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Living Lab project summary – Nudging Behaviour Change into Action: Can Nudge Theory Alter People's Disposal Behaviour at the University of Edinburgh?

Description of the paper

This paper describes a dissertation written by Kiri Huddleston in 2015.

Research question

Can nudge theory alter people's disposal behaviour at the University of Edinburgh?

Objectives

The overall aim of this study is to see whether nudge theory can be used to design effective strategies for changing the waste disposal choices of students and staff within the UoE. More specifically it aims to see whether nudge theory can reduce the contamination levels of the two primary contaminants (coffee cups and paper towels), (CCs and PTs) in the Dry Mixed Recycling (DMR) waste stream. This was tested by implementing new eye-catching signage known as wobblers on certain bins around the university campus to act as a nudge, encouraging people to dispose of CCs and PTs correctly in the general waste (GW). The objective of this study is to investigate which nudge technique incorporated into the wobbler designs (if any) is the most effective in reducing contamination of the DMR with CCs and PTs. To examine this, a series of experiments were undertaken and waste audits were conducted both pre and post-wobbler implementation to measure their impact on contamination rates. Face-to-face questionnaires were also conducted to see how people interacted with and interpreted the different nudge techniques.

Findings and recommendations

This study shows wobblers are an effective nudge method to alter disposal behaviour and reduce target items in the recycling waste stream at the UoE. It also suggests that with adjustments, they could be even more effective, despite the magnitude of their success remaining unclear. In light of the findings and caveats from this study, several recommendations for future research can be made:

1) Empirical research should be undertaken utilising brighter wobbler designs and wobblers which are slightly larger in order to test whether they aid wobblers in becoming more noticeable and therefore effective in reducing contamination rates (McKenzie-Mohr et al., 2012; Rashid and Wogalter, 1997).

2) Future research undertaken should employ a control study as it would allow for a more precise determination of the magnitude of the wobbler impacts on contamination levels (John et al., 2011).
3) Research undertaken during term-time conditions would provide insight into how serious the problem of CC (and PT) contamination is compared to the summer period, and thus whether wobblers need to be targeted to other items in certain areas or indeed whether wobblers are needed at all. It would also be more representative of typical UoE conditions allowing determination of whether wobblers are still effective under such circumstances.
4) Utilising cafés with the same bin styles and signage would allow for better comparisons between locations and allow easier determination of how much of an impact the wobblers alone had. It would also mean one control group could be applicable to all cafés.