

# FSB-CBSM - Results

## Fostering Sustainable Behaviors: Community-Based Social Marketing

DURATION OF THE PROJECT  
01/01/2007 – 31/01/2011

BUDGET  
737.414 €

### KEYWORDS

Sustainable behaviors – environment – social marketing – ambivalence – moral emotions - communities – infrastructure - individual differences - perception – risk compensation

### CONTEXT

Developing sustainable behaviors has become a major objective for our society and for political leaders. However, although most people express a positive attitude toward ecology and sustainable behaviors, they often fail to modify their former behaviors toward greater sustainability. Social marketing campaigns aim at promoting sustainable behaviors. Unfortunately, these campaigns are not always successful and their impact is seldom assessed. This research project aims at identifying the best levers to change individuals' behaviors toward greater sustainability and at developing marketing tools and strategies that could efficiently influence people's behaviors..

### OBJECTIVES

This project had four main objectives. The first objective was to determine how people classify sustainable behaviors and which behaviors are perceived as similar. The main results indicated that participants classified sustainable behaviors into 4 categories. The first category included behaviors related to food and water. The second one was related to consumer's choices such as wastes reduction, or preference for second-hand and recycled products. The third and fourth ones were composed of behaviors that require a continued monitoring. The third one included behaviors related to the conservation of energy, whereas the fourth one comprised behaviors related to transports. We also found that the perceived norm (that is, what other people expect from me), the impact on the individual him/herself (that is, the impact of adopting the behaviors on myself and on my life) and the easiness of pro-environmental behaviors (that is, the extent to which I consider the behavior as easy or difficult) determine how the behaviors are perceived relatively to each other. Results indicated that the impact that the behaviors are likely to have on the environment does not have an impact on the social representation of these behaviors. Finally, our results revealed that the perceived easiness of behaviors was mainly determined by people's physical environment and available infrastructures.

The project's second objective was to identify the cognitive, emotional and psycho-social antecedents of sustainable behaviors. In a first set of 2 studies, we investigated the impact of attitudinal ambivalence on sustainable behaviors. Attitudinal ambivalence is a simultaneously positive and negative evaluation of a given object.

Results indicated that ambivalence significantly improved the prediction of intentions toward pro-environmental action as well as pro-environmental behaviors, besides the "traditional" predictors of intentions (attitude, subjective norm, and perceived behavioral control). The more people are ambivalent toward pro-environmental behaviors, the less they intend to take some form of pro-environmental action. A third study was designed in order to have a better understanding of attitudes content and, by this way, of ambivalent attitudes. The results indicated that the positive component of attitudes elicits more abstract and distant thoughts, whereas the negative component elicits relatively concrete and close thoughts.

Regarding the project's second objective, a second line of research investigated the impact of emotions on sustainable behaviors and intentions. We ran a set of 5 correlational studies focusing on moral emotions, in other words, emotions that are a consequence of the evaluation of a behavior or situation. Our studies investigated both own and vicarious emotions (aroused due to someone else's behavior). Their results indicated that vicarious emotions influence pro-environmental intentions and behaviors, whereas individual emotions appeared as clearly less efficient. Moreover, in most studies, vicarious guilt was the best predictor of the intention to behave in an environmentally-friendly way. Our results also indicated that the control people think they have on pro-environmental behaviors influences their feelings of vicarious guilt. Finally, our results regarding emotions indicated that responsibility feelings have a significant and positive impact on pro-environmental behaviors.

A third line of research investigated the impact of intra-individual variables on pro-environmental behaviors. Results indicated that Social Dominance Orientation, self-monitoring and materialism have a significant negative impact on pro-environmental intentions. In other words, some of the values to which people adhere influence their intentions toward sustainable behaviors.

A set of 2 studies also revealed an impact of endocrinology on people's behavior. In this research, we showed that biological markers like prenatal testosterone have an influence on how people approach situations in which behavioral monitoring is necessary to display ecological behavior. This is fully in line with the previously mentioned studies when one considers this as a biological analogue of more psychological intra-personal states. In our research, indicators of high prenatal testosterone levels caused people to drive more aggressively. Although – as this group of people did not cause more accidents – this did seem to match their level of skill, they failed to assume an ecologically efficient driving style (see below for more information about driving behaviors).



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Finally, in line with the project's second objective, a fourth line of research focused on the impact of the physical and social environment on sustainable behaviors. One cannot but see that people act in a context, and that this context influences every single intra-individual level previously discussed. The environment of an individual plays a moderating role in how perceptions, preferences and intentions are shaped, and how these latter are translated into actions. Combining 16028 responses of EFP-campaigns conducted by the WWF with infrastructural indices based on respondents postal codes allowed us to study the nature of this interaction. We showed how the mere perception of one's environment brings about different mind states that in turn determine how the environment is acted upon. Preliminary results show that reminders of nature shape intentions to preserve it, and how even the best of intentions are hard to execute when public infrastructure is not fit to facilitate them.

The impact of the perceived physical environment was also studied through a very concrete behavior: driving. Our results show that leading people to believe they are in a safe care ironically leads them to adjust their behavior to shape the situation they are in to a more risky one. Risk homeostasis theory indeed predicts that people bolster an optimal trade off between the benefits and the drawbacks of taking risk. When an external influence changes this balance, people adjust for this. When the change is an objective change, this does not come with a price in increased danger. However, we found that it does come with a price in terms of the ecological cost of driving behavior that is risk seeking and more aggressive. This translates into higher fuel consumption and more wear and tear. When the change is subjective, an additional cost of increased danger might be incurred.

