

Program for the interdisciplinary conference:

The Ethical, Legal, and Social Aspects of Cognitive Enhancement Strategies

Conference date: August 24–26, 2021
Location: Online via Zoom
(Please click on this [LINK](#))

Organizers:

- Dr. Sebastian Sattler (Bielefeld University, DEU)
- Prof. Dr. Guido Mehlkop and Floris van Veen (University of Erfurt, DEU)

Keynote speakers:

- Prof. Dr. Martin Dresler (Radboud University Medical Center, NLD)
- Prof. Dr. Saskia Nagel (RWTH Aachen University, DEU)
- Prof. Dr. Amelia Arria (University of Maryland, USA)
- Prof. Dr. Martin Schütte (Federal Institute for Occupational Safety and Health, DEU)

Certain prescription drugs, transcranial magnetic stimulation, brain-computer interfaces, and even genetic modifications are all discussed as forms of potential cognitive enhancement. Cognitive neuroenhancement is a strategy to improve brain functions with medications or other treatments which are not medically necessary. This phenomenon has attracted increased media interest in recent years and is hotly debated in the public as well in the professional and scientific literature. It is often assumed that because of the growing performance demands and the continual pursuit of success and perfection, an increasing number of people are turning to enhancement strategies (such as caffeine tablets, methylphenidate, or amphetamines) in order to improve their ability to concentrate, memorize, learn and make decisions.

Thus, in light of increasing competition and pressure for greater performance, proponents of cognitive enhancement view these strategies similar to the way they view education, as tools for fostering the intellectual, technological, economic, and cultural wealth of nations. Opponents criticize their use and subsequent achievements as unauthentic and unfair, especially when access to the means of enhancement is restricted. This is accompanied by the fear that such technologies have a negative impact on social equality and threaten our evolution as a species or jeopardize significant cultural practices.

We organize this interdisciplinary conference in the context of the DFG-funded project “Cognitive Enhancement in Germany: Prevalence, Procurement Strategies, Causes, and Implications (ENHANCE)” and in addition to external talks, we also would like to present results of phase 1 of the project to the scientific community.

This interdisciplinary conference aims to:

- a) discuss new technological possibilities of cognitive enhancement
- b) engage in a debate about its associated ethical, legal, and social issues
- c) present empirical studies on its prevalence, individual willingness to use, and procurement strategies
- d) explore drivers and hurdles of usage and procurement strategies as well as associated beliefs about risks and moral concerns
- e) deliberate on legal norms and the regulation of enhancement technologies as well as prevention of health-endangering usage.

We invite scholars from various disciplines such as sociology, psychology, philosophy, medicine, law, and political science.

Further information:**Participation**

- To participate as a non-speaker, please send us an e-mail via enhance.conference@wiso.uni-koeln.de.
- You will be able to join the conference via zoom:
- <https://uni-koeln.zoom.us/j/91365634591?pwd=ZitucEFkTkdOTkdvWVVLWlh0VEJ3Zz09>.
- All speakers are automatically registered for participation.

Conference fee: none

Please do not hesitate to contact us via e-mail should you have any questions:
enhance.conference@wiso.uni-koeln.de

We are looking forward to an enriching conference!

The ENHANCE team

Sebastian Sattler, Guido Mehlkop, Fabian Hasselhorn, Saskia Huber, Jonas Jakubassa, Dana Pietralla, and Floris van Veen

Day 1: August 24, 2021

Opening of the conference

14:00-14:20 (CEST)

Sebastian Sattler (Bielefeld University, DEU) and Guido Mehlkop (University of Erfurt, DEU)

Keynote speech

14:20-15:20 (CEST)

Hacking the brain: state- and trait-dependence of cognitive enhancement strategies

Martin Dresler (Radboud University Medical Center, NLD)

Session 1

15:35-17:20 (CEST)

Prevalence of and perceptions regarding the use of different types of substances

A to augment cognitive performance in Germany

Fabian Hasselhorn (University of Cologne, DEU) and Floris van Veen (University of Erfurt, DEU)

How occupational effort-reward imbalance drives cognitive enhancement drug use

B Olaf von dem Knesebeck (University of Hamburg, DEU) and Sebastian Sattler (Bielefeld University, DEU)

Instrumental prescription drug use explained with the Job-Demand Resources Model

C Mareike Reimann (Bielefeld University, DEU), Myriam Baum (Federal Institute for Vocational Education and Training, DEU), and Sebastian Sattler (Bielefeld University, DEU)

The conditional effects of stress on cognitive enhancement

D Heike Krüger (University of Cologne, DEU) and Fabian Hasselhorn (University of Cologne, DEU)

The influence of chronotype and sleep on substance use to enhance performance

E Giulia Zerbinì (University of Augsburg, DEU) and Sebastian Sattler (Bielefeld University, DEU)

Session 2

17:35-19:05 (CEST)

The use of prescription stimulants for cognitive enhancement – differences and similarities between Denmark and the US

A Margit Anne Petersen (Aarhus University, DNK)

