

Comparing energy and water conservation among peers: Tomorrow I will act, but what is the point?

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Introduction

As the rate of energy consumption is increasing, the French State is aiming to reduce energy consumption of buildings by at least 38% by 2020 (Grenelle Environnement). Achieving this goal requires a large proportion of this reduction to be made by “final consumers” themselves. While attention has been given to the study of behavioral changes (Abrahamse and al., 2005; Souchet and al, accepted) and the factors related to conservation behaviors (Corral-Verdugo, 2003; Moussaoui, 2007), few studies have tried to understand how people perceive the relationship between consumption, behaviors and savings.

The purpose of this research is to investigate how participants anticipate the benefits of their behaviours in domestic savings (of water and energy) in terms of gain of consumption.

Method

To do so, 109 undergraduate students in Psychology (M = 19.58 years, SE = 1.36 years) participated in the study. Participants first responded to a 7-item Self Report Index of Habit (adapted from Verplanken and Orbell, 2003). Based on the median score, we characterized these pro-environmental habits patterns as “low” vs. “high”. Three months later, the students were asked to indicate how much they thought they were performing pro-environmental actions to reduce energy and water consumption using a seven-point scale (1 = *less than my peers*; 7 = *more than my peers*) at two different temporal perspectives (*now* vs. *in 15 years*). The same question was administered regarding the amount of energy and water they thought they used per year (1 = *less than*

my peers; 7 = *more than my peers*; *now* vs. *in 15 years*).

Main findings

The results demonstrate that participants establish few connections between energy and water consumption and savings. Moreover, according to the environmental habits of participants, anticipating actions and associated benefits differ: only participants with low environmental habits seem “sensitive” to a temporal perspective. Indeed, participants with high pro-environmental habits think they will neither change their performance in the future, nor consume less energy when compared to their peers. Understanding how individuals project themselves into the future according to their habits gives us insights into decision making, but also helps us to design more effective information campaigns as suggested Dietz (2010) recently.

References

- Abrahamse, W., Steg, L., Vlek, C. & Rothengatter, T. (2005). A review of intervention studies aimed at household energy conservation. *Journal of Environmental Psychology*, 25, 273-291
- Corral-Verdugo, V., Bechtel, R., Fraijo, B. (2003). Environmental beliefs and water conservation: an empirical study. *Journal of Environmental Psychology*, 23, 247-257
- Dietz, T. (2010). Narrowing the U.S. Energy Efficiency Gap. *Proceedings of the National Academy of Sciences*, 107, 37, 16007-16008
- Moussaoui, I. (2007). De la société de consommation à la société de modération. *Les annales de la recherche urbaine*, 103, 112-119
- Souchet, L., Girandola, F., & Zbinden, A. (accepted). Double foot-in-the-door, social representations and environment: application for energy savings. *Journal of Applied Social Psychology*
- Verplanken, B., Orbell, S. (2003). Reflections on Past Behavior: A Self-Report index of Habit Strength. *Journal of Applied Social Psychology*, 33, 6, 1313-1330