

ANNEXES

Minutes of the follow-up committee meeting

Follow-up meeting 1

Fostering sustainable behaviors: Community-based social marketing
Follow-up Committee - 02/04/2007

Present: Marc Van Heuckelom, Ariane Godeau, Jean-Paul Broonen, Luk Warlop, Jean-Marie Savino, Xavier Sohet, Benoit Dardenne, Nathalie Delacollette.

Excused: Sarah Lefevere, Joëlle Van Bambeke, Arnaud Liegeois, Geoffroy De Schutter, Karine Thollier, Jan Verheyen.

I. Presentation of the program and follow-up committee functions

The program and follow-up committee functions are presented by M. Van Heuckelom.

The FSB-CBSM project is part of the research program "Science for a sustainable development" (SSD - second call) as a transversal research project.

The follow-up committee is composed of potential users of the research results. The follow up committee provides (scientific) support to the research network and promotes communication between researchers, decision-makers and society. Committee members have a consultative role: they give feedback, advices, opinions, ideas... The meetings of the committee allow a mutual learning between researchers, follow-up committee members and Belspo.

Marc Van Heuckelom provides informative documents to the committee members. The persons who could not attend to the meeting will receive these documents by post.

II. Presentation of the project, the partners, and the committee members

FSB-CBSM project focuses on psychological antecedents of sustainable behaviors and on marketing techniques that could lead to adopt more sustainable behaviors.

This research project involves 4 partners:

- KUL, marketing group – Luk Warlop

- Ulg, social psychology unit – Benoit Dardenne and Nathalie Delacollette
- Espace-Environnement (Charleroi) – Jean-Marie Savino and Xavier Sohet
- Ecolife (Leuven) – Steven Vromman and Ann Sels

The follow-up committee members who could be present at this meeting introduce themselves:

- Ariane Godeau represents the CRIOC. She works on the eco-consumption problematic, and particularly on waste prevention. She collaborates to surveys realised with consumers (for example, “baromètre de l'éco-consommation”).
- Jean-Paul Broonen comes from the University of Liège. He has a PhD in psychology and has been working on the link between attitudes and behaviors. He is interested in the cognitive antecedents of behaviors.

III. Research objectives and current studies

The research objectives and the current studies are presented by Benoit Dardenne and Nathalie Delacollette (cf power point document). B. Dardenne presents some preliminary results indicating that attitude ambivalence and moral emotions seem to be important predictors of intentions to have sustainable behaviors and of ecological actions. Several suggestions are made for future studies:

- The link between type of motivation and behaviors could be investigated. Sustainable behaviors can be adopted for other reasons than sustainable development concerns (for example, economical concerns). How to encourage people to adopt sustainable behaviors then? Luk Warlop gives the example of re-labelling techniques that can be used in such a case and that he has used in some studies. He proposes to present these studies at the next follow-up committee meeting.
- We could investigate more deeply the impact of habits and former behaviors. Well-established habits can be a threat to change and are difficult to fight. These habits and their impact might be measured in further studies (for example, studies on the implementation of intentions).
- The question of the knowledge about efficient behaviors is raised. Some people might just not know which behaviors are efficient or not in order to reduce their impact on environment. They may also have erroneous beliefs about sustainable behaviors. These knowledge and beliefs might be more deeply investigated in future studies.

- The moral emotions explored in the first studies are mainly negative emotions (guilt, anger, shame). However, more positive emotions might be investigated (for instance, brotherhood, solidarity feelings, civic responsibility...).

IV. Planned studies

Further studies are briefly presented by Benoit Dardenne. They will investigate more deeply the link between emotions and sustainable behaviors / actions.

Follow-up meeting 2

Fostering sustainable behaviors: Community-based social marketing Follow-up Committee - 17/01/2008

Present: Marc Van Heuckelom, Arnaud Liégeois, Geoffroy Deschutter, Xavier Van Roy, Karine Thollier, Lise-Anne Hondekyn, Bruno Verbeeck, Steven Vromman, Bart Claus, Xavier Sohet, Benoit Dardenne, Nathalie Delacollette.

