

To: Transport & Health Policy Makers, & Practitioners
From: Prof Adrian Davis, TRI, Edinburgh Napier University
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Subject: Essential Evidence 4 Scotland No.69 Can changing social norms change travel behaviour?

Top line: What adults believe is approved or disapproved of by others can have an influence on their own travel behaviour. However, such norms need to be part of broader campaigns with other measures. Moreover, past behaviour – habit – appears critical. This suggests that helping children establish healthy travel behaviours should be a core activity of programmes seeking sustainable travel behaviours.

In recent decades, a variety of behavioural measures (soft measures), aimed at motivating voluntary changes in transport choices, have been tested worldwide. One way to increase the effect of soft measures is to use social norms - defined as shared beliefs that guide, regulate, proscribe, and prescribe social behaviour in a given situation.¹ According to Cialdini, Reno, and Kallgren,² two types of social norms can be distinguished: injunctive norms and descriptive norms. Injunctive norms refer to individuals' beliefs about what is *approved or disapproved* of in a particular situation within a society. Descriptive norms reflect individuals' beliefs regarding what others commonly *do* in a given situation. To date, in the transport field, the majority of studies have investigated the effect of descriptive norms, while the influence of injunctive norms has often been overlooked. Quantifying the different effects of these two norm interventions could be of special interest for policymakers and practitioners, as this would allow them to develop behavioural strategies that are more likely to impact people's travel behaviours.

In their research in Cagliari, Italy, regarding intention to use different travel modes influenced by persuasive normative messages, Pris and colleagues found that normative messages appeared to play a relevant role in persuading people to prefer a sustainable means of transport. As expected, the injunctive norm (about what is *approved or disapproved* of) played a key role in triggering the intention to use sustainable mobility and in decreasing the future choice of using a private car. In contrast, the descriptive norm (individuals' beliefs regarding what others commonly *do*) showed a persuasive effect only on the intention to walk or cycle, whereas no significant effect on use of public transport or private cars emerged.

Such finding suggests that the implementation of a soft measure alone is rarely effective. At the same time, the effect of norms on the intention to reduce car use should not be underestimated, as norms can still play an important role within broader campaigns aiming to reduce car use. In this sense, the delivery of persuasive normative messages alongside the implementation of other measures, such as monetary incentives or the provision of feedback that makes people aware of the benefits of using sustainable means of transport, would have a greater effect on eliciting a shift from car to green transport, say the researchers. Moreover, these kinds of persuasive messages can be easily communicated, both via mass media and personalized campaigns, and can therefore be considered a low-cost strategy. However, the researchers acknowledged that past behaviour (habit) is much stronger than the impact of normative messages. Driving habit is also the strongest predictor for trips related to routine activities, such as commuting, shopping and child-related activities.³ Consequently, establishing healthy habits in early life may be a key route to shifting routine travel behaviour to greater reliance on sustainable transport.

¹ Piras, F., et al, 2021 Can persuasive normative messages encourage sustainable transportation usage? *Transportation Research Part F*, 83: 304-322

² Cialdini, R., Reno, R., & Kallgren, C. A. 1990 A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015–1026.

³ Ramos, E. et al, 2020 Understanding daily car use: Driving habits, motives, attitudes, and norms across trip purposes, *Transportation Research Part F*, 68: 306-315.