

Harnessing the power of social norms to increase sustainable behavior

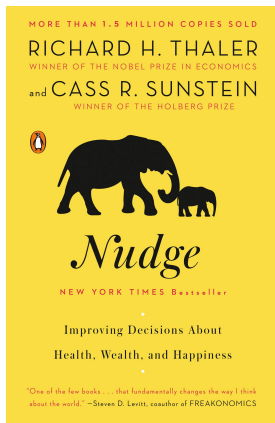
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Sant Just, 1 December 2021

Nudging

"A nudge, as we will use the term, is any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives. [...] Putting fruit at eye level counts as a nudge. Banning junk food does not."



Types of nudge

- The theory of nudges comes from the realization that people are not perfectly rational as standard economic theory would predict
- Nudges hinge on cognitive biases or rules of thumb that we use in our decision-making
- Hence, each type of nudge is connected to a specific bias. For example:
 - Default effects
 - Framing and loss aversion
 - Social norms

Social norms

- Elster (1989): rules of behavior based on widely shared views on how individuals ought to behave in a certain situation
- Bicchieri (2006): behavioral rules individuals wish to conform to on condition that:
 - ① most people in their reference network conform to it (*empirical expectation*)
 - ② most people in their reference network believe they ought to conform to it (*normative expectation*)

Social norms

- Social norms have been frequently mentioned as determinants of pro-social or anti-social behavior (e.g., broken window effect)
- Here, we provide two examples:
 - Hallsworth et al. (2017): tax evasion
 - Shultz et al. (2007): electricity consumption

Using social norms to decrease tax evasion

- Hallsworth et al. (2017) collaborated with the UK tax authority to include randomized messages in the reminders for tax filing

Group name	Test phrase
Control	
Basic norm	Nine out of ten people pay their tax on time.
Country norm	Nine out of ten people in the UK pay their tax on time.
Minority norm	Nine out of ten people in the UK pay their tax on time. You are currently in the very small minority of people who have not paid us yet.
Gain-framed public services	Paying tax means we all gain from vital public services like the NHS, roads, and schools.
Loss-framed public services	Not paying tax means we all lose out on vital public services like the NHS, roads, and schools.

Results

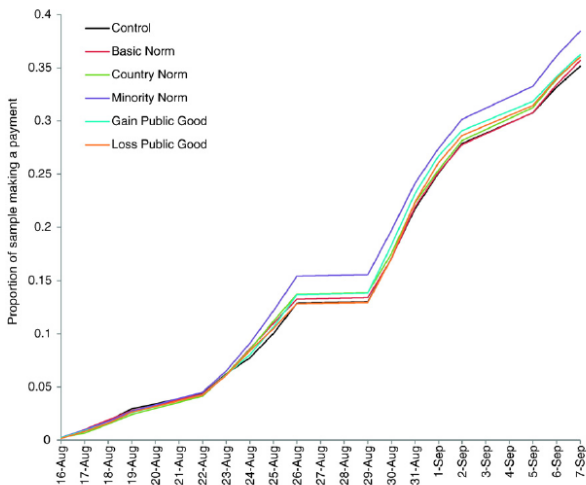
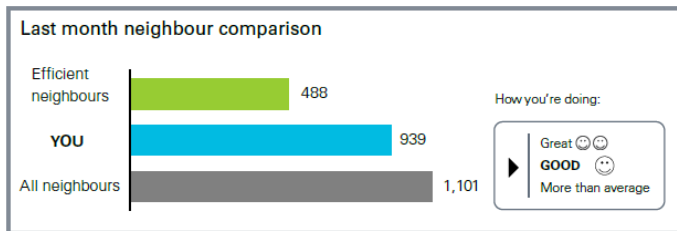


Fig. 1. Raw data on the cumulative percentage of people paying per day by treatment group for the first 23 days of the study period, Experiment One.

Using social norms to decrease electricity consumption

- OPower is a company offering support to electricity providers that launched in 2007 the HER (Home Energy Report) program
- Bi-monthly personalized reports in which data analytics are used to give feedbacks to consumers

HER report



Example of Opower's Home Energy Report

HER report

- The report uses three categories to show consumers how they are doing compared to others:
 - great (open mouth smiley)
 - good (smiley)
 - more than average (no smiley)
- Additionally HER shows how much energy and money households would have saved if they had consumed at the same level as their neighbors

Results

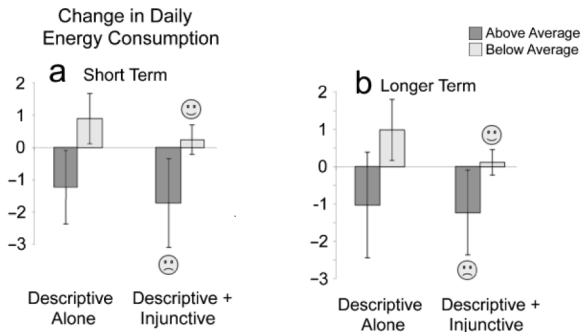
- Households receiving HER's have saved about 11 billion kilowatts of energy since 2007
- On average, the HER saves consumers 1.5%- 2.5% on their energy bills in the first two years
- Cumulatively, HER's have driven \$2 billion in customer savings

One additional experiment

- Shultz et al. (2007) report the results from a pilot test conducted before the OPower program started
- They ask whether giving information without the smiley can have the same effect
 - T1: they only provide info on consumption relative to the neighbours (*descriptive*)
 - T2: on top of the info on relative consumption, people are provided with the smiley (*descriptive + injunctive*)

Results

- Without smiley, feedback reduces consumption of people above average but increases consumption of people below average (boomerang effect)
- The smileys eliminates the boomerang effect as it only reduces the consumption of people above average



Conclusion

- Nudges seem effective in driving human behavior
- Are they also effective on waste management?
- The RETHINK WASTE project will tell us!

Thank you for your attention!

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