

Behavior change in noise-producing activities

Presentation of a four-step research program

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Introduction

More than 15% of the Swiss population suffer from road traffic noise exceeding the threshold limits [1]. Exposure to traffic noise may cause serious health problems, such as sleep disturbance [2] or high blood pressure [3]. In addition to technical improvements and government policies, motivating individuals for noise reducing behavior (e.g. eco-driving, low-noise tires) is assumed to have some potential for noise reduction.

Aim of the study: To find out what brings a person to perform low-noise behaviors, and how interventions to promote low-noise behavior should be designed.

Research questions: Which factors facilitate or inhibit the performance of low-noise behaviors?

Method

Step 1: Development of a comprehensive theoretical process model of changing environmentally relevant behavior by means of a literature review on stage models [4-6] and linear models [7-8] (Winter 2010 - Spring 2011)

Step 2: Adaptation of the model to the noise context by means of qualitative interviews (Spring 2011)

Step 3: Validation of the model by means of a quantitative survey (Autumn 2011)

Step 4: Elaboration recommendations for the design of interventions (Spring 2012)

Acknowledgements

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Results

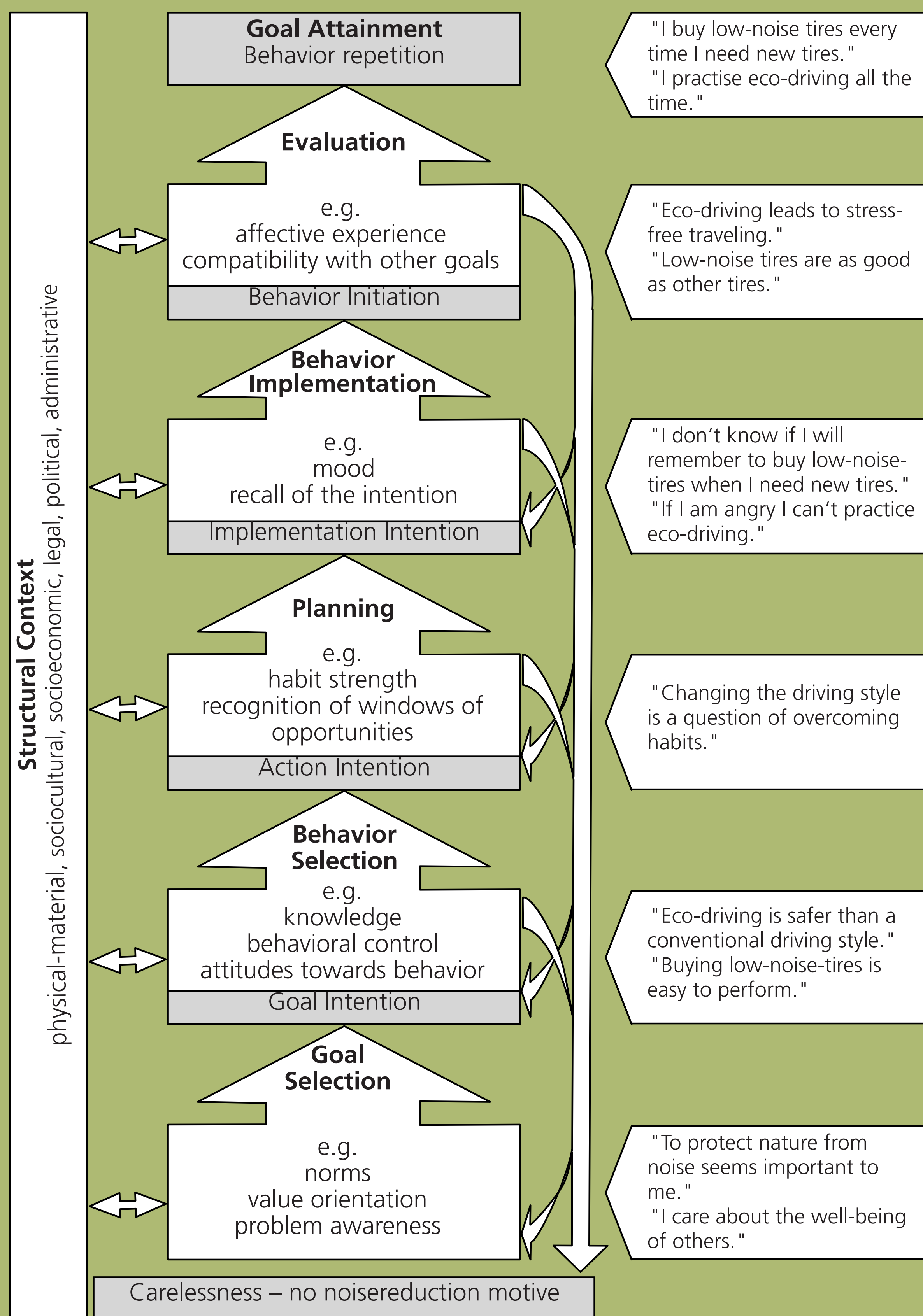


Figure 1: Theoretical process model of changing environmentally relevant behavior (Step 1) with examples of first results from the qualitative interviews (Step 2)

Discussion and Outlook

Proposition of a stage model (Fig.1): A person has to pass through qualitatively different stages to reach the goal attainment stage. In each stage varied factors facilitate or inhibit the transition to the next stage. This findings have to be confirmed with the quantitative survey.

Increasing importance of contextual factors closer to the goal attainment stage: In the first stages psychological factors are more influential. Thus, an intervention has to adress different factors depending on the stage the target group is in.

Little information in literature about the planning, the behavior implementation and the evaluation stages: In the interviews little information could be gained about the planning and the behavior implementation stages as well. Maybe the relevant factors in those stages are less accessible to introspection than the factors of the earlier stages.

Next step: Complementation of the model adaption to the noise context (Step 2)

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