

Abstract and conclusion FNE-Project

Responsible for the project

Dr. Lilla Gurtner

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Psychology of Sustainability: Why is it so difficult to act?

Abstract

Scientific evidence is conclusive: in order to mitigate climate change, we need to act now, as individuals and as entire societies. Despite ambitious goals, actions to mitigate climate change have not yielded the aspired effects. This seminar is dedicated to understanding the underlying psychological reasons for these shortcomings. Understanding why individuals and groups fail to endorse sustainable actions (for example life-styles or voting behaviour) will help to identify targeted measures to support change.

We begin at the individual level focusing on cognitive biases (rebound effects, motivated reasoning and systems thinking) but also consumer decisions, motivational aspects of (not) acting, and psychological well-being. Over the course of the semester, we will also address interactions between individuals (contagious behaviour, imitation and learning from others) and within larger groups, focusing on social cognition and group dynamics to better understand how individual behave as part of a group. The key idea is that our brain is a specific, evolved cognitive tool with its particular strengths (empathy, sense of fairness, long-term thinking) and weaknesses (often not rational, challenged by complexity and nonlinear relationships). When we understand these strengths and weaknesses better, we are in a better position to engage as many people as possible in the mitigation of climate change. This is particularly important given that the "human factor" is often neglected in climate change mitigation strategies, which can for example lead to resistance in uptake of sustainable habits or policies. Understanding both the capacity and limits of our cognitive and motivational capabilities will put students from all disciplines into a position to tune their discipline-specific contribution to the reality of individuals in a society.

The seminar will address topics especially relevant to sustainable development. For example, students will learn about systems thinking (appreciating complex interactions and interdependencies), which refers to understanding the complexity and interrelatedness of, for example, climate systems, agriculture and management of natural resources. Furthermore, we will illustrate how game theory can make contributions to solve social dilemmas such as the prisoner's dilemma or the problem of the allmends.

The seminar will also foster interdisciplinary discourses since it is open to all Bachelor students. Student support groups with a diverse composition will provide students with direct contact to other disciplines and encourage them to support each other with the expertise specific to their discipline. The seminar will be held in English to encourage exchange students to participate. If there are none, I can also switch to German.

Until now, cognitive psychology and more in general cognitive science has done too little to get involved in the public discourse of sustainable development, despite the fact that it has a lot to offer to the topic. Cognitive science studies how individuals behave, how they make sense of the world around them, how they solve problems and how they reason to arrive at certain conclusions but it has not been applied systematically in the domain of sustainability. Environmental psychology has been used to explain sustainable behaviour in individuals or groups. However, this approach is rarely included in technical solutions and the insights of the field are not common knowledge of political or economic decisionmakers.

Students will attend the seminar weekly in the spring semester of 2022. We will have a mixture of students' presentations of seminal papers of cognitive and motivational psychology and discussions on what the results mean for fostering sustainable behaviour. Each session will also entail a short active part, in which participation is welcomed but not obligatory. The idea is to apply the seminar's content in one's own life. In the first part, we reflect on our own carbon footprint and identify rebound effects or green compensatory beliefs in our own reasoning and consumption behaviour ("I have eaten less meat lately, so it is ok that I drive a car"), and we discuss the measures with the best pay-off we can take immediately. In the second part of the seminar, students will formulate as a group a goal for change in their immediate communities (for example changing their household energy supply or appealing to the Mensa for more veggie days). The goal is that the students not only read that acting together with others is empowering, but that they get the opportunity to experience it first-hand. In the third part, where we focus on broader public action, students are encouraged to seek out "uncomfortable" conversations with friends or family members who for example are skeptical about human-made climate change or who have different opinions about the necessary measures. This will be prepared and accompanied by discussions within the seminar in which we assign roles and in which we practice spotting and countering unsound reasoning and climate delay discourses. Together with inputs from climate activists and politics from my personal network, this will allow students to experience the force behind collective action, be more confident in every-day and public discussions on sustainability, and to better appreciate which interventions face which kind of opposition.

My target student group are Bachelor-Students from all disciplines. I will put up flyers throughout the university to encourage participants from all disciplines to join. Ideally, the students will have learned the cognitive underpinnings of our reasoning and behaviour (both as individuals and as a group) and how that leads to specific failures when it comes to sustainable behaviour. This will be tested by an exam with open questions. Students will be able to practice their writing skills throughout the semester. They will be required to write a reaction or comment to the paper

they present in the seminar. This is not supposed to be a summary but rather their personal opinion on what they read. I will give them feedback for their writing. Handing in the text on time is required to be able to take the exam but the text itself will not be graded. Students will also improve their discursive skills, by presenting a scientific paper, practicing challenging conversations in class and remotely, and by (hopefully) having these discussions with people outside the classroom.

The seminar will directly target two of the 17 UN sustainable development goals: 12 (responsible consumption and production), 13 (climate action).

Conclusion

The project created a new class in the Institute of Psychology for Bachelor students. The aim of the class was to show non-psychology students, what psychology as a discipline can contribute to sustainability. For psychology students, the aim was to generate awareness for the relevance of psychology for sustainability beyond consumer decisions. The class had a focus on active participation and learning, and we strived to connect the content with our own daily life.

Thanks also to the students' high motivation and engagement, the atmosphere in the class was very positive, constructive and supportfull. It was possible to build an environment in which we discuss current problems alongside their possible solutions and students managed to make connections between the different topics in a systems-thinking manner.

The aim was to have a very mixed audience from students from all disciplines. To reach this goal, I put up notifications in all university buildings and I contacted all departments and asked them to allow the class to count for the curriculum of their students. While some departments were very open to the idea, others were more restrictive, or their Bachelor curriculum did not allow students to take classes from other departments. Furthermore, the CDE promoted the class, and I contacted the students' union to spread the information about the seminar. Even though the majority of students still was from psychology, about a third of the students came from other disciplines, which greatly enriched the conversations in class.

In the future, I would like to continue to teach this class. I will change the weight of certain topics a bit, based on the current experience. Furthermore, I would like to connect the psychology students better with researchers within the institute, so that they know who to contact if, for example, they wish to write their Bachelor thesis in a domain related to sustainability. I am actively building these connections within the institute at the moment. Personally, the class was a matter of the heart, and it confirmed my intuition, that I would like to continue to work in the connection between psychology and sustainability. The class will be held again in the spring semester in 2023 and I am very much looking forward to it.

Psychology has not yet realized its full potential in its contribution to a more sustainable world, especially regarding all the efforts beyond consumer decisions there remains much work to be done. I think that including sustainability early on into the Bachelor curriculum of Psychology could fill this gap. Classes such as this can build on the motivation and engagement of their students and can greatly profit from efforts to recruit students outside of psychology. The syllabus of my class with all reading materials, links to podcasts and talks can be found in: <https://osf.io/78ct6/>.