The project's third objective was to develop and assess tools and strategies aimed at improving social marketing campaigns. This objective was based on the results of the two previous objectives. A first line of research focused on emotions. In a set of 4 studies, we induced different types of emotion and then assessed participants' intentions and actual behaviors toward the environment. Of special interest, two of these studies used the Ecological Footprint measure in order to induce a specific emotion. The Ecological Footprint was therefore used in a dynamic way as a social marketing strategy. Results indicated that the induction of guilt led to a greater intention to demonstrate pro-environmental behaviors than was the case with the induction of pride and without any induction of emotion. Furthermore, in some of the studies, only the induction of collective guilt led to actual pro-environmental behavior. However, this effect was not constant and additionally depended upon the individuals' level of group identification. Consequently, the impact of identification level makes the use of collective guilt in marketing campaigns or messages rather difficult and further research seems to be needed in order to have a better understanding of the conditions under which collective guilt has a positive impact on sustainable behaviors.

A second line of research regarding objective 3 investigated the impact of message framing on sustainable intentions and behaviors. We tested the impact of messages focusing on very concrete, short term and personally relevant positive consequences of pro-environmental behaviors. The results indicated that people are willing to behave environmentally-friendly to a higher extent when they receive a message highlighting the short-term consequences of pro-environmental behaviors on themselves than when they receive a message highlighting long-term consequences on others or a neutral message. Furthermore, this effect was stronger on men than women.

The last line of research related to the third objective focused on the impact of an abstract versus a concrete mindset on attitudes and intentions toward pro-environmental behaviors. This line of research was based on the Construal Level Theory, according to which it is possible to tune people to a high or a low construal level and consequently to a more abstract or a more concrete mindset. Some of our results showed that people who were placed in a more abstract mindset expressed less negative thoughts regarding pro-environmental behaviors and more pro-environmental intentions. However these results were not constant and further research is needed in order to test whether tuning people to a more concrete or abstract mindset can be an effective strategies to trigger pro-environmental behaviors.

In line with this third objective, we also tested a pilot project called the climate transition tool. Households were invited to register on the internet and to use a carbon footprint calculator. They could then monitor their own consumption and follow the CO2 emissions of the whole group. This pilot project was very promising and the social comparison offered to participants was very appealing.

Finally, the project's fourth and last objective was to communicate about our research and results. The results of this project were presented in several workshops and in several journals or newspapers. Papers for peer-reviewed journals are currently written.

### CONCLUSIONS

Studies related to Objective 1 confirmed that all pro-environmental behaviors are not equal, not perceived the same way. Furthermore, results also indicated that the impact that the behaviors are likely to have on the environment does not have an impact on the social representation of these behaviors. Consequently, campaigns focusing on the positive or negative consequences of some behaviors on the environment might be ineffective in changing people's representations and attitudes. Instead, they would be more efficient by highlighting the positive impact these behaviors can have on the individual him/herself, the easiness of the behaviors and their normative aspect.



Objective 1 results also indicated that people often consider pro-environmental behaviors as difficult if they think their environment lacks the infrastructures that are necessary for these behaviors. This result points to the necessity of providing people with the means to behave environmentally-friendly and to inform them about the possibilities their physical environment offers them in order to act pro-environmentally.

Studies related to objective 2 and attitudinal ambivalence pointed to the fact that it is important to consider attitudes as complex variables and take into consideration their ambivalent aspect. Our results indicated that negative components of attitudes were generally more concrete and less distant than the positive ones. This also means that, when both types of thoughts are present at the same time, thoughts related to the negative components have more chances to be taken into consideration when making a decision (as people preferentially attend to short term and personally-relevant arguments when making a decision). Together with studies related to Objective 3, these results pointed to the importance of highlighting the direct benefits people can have when they behave environmentally-friendly. Concretely, it means that marketing campaigns and messages would be more effective if their content was focused on the short term and direct interests of pro-environmental behaviors for people rather than on the interests for future generations or people living in foreign countries.

Studies related to emotions first indicated that vicarious or collective guilt might be effective in triggering pro-environmental behaviors. However, further research is needed in order to have a better understanding of the conditions allowing a positive impact of guilt on sustainable intentions and behaviors.

The observed impact of perceived control on guilt suggests that strengthening this feeling of control amongst people could favour pro-environmental behaviors through different mechanisms, such as the direct impact of subjective control on behaviors, but also its indirect impact through behavioral intentions and feelings of vicarious guilt.

Finally, the results of this line of research also indicated that Ecological Footprint can be used as a dynamic tool and can contribute to changing people's behaviors.

### CONTRIBUTION OF THE PROJECT TO A SUSTAINABLE DEVELOPMENT POLICY

The project allowed us to make recommendations (that can be found in the conclusions) for a higher efficiency of social marketing campaigns. The inclusion of two associations active in environmental prevention as partners of this project, as well as the participation of representatives of both associations and public actors in the follow-up committee, guarantee the dissemination of these recommendations and their possible application in social marketing campaigns.

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