

Emotional Taxation: the Hidden Costs of Nudges

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Overview

The door-in-the-face (DIF) phenomenon is a well known experiment from psychological research (Cialdini et al., 1975). The idea is to confront subjects with an initially large request, which they usually deny, then followed by a smaller second request. Psychological experiments show consistently that the compliance rate with the smaller request is significantly higher when preceded by an initial large request than when this is not the case.

There are many hypotheses as to why this observation is made. What is common to all of them is that declining an initial request leads to some form of emotional cost for the receiving party, which – so it is hypothesised – is reduced by the compliance with the second smaller request.

In many countries, households are frequently encouraged by their utility company, by their government, and other organisations, e.g., NGOs, to reduce their energy consumption or to invest in more energy efficient appliances or buildings. Often these requests come in form of appeals to households' pro-social conscientness and are motivated by the environmental benefits generated by these actions. Such appeals are generally seen as cheap and effective, as they do not entail financial incentives, nor are particularly costly to conduct.

However, little is known to date about the true welfare impact of these 'nudges', as the emotional costs – or emotional taxation – is usually not accounted for. Allcott and Kessler (2015) are the first authors to systematically evaluate the emotional costs of home energy reports (HER). They find considerable disutility generated by the HERs which – once taken into account – reduces the overall welfare effect of HERs considerably.

Our study wants to investigate ways by which these welfare losses can be circumvented or lessened. By means of a natural field experiment, we exploit the mechanism underlying the DIF in order to test the impact of a smaller second request on subjects' welfare.

Methods

We conduct a natural field experiment on 1994 households in Southern Jutland (Denmark). Households are randomly assigned to invitation letters to participate in a larger experiment on energy demand flexibility, which are framed with three different strategies. The first strategy is a classical environmental strategy appealing to households' pro-socialness. The second strategy offers the possibility to win a costly gadget and can be seen as a pro-self motive. The third strategy is a mixture of both.

Once the household has received the invitation, they are asked to accept or decline participation and to fill-in a short questionnaire on their energy consumption habits and other aspects.

We subsequently analyse the n-dimensional contingency table by means of a log-linear model, in order to test the following hypothesis:

Subjects treated with a pro-social motive, face higher emotional costs by declining the first request, and will therefore be more inclined to comply with the second request and answer the questionnaire than subjects treated with the pro-self motive.

Results

Our results confirm our hypothesis. Subjects treated with the pro-social framing strategy and declining participation are 3.4 times more likely to respond to the second request than subjects treated with the pro-self framing strategy and 1.7 times more likely than subjects treated with the mixed strategy. The results remain stable even when controlling for different group sizes and the correlation between participation in the experiment and response to the questionnaire.

Not only do our results thereby confirm the existence of emotional costs induced by a pro-socially framed initial request, like in Allcott and Kessler (2015). But we show that by offering a second smaller request which is easier to comply with, these emotional costs can potentially be reduced, hence, augmenting the overall welfare effect of the measure.

Conclusions

Our results confirm the existence of emotional costs of pro-socially framed nudges. These costs are usually unaccounted when estimating the welfare effects of pro-socially framed nudges and framing strategies. By means of a natural field experiment, we show that these costs can potentially be reduced by giving households the possibility to comply with a smaller follow-up request. By choosing to comply, households have the possibility to ease their emotional costs of non-compliance with the first larger request and might generate less disutility from the process than if this goes unaccounted for.

References

Allcott H., Kessler J.B. The Welfare Effects of Nudges: A Case Study of Energy Use Social Comparisons. Technical Report Working Paper No. 21671; NBER; 2015.

Cialdini R.B., Vincent J.E., Lewis S.K., Catalan J., Wheeler D., Darby B.L. Reciprocal concessions procedure for inducing compliance: The door-in-the-face technique. *Journal of Personality and Social Psychology* 1975;31(2):206–15.