

## „Cognitive Bias“ ... *in science and everyday life*

**Event:** Young European Scientists meeting 2014  
**Date:** Thu, March 27, 2014  
**Schedule:** 9-16h  
**Place:** Venet Summit Hut  
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### Workshop description

The aim of the workshop is to get along with the cognitive bias, as it shows up in science and everyday life. Thus I would like to demonstrate how it can affect us in daily life and develop together with the participants strategies for overcoming this cognitive bias.



Therefore, it is important to uncover the own information processing and to improve it by awareness. In a combination of theory/lecture and interactive parts where the participants can experience cognitive biases first hand I would like to create awareness why cognitive biases may sometimes lead to perceptual distortion, inaccurate judgment or illogical interpretation.

I suggest the following parts as main components for the workshop:

1. Theory/lecture with a lot of examples and insight in current studies
2. Experiences of the participants to create awareness
3. Thought experiments and videos to demonstrate some cognitive bias effects
4. Group work to demonstrate some cognitive bias effects in an experiment (for example anchoring)
5. Figuring out solutions with the participants how to protect against the cognitive bias or how to get along with it

As you can see in the main components: For me it is very important, that the training is very interactive and practical that the participants can really experience what the cognitive bias is.

Biases can be distinguished on a number of dimensions. For example, there are biases specific to **groups** (groupthink, risky shift) as well as biases at the **individual level**. I would like to place the focus on both levels. Especially for research the work in groups is very important and should be addressed.

During the workshop I would like to demonstrate in several ways how and why human judgments and decisions can differ from rational choice theory and which consequences in day to day decision making for example an overestimation of the likelihood of unlikely events and at the same time the underestimation of the likelihood of very likely events can have. The Prospect Theory from Kahneman and Tversky for example explains that biases make us treat

losses completely different than gains, what for example means that winning a special amount of money is not as good as it is bad to lose the same amount.

As there exist various cognitive biases, I suggest selecting some, which are most important for science and everyday life.

Thus my idea is to introduce the different types of cognitive biases

- social biases
- memory biases
- decision-making biases
- probability/belief biases

and to explain the most known examples for each of these.

Moreover I would like to introduce common theoretical causes underlying cognitive biases, like for example cognitive dissonance, or the prospect theory and heuristics, which are information-processing shortcuts. They are simple for the brain to compute but sometimes introduce severe and systematic errors like Kahneman and Tversky call it.

### **Trainer's Educational Background**

10/2013 – **PhD Student** | ETH Zürich, Switzerland. Department of Health Science and Technology, Institute for Environmental Decisions (IED), Consumer Behavior: present Research about risk perception and risk communication, especially in medical decision making.

3/2010 – **Certified trainer in social competence** | Ludwig-Maximilians-University, 9/2011 Munich, Germany

10/2007 – **Diploma in Psychology** | Ludwig-Maximilians-University, Munich, Germany 3/2012 Focus: Work- and Organizational Psychology, Social and Economic Psychology (Human Resource Management)