

Mental Imagery and Environmental Messages: Exploratory Research on how Images can affect Behaviour

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Introduction

The challenges facing our society in relation to climate change and the associated necessary changes in individual behaviour are becoming increasingly clear. Visualisations provide a promising way to change behaviour. However, there is a lack of understanding about how visual images motivate people to behave pro-environmentally (Nicholson-Cole, 2005; Sheppard, 2005).

We propose using the Elaborated Intrusion theory (EI theory; Kavanagh, Andrade, & May, 2005) to explain responses to visual images in the sustainability context. This theory proposes that goals are triggered as intrusive thoughts; this process is followed by elaboration of these thoughts. An important part of elaboration is the formation of mental images which help individuals choose between different available goals.

It is easier to vividly imagine concrete short-term goals such as feeling better after turning up the heating, than it is to imagine more abstract long-term environmental goals such as consuming less energy. Based on EI theory it is expected that messages using strong, affectively charged images relating to sustainability can be internalized and can act as a motivational bridge reminding individuals of long-term environmental goals.

Method

Three studies were conducted in which participants were exposed to an environmental message with images (on pollution, energy saving and sustainable futures). Approximately one week later they reported strength, frequency and vividness of intrusive thoughts and mental imagery experienced after exposure to the message.

Thoughts about behaviour change, behavioural intentions, self-reported behaviour change and value orientation were also measured.

Results and Discussion

Intrusive thoughts and mental imagery predicted the behavioural measures used in this study. Furthermore, when value orientation was in line with the message, participants experienced more vivid mental imagery. Moreover, a positive message was seen as more intrusive than a negative message, and a vivid message led to more mental imagery compared to a non-vivid message.

Also, preliminary data indicated that participants focussed less on behaviour change when mental imagery of the environmental message was blocked by a competing visual working memory task.

Overall, the studies indicate the importance of taking mental imagery into account when studying the effectiveness of environmental messages; visual images can increase the motivational power of pro-environmental goals and may help individuals to change their behaviour towards a more sustainable future.

References

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