Excused: Jean-Paul Broonen, Sarah Lefevere.

1. Presentation of the follow-up committee functions

M. Van Heuckelom explains the follow-up committee functions.

The follow-up committee is composed of potential users of the research results. Committee members have a consultative role: they give feedback, advices, opinions, ideas... The meetings of the committee allow a mutual learning between researchers, follow-up committee members and Belspo. The comments of the committee members will appear in an annex to the mid-term report.

2. Presentation of the partners and the committee members

Each committee member introduces himself. The project partners introduce themselves and explain their role in the project. This research project involves 4 partners:

- KUL, marketing group – Luk Warlop and Bart Claus
- Ulg, social psychology unit – Benoit Dardenne and Nathalie Delacollette

- Espace-Environnement (Charleroi) – Xavier Sohet
- Ecolife (Leuven) – Steven Vromman and Bruno Verbeeck

1. Results of the studies run in 2007, current and planned studies

After a short reminder of the project objectives, the studies run in 2007 and their results are presented by Nathalie Delacollette (cf power point document). The results of 3 lines of research are presented. The first line of research focuses on the social representation of sustainable behaviors. Preliminary results seem to indicate that participants made a difference between behaviors involving a decisional process (for instance consumer choices as buying economic electric bulbs, avoiding to buy over-wrapped products, etc.) and behaviors involving a continuous regulatory process (ex: walking or cycling for short distances, driving ecologically-friendly, having a shower rather than a bath, etc.). However, more data have to be analysed before a conclusion can be drawn.

The second line of research was about attitudinal ambivalence. Results indicated that ambivalence predicted the intentions toward sustainable behaviors. The more participants felt ambivalent, the less they intended to have sustainable behaviors.

Finally, the third line of research focused on moral emotions. Results indicated that guilt was strongly linked to behavioral intentions and to self-reported behaviors. Furthermore, vicarious guilt seemed to be especially powerful in leading people to have more sustainable behaviors.

Current and planned studies are then presented (cf power point document) and discussed. Current studies focus on emotions induction, community specificities (use of several data sets and their links based on respondents' postal codes) and predictors of involvement in ecological actions (field study with compost-guides).

The committee members were very interested and very enthusiastic about the first research results and about the current and planned studies. During the presentation, they raised several points and made several suggestions:

Concerning guilt :

- Some committee members noted that they had **already observed expressions of collective and vicarious emotions** (especially guilt) in people's reactions about ecology and environment. For instance, when people speak about ecology on the radio, they often cite other people (their neighbours...) lack of respect for

the environment, but almost never talk about their own behaviors toward environment.

- Arnaud Liègeois suggests that we could use vicarious or collective guilt in an **“induced hypocrisy” paradigm** (we could activate a general positive attitude, and then induce collective guilt).
- Bart Claus indicates that **some preliminary analyses** on data collected by the KUL team reveal a **stronger impact of individual guilt** than collective guilt on intentions toward sustainable behaviors (although both are effective to increase these intentions). Nevertheless, **collective** guilt might be **easier to use in marketing campaigns** than individual guilt.
- From a **deontological** point of view, the problem of **using guilt** (especially individual guilt) **in public messages** is raised. One can wonder if inducing negative emotions and reminding people of their negative behaviors is acceptable. Again, collective guilt can be a solution to this problem. It is a “softer” way to induce a negative feeling and it doesn’t focus on each person’s negative behaviors. On the contrary, it includes a kind of empowerment message (as the message is “people around you have a negative behavior, but you can do something to repair”).
- Xavier Sohet asks the question of **the reference group to induce collective guilt**. How could we know what is the best group to choose as a reference in order to induce guilt. The answer to this question is not easy. The best group should be the group to which the target is the most highly identified. This means that the answer to this question depends on the targeted group (for instance, different reference groups should be used for students, for housewives or for active people...).
- The **dynamic use of the Ecological Footprint measure** is discussed. EF can be used in order to induce emotions such as guilt or pride. In addition, it can be an effective way to touch people who are not already “environmentally aware”.
- Some of the committee members wonder if there are already some **marketing campaigns using guilt**. We will try to collect information about this.

