Reducing consumption through digital feedback

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The social norms approach

Feedback:
what *most* other people do

Some success: alcohol, smoking, drugs, sustainability

Energy studies combine individual & social norms feedback
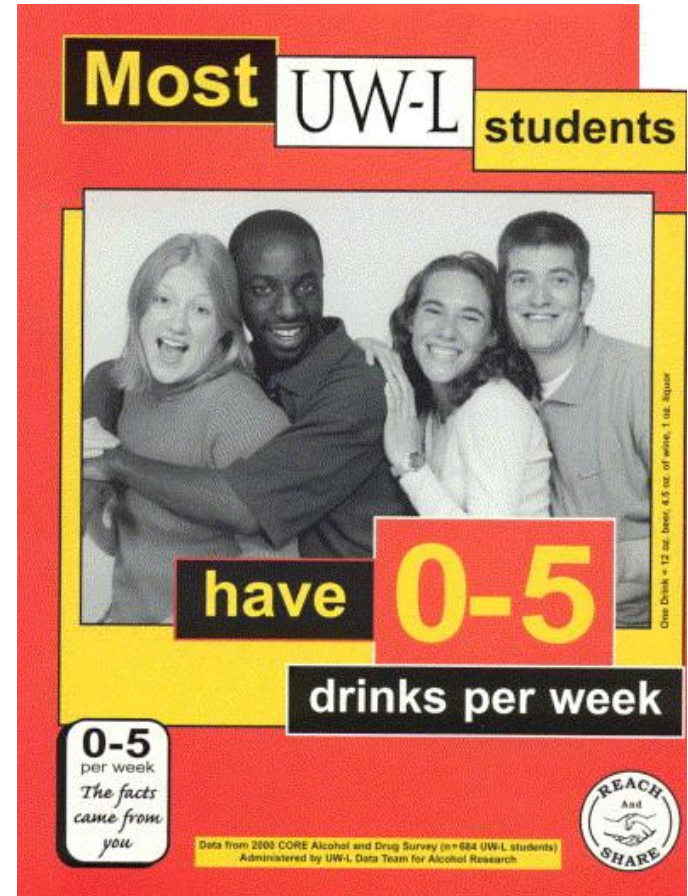
Research design

In-home recruitment, £80 incentive, 18 weeks
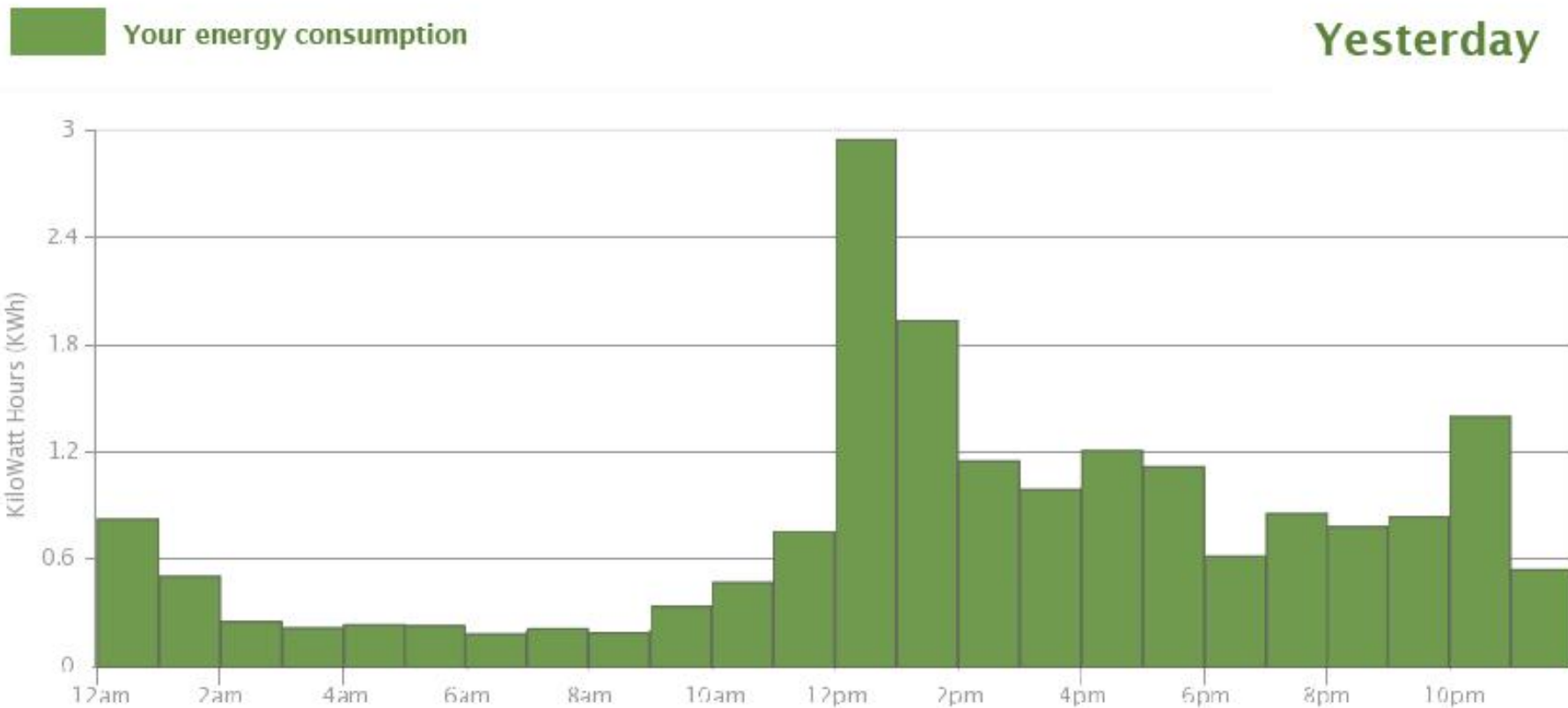
Quasi random allocation
    1. control – no feedback
    2. individual feedback & tips
    3. individual & social norms feedback & tips

