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# Can environmental nudges increase physical activity levels?

# Dr Nicola Eccles and Dr Kiara Lewis A CP Active project supported by









#### agenda

- Overview of CP Active
- The problem we wanted to address
- How we tackled the problem (and evaluated our work)
- Issues we encountered
- Initial findings
- Next steps

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#### about us

- Founded by Dr Nicola Eccles, Mike Brennan and Richard Eccles in September 2015
- Intention is to work with a variety of stakeholders including large employers, CCGs, and Local Government to tackle inactivity
- Aim is to shift the focus from 'education' to prompts in relation to health behaviour
- Pilot project supported by Heart Research UK, Kirklees Council and The University of Huddersfield



#### the problem

Deaths attributable to inactivity have recently been estimated at TWICE as many as obesity...the need to focus on inactivity, rather than the 'obesity crisis'. Inactivity... ...the 'silent killer'.

British Heart Foundation (2015)

Walking and cycling could, in 20 years, lead to savings of roughly £17 billion (in 2010 prices) for the NHS in England and Wales.

(Jarret et al 2012)

This Environmental Nudges project is based on the belief and understanding that traditional educational based interventions to increase physical activity are ineffective in bringing about change and reducing disease.



#### the problem

Marmot (2002) in his renowned review on health inequalities stated that focusing on education assumes an equality of access to the educational information.

The trend in developed countries for giving health information - then victim blaming for a lack of action.

This way of working is inappropriate and unhelpful.

Peters et al (2002) suggested nearly 15 years ago that body weight control had gone from an instinctual process to one that requires substantive effort....and so the solution (we thought) was to INFORM people....but how much success?



#### a more effective strategy

A more effective way to increase activity is to act on sub-conscious levers.

Altering the environment can produce a much greater impact on the health of communities than individual lifestyle approaches

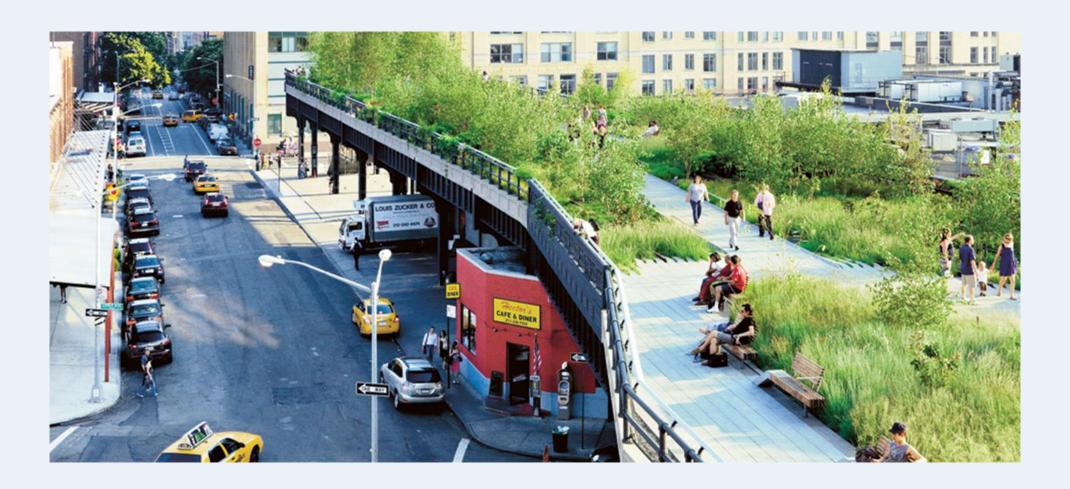
Solutions to address the environment are more likely to affect multiple pathways within the obesity system.

The Foresight Report (2007)





#### if we build it, will they come?





#### choice architecture and nudge theory

Choice architecture - gaining traction in public health...the concept of altering the environment in which people make choices. Absence of evidence around how this works. (Hollands et al 2013)

Nudge theory is the preferred choice for behaviour change experts...the belief that behaviour change is most commonly affected by subliminal rather than obvious changes to the environment. (Thaler and Sustein 2008)

Our intervention utilises these contemporary concepts and adds knowledge around health behaviour change. A qualitative approach for understanding is our central to our intervention.