Concerning the project studies in general:

- The question of the **populations** studied in the project is raised. Most studies used samples composed of **students**. Only a few studies focused on adults or working people. Committee members wonder if these populations would lead to different results, given the different constraints they face or the different social status they have. Data collected until now on “working” people gave the same results as data collected on students. Consequently, it seems that there are no

reasons to believe that cognitive and emotional processes differ in these populations. However, this possibility will be further tested. Several current and planned are designed to collect data on different types of population. These studies will focus more on “adult” or “working” population (and not only on students).

- Some of the committee members wonder if some of the emotions studied can lead to **longer term effects** than others. The present project doesn't have data about long-term impact yet. However, some studies testing these long-lasting effects are about to start (ex: “compost-guides” study and studies about implementation intentions). Furthermore, Benoit Dardenne gives the example of a study (from another research project) on the impact of collective guilt on gender discrimination. This study showed an effective short-term impact of both individual and collective guilt, but only collective guilt had a significant impact several months after its induction. These results are quite encouraging for our current research on collective guilt. The present project will investigate the long-lasting effect of several emotions on sustainable behaviors in further studies.
- The **impact of positive emotions** is discussed. Studies run in 2007 mainly focused on negative moral emotions. However, studies planned in 2008 will investigate more positive emotions. The different impacts of positive and negative emotions are discussed. One hypothesis could be that the first step toward sustainable behaviors could come from negative emotions and that positive emotions could subsequently be efficient to maintain these behaviors.
- The question of the **knowledge and its interaction with emotions** is raised. When should people be provided with cognitive information about sustainable behaviors? Before any emotion induction? Later? Information could be especially important when it comes to implementation intentions. When people think about how, when and where they are going to have sustainable behaviors, it should be essential to provide them with information about how to implement their “new” behavior(s).

Concerning further studies:

- Concerning the studies on **communities' specificities**, Xavier van Roy informed the research team that the **IBGE** has got some **data** on Brussels that could be interesting for this part of the project. The **OVAM** might also have interesting data about, for instance, the amount and type of wastes.
- The project researchers raise the **problem of actual behaviors measurement**. It is rather difficult to find non-intrusive measures of concrete behaviors. The committee members make several suggestions. For instance, we could use

consumer choices tasks. We could also offer a drink to participants at the end of a study and see if they chose plastic cups or glasses. We could also ask them to regulate the temperature of the room (use the thermostat). Finally, Arnaud Liégeois suggests having a look in Rob Holland's papers (who used several concrete behaviors as dependent measures).

- Xavier Van Roy draws a parallel between **compost-guides** and **“mobilisateurs énergie”** (from the project “défi énergie” in Brussels). These people also receive a training and help people around them to reduce their energy consumption. The study about compost guides motivations and involvement could maybe be extended to these “mobilisateurs énergie”.

2. Next meeting

The next follow-up committee meeting should take place end of June or beginning of July 2008 and will allow the committee to discuss a first version of the evaluation report.

Follow-up meeting 3

Fostering sustainable behaviors: Community-based social marketing Follow-up Committee - 03/07/2008

Present: Marc Van Heuckelom, Xavier Van Roy, Bart Claus, Luk Warlop, Xavier Sohet, Johanne Huart, Benoit Dardenne, Nathalie Delacollette.

Excused: Bruno Verbeek, Arnaud Liegeois, Ariane Godeau, Jean-Paul Broonen, Tineke Van Engeland (Netwerk Bewust Verbruiken).

1. General Information

We are approaching the end of phase 1 (December 2008). The project partners are currently writing the evaluation report as well as working on the second phase project (years 2009 and 2010). For this purpose, the suggestions and comments of the follow-up committee members are welcome and would be very useful.

Nathalie Delacollette will be on maternity leave from mid-august until beginning of December. During this period, Johanne Huart (researcher at the Social Psychology Unit, ULg) will replace her (half time).