Feedback via emails and personalised websites

Surveys, interviews, focus groups

Sample of 316

Graphs by email & web

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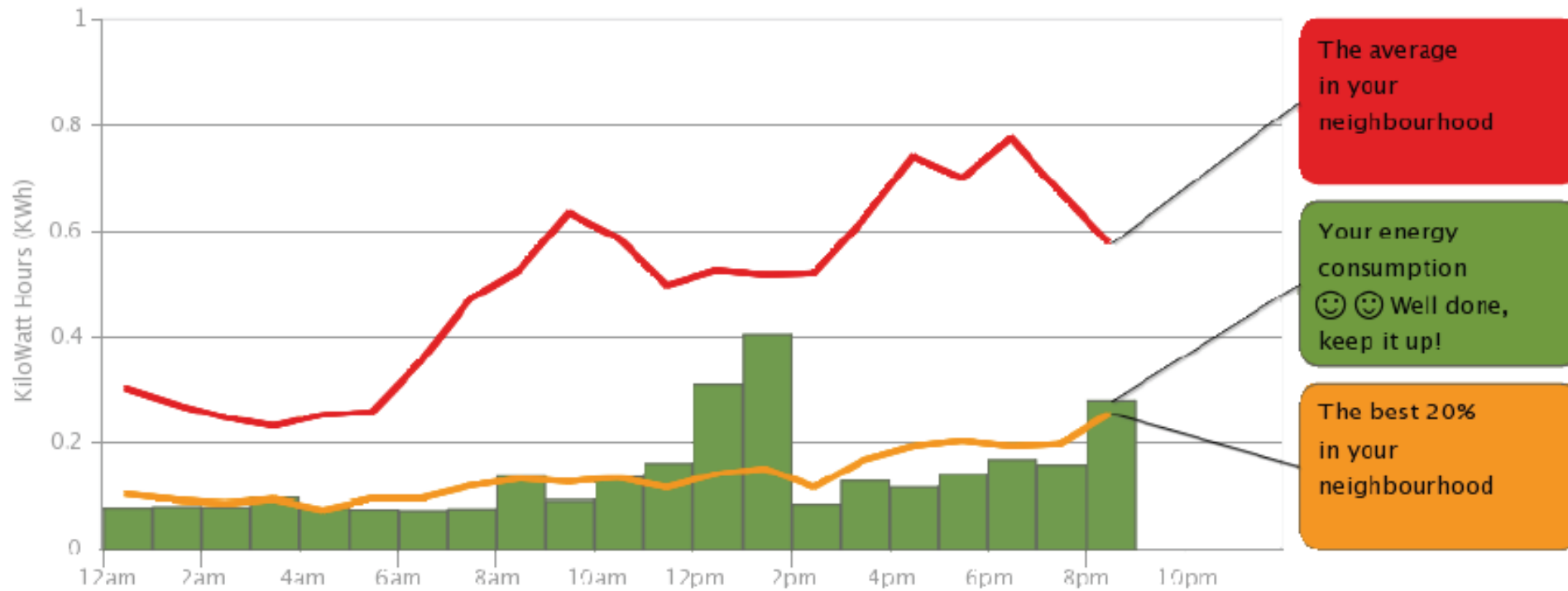
Feedback in weekly emails

