

**To:** Transport & Health Policy Makers, & Practitioners  
**From:** Prof Adrian Davis, TRI, Edinburgh Napier University  
**Date:** 25<sup>th</sup> May 2021  
**Subject:** Essential Evidence 4 Scotland No. 39 Life events and active travel

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Top line: Attempts to reverse declines in active travel as part of overall physical activity need to address the impact of changes in life events or life circumstances. These can provide windows of opportunity for increasing active travel.

Physical inactivity and related diseases are of global public health concern. Previous work has identified that periods of transition across a life course or 'life-change events' have implications for drop out for physical activity. Therefore, any attempts to increase or even reverse trends in population physical (in)activity must address the impact of changes in life events or life circumstances on physical activity participation. Research identifies both possible life changes that might affect participation in physical activity and temporal trends in physical activity. Allender et al<sup>1</sup> identified five life changes which largely reduced physical activity levels: employment status (e.g. location); in residence; in physical status (e.g. pregnancy, illness, disability); in relationships (marriage, divorce); in family structure (parenthood, 'empty nesters').

For commuting behaviours, it has been suggested that they become habitual and changes to commute mode are more likely at the time of major life events. To test this, Clark and colleagues<sup>2</sup> used two waves of panel data from the UK Household Longitudinal Study to identify and explain the prevalence of individual change in commute mode from year to year amongst a representative sample of the English working population ( $n = 15,200$ ). One third of those that cycle or get the bus to work, and one quarter of those that walk to work, are shown to change commuting mode by the following year. Car commuting is more stable, with only one in ten car commuters changing mode by the following year. Switching to non-car commuting becomes much more likely (9.2 times) as the distance to work drops below three miles. High quality public transport links to employment centres are shown to encourage switches away from car commuting and mixed land uses are shown to encourage switches to active commuting (walking and cycling). Switches away from car commuting are found to be more likely (1.3 times) for those with a pro-environmental attitude. The attitude orientation is shown to precede the behaviour change, demonstrating evidence of 'cause and effect'. Overall, the study shows that changes in commuting behaviour are strongly influenced by life events, spatial context and environmental attitude.

Findings from a Scoping Review suggest that major life events are "windows of opportunity" for travel behaviour change given the large proportion of studies showing statistically significant changes.<sup>3</sup> However, the direction of changes in travel behaviour was highly variable, and it may depend on a wide range of contextual factors. The negative attitudes towards cycling identified in qualitative studies are concerning and suggest a need for concerted action to address social norms. This could include social marketing campaigns (perhaps engaging youth and "grassroots" organizations) to promote sustainable transport, while addressing barriers to cycling at the school environment, built environment, and policy levels. Promoting sustainable transport early in life seems critical as many studies found that driving habits were the least likely to change with major life events. Finally, the researchers found that factors commonly associated with changes in travel mode with relocation (among other major life events) include shorter distance, greater urbanisation and walkability, and lower car ownership.

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<sup>1</sup> Allender, S., Hutchinson, L., Foster, C. 2008 Life-change events and participation in physical activity: a systematic review, *Health Promotion International*, 23(2): 160-172.

<sup>2</sup> Clark, B., Chatterjee, K., Melia, S. 2016 Changes to commute mode: The role of life events, spatial context and environmental attitude, *Transportation Research Part A: Policy and Practice*, 89: 89-105.

<sup>3</sup> Larouche, R., et al, 2020 Effect of Major Life Events on Travel Behaviours: A Scoping Review, *Sustainability*, 12, 10392; doi:10.3390/su122410392