2. Phase 1 studies and results

Nathalie Delacollette and Bart Claus present phase 1 studies and their results → Cf power point document. Several comments and suggestions are made by the persons participating in this meeting:

- Concerning the project in general, Xavier Van Roy (Brussels Environment) underlines the fact that most of our participants were students. He explains that Brussels Environment has already observed a powerful effect of social status on sustainable behaviors. For this reason, he suggests that we collect more data on different social group. Furthermore, he advises us to test the impact of social class (for instance, based on segmentation → Study level + job function. Cf SIM.BE to see how to use such a classification) on the variables we studied and on sustainable intentions and behaviors.
- Concerning the social representations study, Luk Warlop proposes that a possible dimension underlying the representation could be the level of control. It could be possible to draw a diagonal from behaviors requiring a low control to behaviors requiring a high control. This question will be investigated in the follow-up study planned for September 2008.
Some behaviors don't seem to be in the "right" group. For instance, choosing green electricity appears in the same group as highly demanding (in terms of cognitive resources, motivation, and control) behaviors such as having a calm driving or systematically unplugging electric devices. The follow-up study will probably help us to better understand this classification.
- Concerning the studies using a driving simulator, the results obtained in the KUL preliminary study indicate that the type of car people think they are driving influences their way of driving. This could be used in further studies, for example, by combining the type of car with guilt induction (through messages such as "the car you're driving is very bad for environment", in order to induce a guilt feeling).
However, Marc Van Heuckelom wonders if participants see their task as a game or as a realistic situation of driving. Future studies will have to pay attention to this potential problem.

- Concerning the predictors of sustainable behaviors at the community level, Marc Van Heuckelom points out that we need to be careful with the interpretation of our data. Some of the data are quite surprising (such as the average housing surface or the average shopping surface by city inhabitant) for some of the cities. Furthermore, some of the data need to be analysed in interactions. Finally, Bart Claus underlines that we must also take into account some of the data concerning the adjacent communities (for instance, the presence of a highway). All these considerations will be taken into account, but will also make our model very complex.

3. Phase 2 project

The main objectives of the project second phase are presented and discussed.

Some suggestions are made:

- we could link community characteristics to some of our variables, in order to identify what would be the most efficient variable(s) to target in specific communities. For instance, we could try to know if some emotions are more powerful for some communities than for others.
- Brussels Environment (X. Van Roy) would also be interested in knowing how to use our findings in mass media campaigns. Furthermore, they would be interesting in crisis communication, aimed at communicating on difficult decision (i.e. how to help people accepting difficult decision and restrictions, but it looks like this is one of the objectives of another project funded by the government).
- We have to focus the project second phase mainly on non-student populations.

Follow-up meeting 4

Fostering sustainable behaviors: Community-based social marketing

Follow-up Committee - 19/01/2009

Present: Marc Van Heuckelom, Arnaud Liégeois, Bart Claus, Xavier Sohet, Rénovat Ngwabije, Bruno Verbeeck, Benoit Dardenne, Nathalie Delacollette.

Excused: Jean-Paul Broonen, Tineke Van Engeland (Netwerk Bewust Verbruiken), Xavier Van Roy, Geoffroy Deschutter.

A. General Information

We hope that the actual members will still be involved in the follow-up committee. Nathalie Delacollette will send them an email in order to check that they are still interested in following our research project. In addition, some new members will be invited. We already invited Arnaud Pêtre (marketing researcher). Marc Van Heuckelom also told us that some people from the Ministry of Environment would be interested in following our project.