Home Energy Study

SMS

Dear John

* Tip of the week * Watch out for so-called 'vampire usage' – the electricity used by appliances when they're idle but switched on at the mains. According to some experts, this explains 10% of household electricity bills.

It can also explain why some people have puzzlingly high night-time usage. (Hence the term 'vampire', because it can feel as though something is sucking the energy away during the night!)

To see how much electricity you use in your home during the night, look at the graph below. For tips on how to reduce this amount, read the following notes on 'escaping the vampire'.
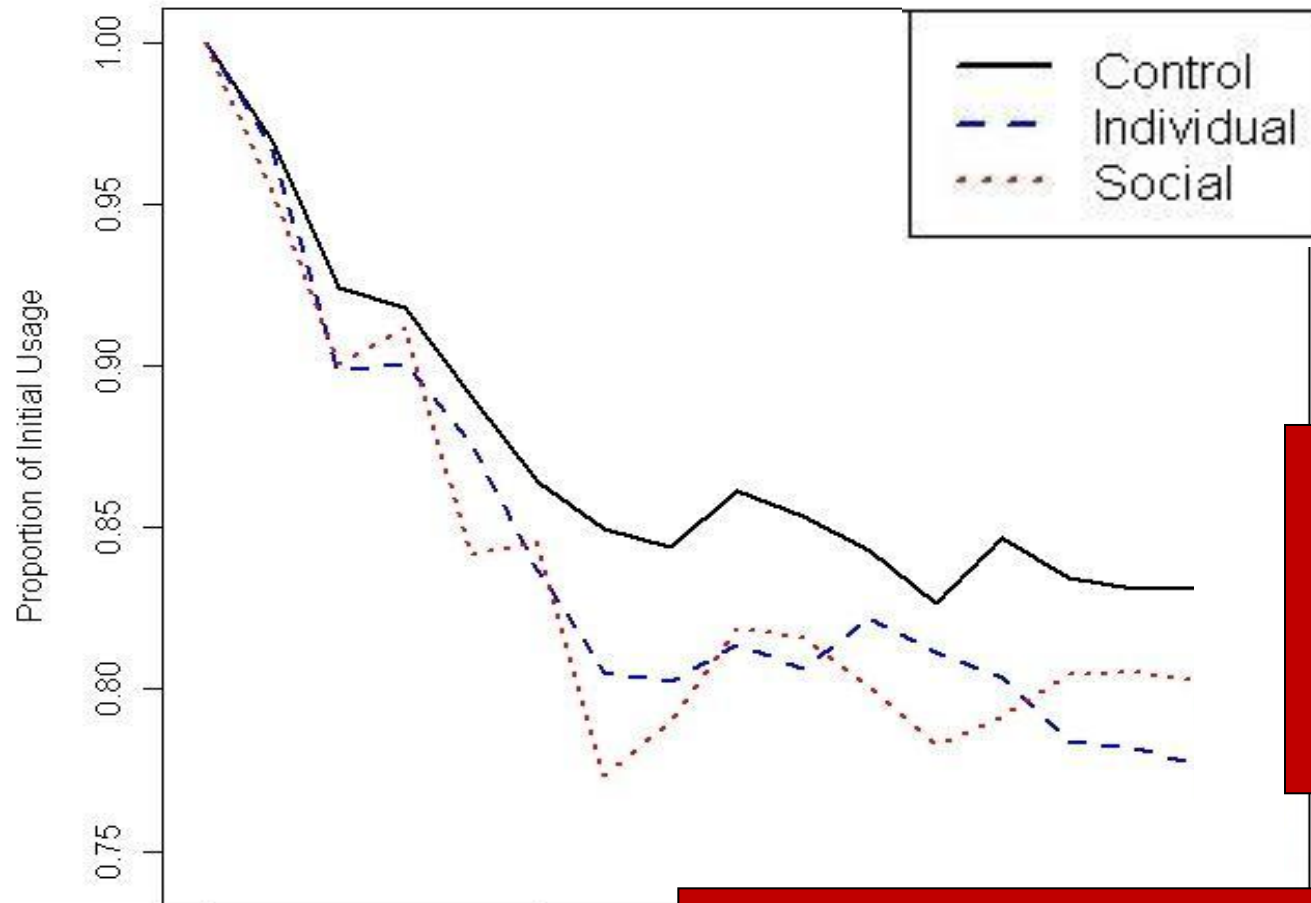
"Are you suffering from the 'vampire' effect – electricity being used when little or nothing appears to be on? Check this week's email to find out more"

