Carsten Lynge Jensen, KU

Recruiting electricity consumer to greener power programs - Investigating the effects of Persuasive advertising – through a large field experiment

Abstract: In order to reduce greenhouse gas emissions power companies are looking for ways to induce consumers to participate in flexible power consumption programs. Such programs can help integrate green solar and wind technologies into the power system and thereby reduce the cost of moving toward sustainable energy production. It is well know that people in a wide range of markets respond to nonrational persuasion like pictures etc. in advertising. For example Bertrand et al (2008) finds that a photo an attractive woman increased the loan demand among males in a large field experiment on advertising for consumer loans. In the present study, we investigate the impact of persuasive advertising on participation and performance in such a flexible electricity consumption program using a large field experiment among 40.000 households. The study shows that using different intuitive illustrations in the initial direct mail advertising we used attracted different segments of people into the program. The advertising campaign focused on financial and prosocial environmental incentives where consumers were asked to shift consumption a few hours during the day when prompted by an SMS. We generally find small effects of different persuasive advertising elements on the number of consumers recruited to the program. However, we find significant effects on how actively recruits participated in the following one year program. The preliminary results indicate that there are important selection effects of persuasive advertising especially on household receiving pro-social (non-financial) incentives. We see that males are significantly less active in the program if they originally responded to an invitation with picture of a woman. Females on the other hand are significantly more active in the program if they responded to an invitation with an environmental illustration. Our results suggest that persuasive marketing may affect selection into energy programs especially when combined with prosocial incentives and that the result can be both beneficial and detrimental to program performance.