

Bachelor/Master Thesis

Understanding Mirroring Gaze Behavior During Remote Meetings

Problem Description

During remote meetings, people can feel a displeasing state, also recently called "zoom fatigue", which refers to exhaustion and feeling tired. A possible impact factor is the continuous mirroring of oneself (as seen in the lower right corner in the picture below). As we are continuously seeing ourselves, some of us also care more about our looks, whether we are within the picture or the current mimic and gestures. This constant comparison has shown to have severe impacts on appearance (dis)satisfaction (Pikoos et al., 2021). Existing studies leveraged self-reported subjective measurement after the meeting reflecting conscious viewing behavior. A complementary approach is to collect objective gaze behavior data using eye tracking technology. On this basis it would be possible to also analyze unconsciously gaze at our mirrored self.

In the proposed thesis, an experiment should be designed and conducted that collects eye-tracking data while participating in remote video-based meetings. By collecting additional data on the meeting content, the environment and user-related data, additional insights on the situations in which we increasingly look at our mirrored self may be gained.

Pikoos et al. (2021) 'The Zoom Effect: Exploring the Impact of Video Calling on Appearance Dissatisfaction and Interest in Aesthetic Treatment During the COVID-19 Pandemic', Aesthetic Surgery Journal, 41(12), pp. NP2066–NP2075. doi: 10.1093/ASJ/SJAB257.

Goal of Thesis

- Investigate the current state of the art on measuring mirroring during remote meetings and its outcomes
- Design and conduct an experiment measuring mirroring gaze behavior through eye-tracking (desktop, wearable, or webcam eye-trackers)

Requirements

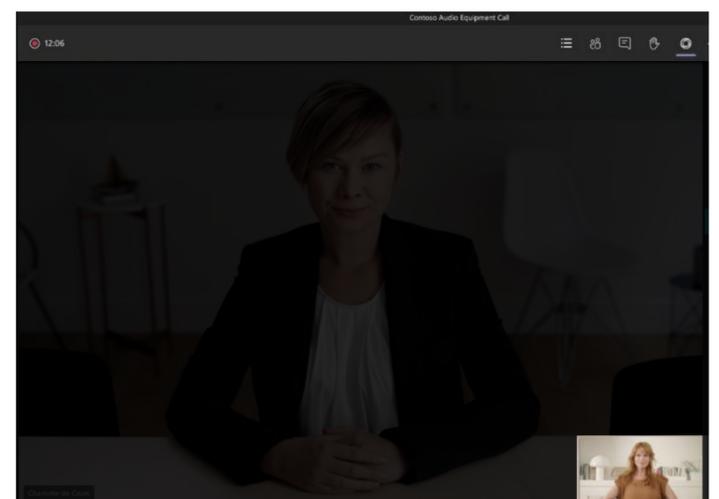
- Interest in eye-tracking technology and experimental design
- Strong time management and communication skills
- Programming skills
- Good English skills
- Knowledge in experimental design, data analysis is beneficial

Contact



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Source: <https://www.microsoft.com/de-de/microsoft-teams/meetings-apps>



Eye-tracking Device Example:
Pupil-Labs