Survey: claimed behaviour

	Claimed that tried to reduce electricity	Claimed that did reduce electricity
Control	**37%**	**19%**
Individual	**88%**	**53%**
Social	**86%**	**57%**

Actual consumption

Feedback vs. no feedback: 3% relative reduction

No evidence of any difference between feedback groups
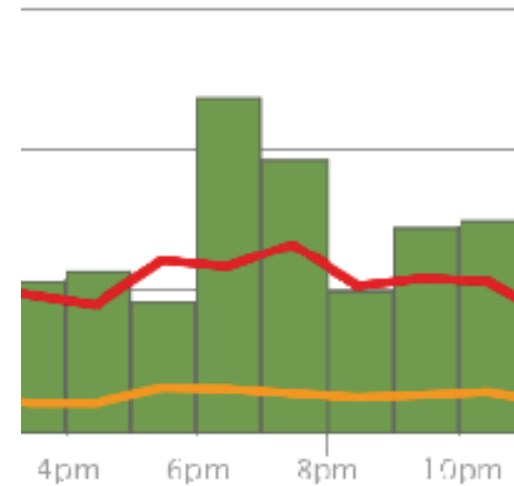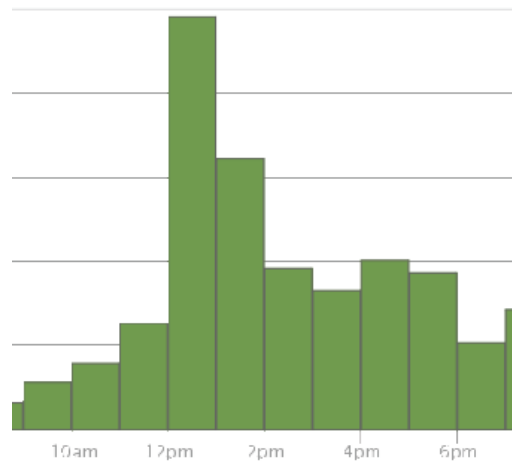
Social feedback more engaging
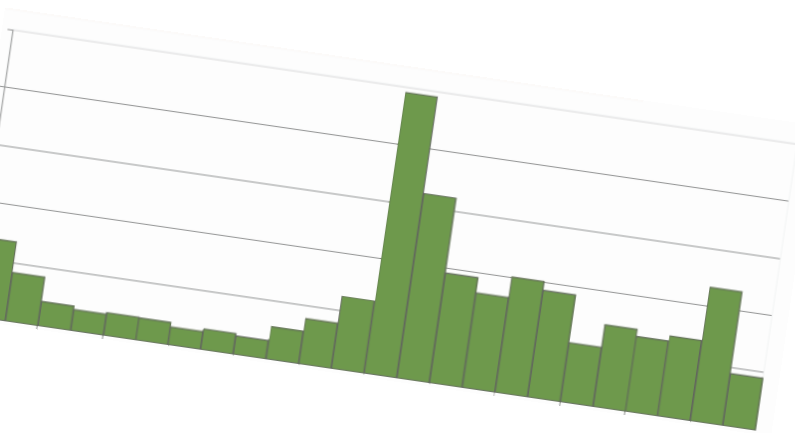
	Individual	Social Norms
graphs viewed	13.4	19.8

'Wastefulness' discourse prompted by comparisons

*They have these bar charts and they're showing the average use in the area, and then your usage. And **mine was way above everybody else's**. I thought well why is it so much then. So I tried turning things off etc, and it seemed to work.*

Conclusions

Little motivation to reduce consumption

- wastefulness discourse

- household conflict

Feedback

- individual feedback can reduce consumption

- social feedback increases engagement but no evidence of consumption change

Smart meters might benefit from

- email and web feedback

- hourly trend data

CHARM

http://www.projectcharm.info/findings