Faculty of Psychology
Chair of Lifespan Developmental Neuroscience
Professur für Entwicklungspsychologie und Neurowissenschaft der Lebensspanne

TECHNISCHE UNIVERSITÄT DRESDEN

Paid Student assistants (SHK/WHK) wanted from September 2023:

[Fluent German is necessary for communicating with study participants.]

Neurocognitive correlates of plausible vibrotactile stimulation in periadolescents

In recent years, the development of virtual reality (VR) technologies has demonstrated an immense potential in contributing to various fields such as education and medicine. Therefore, it is crucial to construct VR environments and events which conform to the user's expectations (i.e., highly plausible virtual environments) to achieve realistic VR experiences. Since VR technology is increasingly used in multiple contexts and for many purposes, it is important to investigate the perception of vibrotactile stimulations' plausibility in VR environments. By adopting a lifespan approach, we will expand previous evidence for neurocognitive mechanisms underlying contextual expectancy in perceiving the plausibility of VR environments in adults to periadolescents. Therefore, we aim to identify neurodevelopmental-related effects on the neurocognitive mechanisms underlying the plausibility of vibrotactile stimulation in a VR environment.

In this study, we will collect neuroimaging data using functional near infrared spectroscopy (fNIRS) data while participants (periadolescents) experience vibrotactile stimulations which could either be congruent or incongruent with the audio-visual scene that they are viewing. By participating in this project, you will gain experience setting up, collecting and pre-processing fNIRS data. There is also potential to do a Bachelor's or Master's thesis in this project.

Summary

Project timeline	**:** September 2023 - December 2023
Earliest start date	**:** September 2022
Workload	**:** 10/week (negotiable)
Required Skill Level	**:** Bachelor's and Master's students
Responsibilities	**:** Recruitment, data collection, and data processing
Benefits	**:** 1) Learn how to set up virtual reality (VR) experiments 2) Collecting and processing FNIRS data
Supervisor	**:** Dr. Annalisa Palmisano

Contact Information

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