Course Description

Avatars and virtual environments are no longer science fiction. Virtual reality (VR) has become a mainstream medium with millions of users world-wide. Social scientists have
begun to use VR and avatars as a new research tool to simulate and study human social behavior. VR is particularly interesting for psychological research as it enables us to experimentally manipulate and measure a range of psychological variables (high experimental control) in a naturalistic, close-to-real-life environment (high ecological realism). But VR can go beyond simulating reality and allows for transformations of our body representation, the environment in which we interact or the actions we perform in ways that are not possible in real life. This new methodological paradigm makes it possible to study psychological questions that could not have been investigated before, such as how does being in a dark-skinned virtual body change light-skinned people's racial prejudice, or how can experiencing harassment from a victim's perspective change gender-related attitudes?

This seminar introduces virtual reality as a new psychological methodological research method and illustrates how it can overcome limitations of traditional psychological methods. In Semester B, the students will conduct a seminar research project using virtual reality.

**Weekly Course Topics:**
Semester A:
Week 1: Introduction to VR
Week 2: Presence in immersive virtual environments
Week 3: VR experience (VR lab visit)
Week 4: Reality simulation and ecological validity (article presentations)
Week 5: VR interventions and virtual self-transformations (article presentations)
Week 6–7: VR projects (lab meeting)
Week 8–12: VR research project preparation (individual meetings with project teams)
Week 13: Research proposal presentations

Semester B:
Semester B will be dedicated to conducting the VR experiments and analyzing the data. Individual meetings will be held with the project teams for guidance along the process. In the last two weeks of the semester, students will present the findings of their VR experiment in class.

---

**Course Goals**
In this seminar students will learn about the concepts and theoretical models of virtual reality, and how it can be applied as a tool in psychological research.

---

**Grading**

**Assignments and Requirements:**
Constructive participation in class discussion
Reading the bibliographical material as preparation for class
Presentation of an article in class (in pairs)
Submission of a research proposal (Semester A) and research report (seminar paper in Semester B) (in pairs)

**Grade Composition:**
Semester A: Research proposal (30%)
Semester B: Research report (70%)

**Deadlines:**
Semester A: Research proposal: April 1, 2023
Semester B: Seminar paper: August 31, 2023

---

**Reading List**

**VR as a tool for psychological research:**

**Presence:**

**Reality simulations:**
Bystander responses to a violent incident in an immersive virtual environment. PloS one, 8(1), e52766.

**VR interventions:**