher than in the experimental group. The difference was statistically significant. The results indicated that the experimental groups who received information about car use with respect to risk, cost, and/or stress due to congestion had less enthusiasm towards life using a car than the control group.

The results indicate that the information provided had a negative effects on an individual's need to obtain a driving licence and his/her attitude, even 18 months after participating in the study. The results imply that young non-drivers were not fully aware of the negative aspects of car use and providing such information to them may change their travel behaviour. This could help reduce total lifetime carbon dioxide emissions of an individual, because the decision to obtain a driving licence will have substantial effects on the travel behaviour for the rest of his/her life. A similar study among young adults in Copenhagen reported comparable findings, giving greater confidence to Fujii's study.

Other studies of delaying driving licence acquisition<sup>2</sup> have focused on listening to reasons young people aged 17+ state for not having a license. None of these studies address provision or knowledge of the harms of car use. Other evidence suggests some generational shifts away from car use.<sup>3</sup>

---

<sup>1</sup> Fujii, S. 2007 Communication with non-drivers for promoting long-term pro-environmental travel behaviour. *Transportation Research Part D*, 12: 99-102.

<sup>2</sup> For example in the UK: Le Vine, S., Polak, J. 2014 Factors associated with young adults delaying and forgoing driving licenses: Results from Britain, *Traffic Injury Prevention*, 15:8, 794-800.

<sup>3</sup> Calvin, T., Handy, S. 2018 Driver's licensing delay: A retrospective case study of the impact of attitudes, parental and social influences, and intergenerational differences, *Transportation Research. Part A*, 111: 24-40