#### our solution to the problem

Could we increase physical activity across a whole community through targeted subliminal messages in outdoor media spaces?

## How and why would this work?

Would this approach have a wider reach?

Would the communities respond?

What would these messages look like?



#### existing examples









#### existing examples







#### initial steps

Support from the project involved **establishing spaces** in which we would work and collect data.

Could we just use outdoor media spaces?

Or enter into communal indoor spaces?

We chose to work both outside and within spaces.

A secondary school in Kirklees...employees at the University of Huddersfield... ...employees at Kirklees Council



#### how will we know if it has worked?

- What is the marker of success?
- Success will be in understanding the process of changing perceptions and self-efficacy (qualitative) in relation to the prompts which may in turn lead to behaviour change and increased physical activity.
- Most important are the stories, interactions and disruptions that occurred to diverse individuals.
- Stakeholders supported a qualitative approach to the intervention.



#### methodology

Pre and post-intervention focus groups.

Understanding daily habits, beliefs and perceptions....

Understanding how they had received and interpreted the prompts

Questionnaire with open ended options identifying:

- awareness
- recognition of phases
- possibility of behaviour change





#### our nudges

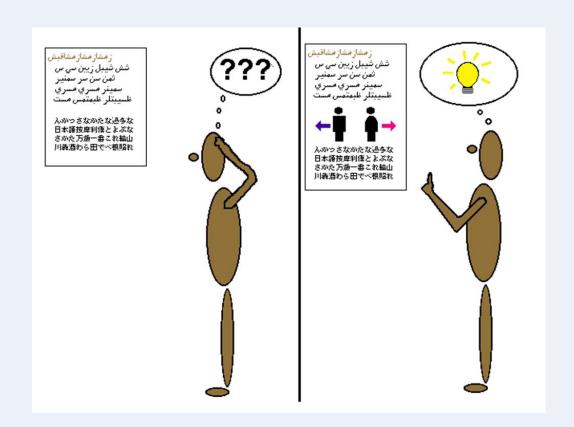
Two **phases** of nudges:

1. Subliminal phase

2. Call to action

Would there be a **different** response?

Would people even **realise** there was a difference?





### subliminal phase







#### subliminal phase











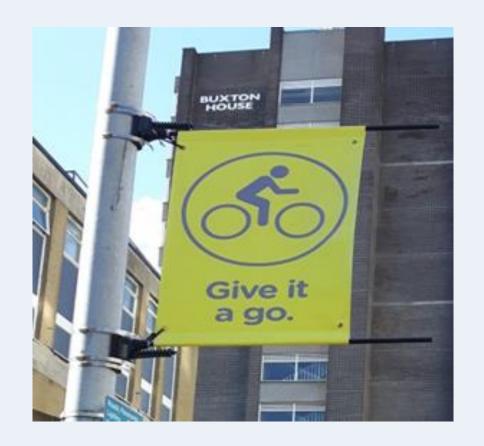
#### call-to-action phase







#### call-to-action phase







#### issues we encountered

- Conflict with marketing and communications – could we have communicated our approach more effectively?
- Estates 'consent' for our indoor signs
- Time taken to liaise with council employees and University staff





#### initial findings - did it work?

The pre intervention focus groups were significant. The daily struggle was real and apparent from all participants.

The post intervention focus groups showed that often people did not understand the subliminal phase...but that 'disruption' did occur for all who came into contact with the prompts.





#### initial findings - did it work?

Individual choice, responsibility and possibility were the successful features of our prompts.

- 1. The responsibility of the employer became very apparent.
- 2. Leisure time is a fallacy and activity is not established as a habit.
- 3. The workplace as a 'captive audience' could have immediate and significant impact

NB. The questionnaires need refining but showed a high level of interest and awareness in increasing activity and the majority thought the signs were beneficial.



#### next steps

- MSc student supporting the work within the school and looking at self belief and efficacy in relation to our prompts
- Designing relevant prompts to install within school that apply to staff and students (year 11)
- Kirklees Council now considering this as an employer's responsibility
- Securing more projects across the UK with employers and councils



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