

Submission to ESEE 2015 Leeds conference, Abstract

Abstract for theme/subtheme:

5. New business models and understandings of human behaviour

5.4. Changing practices and patterns of human behaviour

### **Getting the unpalatable message across: Matching environmental communication with expectations**

The predominant communication strategy in climate change and biodiversity is to raise the ambitions for behavioral change by laying out the formidable environmental threats facing humankind. This strategy, however, often fails to influence thinking and behavior due to known social psychological principles. One such principle is that the adoption of a message depends on the opinions of the target audience. A message consonant with the opinions raises the likelihood of the message influencing thought and behavior. We will study whether and under what conditions this observation could help to increase support for decisions facilitating sustainability.

In the environmental field it has been observed that the general public resents making high personal sacrifices to deal with environmental threats. It therefore makes sense to search for cognitively less dissonant framings of environmental communication. One option for doing so is what we call the Trojan horse approach: framing communication in a way that “smuggles in” the environmental message as part of a broader, cognitively consonant message. Historical examples of significant environmental improvements taking place as unintended side effects of actions whose focus has been distinctly non-environmental point to the potential of this strategy.

Our hypothesis is that an environmental message cognitively consonant with the opinions of the target audience is more likely to influence thinking than a cognitively dissonant message. We also hypothesize that framing a cognitively dissonant environmental message in a cognitively consonant way is more likely to influence thinking and behavior than one without such framing.

We will conduct an Internet-based survey among Finnish and Hungarian university students in the spring of 2015 on the future of energy systems in the two countries. We choose these two countries because of their polarized energy policy discussion on renewable versus nuclear energy.

In the survey, we divide the respondents randomly into four groups of equal size. As background information, we first ask the respondents’ opinions concerning the use of different energy sources by requesting them to place themselves along two axes with the extremes of “Renewables should play [no...a very important] role in the future energy supply of my country” and “Nuclear power should play [no...a very important] role in the future energy supply of my country”. We then ask each respondent group to read one of four differently framed texts presented as an expert opinion that describes the nation’s future energy challenges and a particular solution to it. The challenges will be framed with different emphasis on the need to increase reliance on a particular energy source (renewables or nuclear) and the need to address a particular functionality of the energy system (low carbon emissions or security of supply). The four texts describing the future energy challenges constitute the four possible combinations of direct and smuggled approaches: (1) Need more renewables to achieve low carbon emissions; (2) Need more renewables to achieve secure energy supply by reducing dependence on imported energy; (3) Need more nuclear to achieve low carbon emissions; (4) Need more nuclear to achieve secure energy supply with predictable and stable production. The suggested percentage shares of different energy sources will be the same in all four descriptions. Finally, the respondents will be asked to present their solutions to the

challenges by stating how much they think should be used from each energy source in percentage terms.

In the analysis of the questionnaire responses, we test how framing affects the relationship between initial opinions expressed on the Likert scale ([no...very important] role) and final percentages envisioned by respondents. We assume that framing will affect the level of cognitive dissonance that will arise due to the difference between respondents' initial opinions and the percentage shares of the two energy sources suggested in the text. The magnitude of the framing effect will be analyzed by comparing energy mixes proposed by people who had identical initial opinions

Our hypothesis is that the most cognitively dissonant environmental messages are the least persuasive (for example, a "pro-nuclear no-renewables" respondent reading the "renewables to achieve lower carbon emissions" description of future energy challenges, or a "pro-renewables no-nuclear" respondent reading the "nuclear to achieve secure energy supply" description) and the most consonant messages the most persuasive ("pro-nuclear no-renewables" respondent reading the "nuclear to achieve secure energy supply" description and "pro-renewables no-nuclear" respondent reading the "renewables to achieve lower carbon emissions" description). Our particular interest focuses on the effectiveness of the "smuggled" messages, that is, messages attempting to frame a dissonant position within a consonant message. Will, for example, "pro-nuclear no-renewables" respondents who have read the "renewables to achieve secure energy supply" description of future energy challenges propose solutions with a higher proportion of renewables than they originally expressed? And will "pro-renewables no-nuclear" respondents who have read the "nuclear to achieve lower carbon emissions" description of future energy challenges propose solutions with a higher proportion of nuclear than they originally expressed?