B. Phase 1 studies and results

Nathalie Delacollette and Bart Claus presented phase 1 studies, their main results and the prospects for phase 2 → Cf power point document. Several comments and suggestions are made by the persons participating in this meeting:

- Arnaud Liègeois suggested examining the gap between private and professional behaviors. Indeed, although they behave environmentally-friendly in their private life, many people do not care about ecology on their work place.
- Our argument and hypotheses related to the study on message framing could be reinforced by the Game Theory. The way people perceive sustainable behaviors consequences can be compared to a social dilemma, with personal short term consequences on the one hand, and long-term consequences for other people on the other hand. This reasoning could also be applied to the studies on attitudinal ambivalence.
- Concerning studies on framing, Arnaud Liègeois suggests that we could have a look in the literature on messages framing and their consequences (for instance positive vs. negative framing, etc.)
- Arnaud Liègeois raised the question of the difference between ambivalence and cognitive dissonance. Cognitive dissonance is a feeling of discomfort when, for instance, people's behaviors and attitudes are conflicting. People are aware of this discomfort. Consequently, dissonance would be close to subjective ambivalence, but not to objective ambivalence (which people are not necessarily aware of). As our results indicate an impact of objective (but not subjective) ambivalence on sustainable behaviors, we can conclude that our results are not linked to some kind of dissonance.
- Concerning the results dissemination, Marc Van Heuckelom suggests that we could later on publish in Science Connection, the Belspo journal.

- Marc Van Heuckelom reminds that it is very important to disseminate our results and to make recommendation for policies. It is important to plan some time during phase 2 to work on this objective.

Follow- up meeting 5

Fostering sustainable behaviors: Community-based social marketing Follow-up Committee - 16/06/2009

Present: Marc Van Heuckelom, Arnaud Liégeois, Jean-Paul Broonen, Arnaud Pêtre, Béatrice Best, Bart Claus, Luk Warlop, Rénovat Ngwabije, Benoit Dardenne, Nathalie Delacollette.

Excused: Xavier Van Roy, Xavier Sohet, Bruno Verbeeck.

Nathalie Delacollette and Bart Claus present the research project, its objectives, the studies realised up to now, their main results and the planned studies → see power point document. Several comments and suggestions are made by the persons participating in this meeting:

- Concerning the ambivalence of attitudes and their abstract / concrete content, Béatrice Best points to the difficulty of leading people to think more abstract. Furthermore, one limitation of this technique is that we would need a constant environment → it could only be used in very specific settings.
- Regarding the gender effect found in some studies, Arnaud Pêtre indicates that he collaborated on a study carried by the SPPDD, which revealed that the “best” targets for environmental campaigns (that is the targets who are the most able to change their behavior) seem to be women between 25 and 35, without children, living in a city. Arnaud Pêtre indicates that some of the studies carried by the SPPDD could be interesting for our research project. It might be interesting to read their reports.
- Arnaud Pêtre also worked with the SPPDD and Bruxelles-Environment on a study showing that information does not have an impact in reducing negative behaviors (could we have an access to the report ? → ask Xavier Van Roy). All the people participating in the meeting agree on the importance of emotions in changing individuals’ behaviors.

- Concerning our future applied studies (and the evaluation of marketing tools), Béatrice Best suggests to contact the UNEP (United Nations Environment Program) to see whether they have data about the impact of pro-environmental advertising campaigns. They might also be likely to put us in touch with advertising people who would be interested in testing their campaigns.
- Arnaud Pêtre indicates that some studies realised by the WWF could also be interesting for our research project. He collaborated on some studies and could provide us with the results of these studies. He also points to the project “Energie-Cités”, involving several European cities. Several campaigns promoting sustainable consumption of energy in cities have been led within this project. Maybe we might access the evaluations of these campaigns.
- Concerning the driving studies, Arnaud Liégeois raises the question of the difference between people who drive company cars and people who drive their own car.
- Arnaud Liégeois indicates that Ecolife is currently working with the Mutualité Socialiste (on an “Ecoteams” project). It could be an opportunity to collaborate on an applied study.
- Arnaud Liégeois will collaborate on the last studies about collective / vicarious guilt.

Follow-up meeting 6

Fostering sustainable behaviors: Community-based social marketing Follow-up Committee - 14/01/2010

Present: Marc Van Heuckelom, Arnaud Liégeois, Béatrice Best, Bart Claus, Luk Warlop, Bruno Verbeeck, Nathalie Delacollette.

Excused: Xavier Van Roy, Jean-Paul Broonen, Xavier Sohet, Benoit Dardenne.