Discussing cognitive enhancement from the perspective of a developing country

B Vorathep Sachdev (University of Edinburgh, GBR)

Differing motivations for use of stimulants and psychedelics for cognitive enhancement

C Suzanne Wood (University of Toronto, CAN)

Mechanisms of perceived social norms: The mediating and moderating role of morality and outcome expectations on nonmedical prescription drug use in the working population

D Saskia Huber (University of Erfurt, DEU), Sebastian Sattler (Bielefeld University, DEU), and Guido Mehlkop (University of Erfurt, DEU)

Informal get-together

after 20:15 (CEST)

We will meet online via gather.town: <https://gather.town/invite?token=rpa1kWB> (no download required) to talk about the conference topic, collaborations, etc. You may order food or the like. More information on gather here:

<https://support.gather.town/help/movement-and-basics>.

Day 2: August 25, 2021

Keynote speech

14:00-15:00 (CEST)

Ethical questions on enhancement throughout life – relations and responsabilization

Saskia Nagel (RWTH Aachen University, DEU)

Session 3

15:15-16:35 (CEST)

The Agent-Deed-Consequences Model and enhancement behavior in the workforce

- A Veljko Dubljevic (North Carolina State University, USA), Eric Racine (Institut de recherches cliniques de Montréal, CAN), and Sebastian Sattler (Bielefeld University, DEU)

How drug-enhanced colleagues affect the motivation to contribute to group work

- B Sebastian Sattler (Bielefeld University, DEU), Nadira Faber (University of Oxford, GBR), and Jan Häusser (University of Göttingen, DEU)

Neuroenhancements in the military: A mixed-method pilot study on attitudes of officers to ethics and rules

- C David Whetham (King's College London, GBR), Edward Jacobs (University of Oxford, GBR), Iliina Singh (University of Oxford, GBR), Imre Bárd (London School of Economics and Political Science, GBR), Jonathan Moreno (University of Pennsylvania, USA), Gian Galeazzi (University of Modena and Reggio Emilia, ITA), Agnes Allansdottir (University of Siena, ITA), Sebastian Sattler (Bielefeld University, DEU)

Public attitudes towards brain stimulation devices (BSDs) and brain-computer interfaces (BCIs)

- D Dana Pietralla (University of Cologne, DEU) and Sebastian Sattler (Bielefeld University, DEU)

Keynote speech

16:50-17:50 (CEST)

Neuro-enhancement viewed from the perspective of occupational safety and health

Martin Schütte (Federal Institute for Occupational Safety and Health, DEU)

Session 4

18:00-19:00 (CEST)

Unhealthy parenting strategies: Situational (dis-)incentives, Machiavellian personality, and their interaction on misuse of ADHD medication for healthy children

- A Philipp Linden (University of Siegen, DEU) and Sebastian Sattler (Bielefeld University, DEU)

Buying prescription stimulants illegally online

- B Floris van Veen (University of Erfurt, DEU)

Feigning symptoms to obtain prescription stimulants: A vignette-based study on its conditions

- C Floris van Veen (University of Erfurt, DEU), Sebastian Sattler (Bielefeld University, DEU), Guido Mehlkop (University of Erfurt, DEU), and Fabian Hasselhorn (University of Cologne, DEU)

Day 3: August 26, 2021

Keynote speech

14:00-15:00 (CEST)

Prescription stimulant misuse among college students in the U.S: Etiology, motives and perceptions

Amelia Arria (University of Maryland, USA)

Session 5

15:15-16:25 (CEST)

How do parents view cognitive enhancers for their children? Evidence from India

- A Jayashree Dasgupta (Sangath, IND), Georgia Lockwood Estrin (University of London, GBR), Zenia Yadav (Sangath, IND), and Ilina Singh (University of Oxford, GBR)

Parents' perceptions of cognitive enhancement among healthy children and adolescents

- B Kati Hiltrop (University Hospital Bonn, DEU) and Sebastian Sattler (Bielefeld University, DEU)

How parental status orientation affects the instrumentalization of medication to improve academic performance in healthy children

- C Fabienne Kraemer (Leibniz-Institute for the Social Sciences, DEU), Sebastian Sattler (Bielefeld University, DEU), Guido Mehlkop (University of Erfurt, DEU)

Session 6

16:40-17:25 (CEST)

Colleague selection: The impact of workplace rumors of cognitive stimulant use

- A Fabian Hasselhorn (University of Cologne, DEU)

Why parents misuse prescription drugs to enhance the cognitive performance of healthy children: The influence of peers and social media

- B Guido Mehlkop (University of Erfurt, DEU), Vanessa Bahr (University of Erfurt, DEU), Cornelia Betsch (University of Erfurt, DEU), and Sebastian Sattler (Bielefeld University, DEU)

Discussion & Closing

17:30-18:15 (CEST)

Summary, outlook, and further discussion

Guido Mehlkop (University of Erfurt, DEU) and Sebastian Sattler (Bielefeld University, DEU)