

Dr Frank Eves BSc PhD

Reader in Lifestyle Physical Activity

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About

Frank Eves is a public health psychologist who pioneered the use of prompts in community settings to increase lifestyle physical activity. This translational research uses psychological theory to optimise the response to these 'nudge' interventions at a population level. He has supervised 18 PhD students to completion and likes to dance when he gets the chance.

Qualifications

BSc (Wales)

PhD (London)

Research

Research interests

- Exercise Psychology
- Health Psychology
- Environmental Psychology

Research summary

The research that I do targets obesity, one of the major threats to public health in the developed world. The simple behaviour of stair climbing has implications for weight control. An 80 kg man climbing a 3m flight of stairs only an extra ten times in a day accumulates 28 kcals, an energy expenditure that is equivalent to about three pounds of fat if continued over a year. Repeated every day for 10 years, this is equivalent to more than two stone. Just as obesity results from a steady accretion of weight, so one can counter this with a steady accumulation of energy expenditure during everyday life. Stair climbing interventions eschew conventional approaches based on individual counselling or public health information broadcasts about obesity. These conventional attempts at weight control are divorced in time and place from the intended behaviour.

For the accumulation of physical activity as part of daily life, I use environmental interventions, what might be termed active 'nudges' in current parlance. Thus, a prompt is positioned within the environment encouraging pedestrians to take the stairs rather than the escalator or lift for health reasons. These interventions are termed point-of-choice prompts as they are positioned at the point where pedestrians choose one alternative. They function by interrupting habitual behaviours *at the point of their occurrence*, allowing replacement of bad habits with health enhancing alternatives. They translate good intentions into action by intervening *at the point in time where action can be taken*. Thus, point-of-choice prompts circumvent the problems of memory and planning that may prevent translation of good intentions into behaviour. Critically, they work; to date 37/41 interventions on public access staircases have been successful and 23 of those successful interventions were conducted by my team.

My team's work in this area initially investigated parametric aspects of message delivery such as prompt size and visibility, key components of intervention success. This work has expanded to investigate the potential of different message contents and formats, the effects of contextual variables (e.g. public access vs. workplace settings), the effects of physical variables such as climate and terrain and the effects of uncontrollable variables such as pedestrian traffic volume at the site, SES and demographic grouping such as age and weight status. Recently research has been exploring multiple components interventions in which the basic prompt is supplemented by materials targeting attitude and intention to augment their effects. This research adds a motivational component to the volitional intervention of an active environmental nudge towards a healthier option. Currently, we are generalising knowledge gained with stair climbing prompts to potential interventions for food choice at the time of purchase.

In this work on prompting, we use choice of stair climbing as a model of active transport behaviour. Climbing stairs is an energy hungry behaviour, requiring more expenditure per minute than jogging. Effects of physiological resources are magnified for this choice. Using an escalator can avoid the energetic costs and escalator choice becomes a habit, reinforced by minimization of the energy costs of navigating the built environment. Complimentary current research is investigating signals that might deter energy expenditure during active transport, namely perception of the slope of stairs and hills. We are exploring the effects on this 'embodied' perception of demographic variables such as gender, age and weight status, as well as potential effects of fatigue, quadriceps strength and prior activity. Much of this research involves field studies in which judgements of slant perception are made by individuals who are navigating the built environment. In essence, we study the natural behaviour of pedestrians and the factors that influence physically active choices.

[Read my case study - Stair climbing to increase Lifestyle Physical Activity \(/schools/sport-exercise/research/showcase/stair-climbing-to-increase-lifestyle-physical-activity.aspx\)](/schools/sport-exercise/research/showcase/stair-climbing-to-increase-lifestyle-physical-activity.aspx)

[Listen to my podcast 'Nudges towards and away from obesity' \(MP3 - 13.7MB\) \(/Audio/news/Dr-Frank-Eves-podcast.mp3\)](#) or read the [podcast transcript \(/accessibility/transcripts/Dr-Frank-Eves-nudges.aspx\)](#).

Publications

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