Nathalie Delacollette and Bart Claus presented the studies realised during the year 2009, their main results and the planned studies → see power point document. Several comments and suggestions were made by the persons participating in this meeting:

- Concerning the study on the framing of the message, Béatrice Best suggested including measures about the willingness to make some pro-environmental improvements at home (for instance, buying pro-environmental products, buying less products, etc.). In our first study, we tested the impact of different messages

on behaviors and interests in some improvements at work, and we obtained an interaction between gender and messages. However, it is possible that men and women are sensitive and feel empowered to modify different types of behaviors, or behaviors related to different contexts (private vs. professional).

- Concerning this study, Luk Warlop suggested adding an ambivalence measure to test for the mediation between our manipulation and participants' intentions. He also suggested including a social desirability measure. We also discussed the possibility to use a behavioral dependent measure (for instance, the measure of paper use, already used in some studies carried in Leuven).
- Concerning the intra-individual measures, we talked about including a construal level scale in some of our studies.
- The results of the survey on emotions were discussed, especially the interaction between guilt and gender. The committee members propose that some of the differences we observed between men and women might be due to the specific behaviors we used as dependent measures. They also insisted on the importance of the identification to the group and of the situation. Some situations might make the group identification or membership salient whereas some other situations don't. We might add a measure of "group identity salience" in some of our studies.
- Concerning the study on community affordances, we discussed the difficulty to find data sets about some infrastructural data (for instance, the number of bus stops in each communities, etc.). Béatrice Best suggested contacting directly some Minister cabinets. Bruno Verbeeck suggested contacting Vectris. Marc Van Heuckelom will contact the person who is responsible for the transport research project at Belspo in order to know whether some research teams would have this type of data.
- Concerning the studies about endocrinology and driving behaviors, the committee members encouraged us to be very careful to the way we will deliver our message.

Follow-up meeting 7

Fostering sustainable behaviors: Community-based social marketing
Follow-up Committee - 15/06/2010

Present: Marc Van Heuckelom, Arnaud Liégeois, Xavier Van Roy, Beatrice Best, Yvette Meganck, Bart Claus, Bruno Verbeeck, Xavier Sohet, Benoit Dardenne, Nathalie Delacollette.

Excused: Jean-Paul Broonen, Luk Warlop

Beatrice Best will from now be replaced by Yvette Meganck in the follow-up committee.

Nathalie Delacollette and Bart Claus present the studies carried and the results obtained during the previous 6 months (see power point document). Several comments and suggestions are made by the committee members:

- Concerning the social representations study, the committee members suggest to test whether there are some differences in people's answers according to the postal codes or according to the area in which people live. For instance, one could assume that there would be some differences between city and countryside inhabitants. Regarding the dimensions underlying the representations, Beatrice Best proposes that one of these dimensions might be the visibility of the behaviors and their results. Indeed, on the table, most behaviors seem to be ranked from "what you can see" to "what you cannot see" (or concrete → abstract). Finally, Xavier Van Roy specifies the types of behaviors that have the strongest impact on the environment: Heating / meat consumption / transportation / electronic devices. It would be interesting to compare these information to the beliefs of lay people (who consider for instance that sorting garbage has a strong positive impact on the environment).
- Marc Van Heuckelom indicates that we might be interested in the project ISEU, which concerns the consumption of energy and the perception that users have of objects that consume energy.
- Concerning the impact of the abstract / concrete mindset on people's intentions and behaviors, Benoit Dardenne stresses the impact of the step in the decision process. An abstract / concrete mindset will have a different impact on people when they are building their intentions and when they are implementing their behaviors.
- Regarding the induction of emotions and their impact on pro-environmental behaviors, the committee members suggest that we could also induce a high or a low level of group identification. We could also make the identity of some specific subgroups, which participants could belong to, salient. Finally, they stress the importance to give an opportunity to repair fast. However, in real settings, this is not always possible. As a consequence, emotions such as

collective guilt should probably be used only in situation where a possibility to repair is given just after the feedback.