

Information for Participants in the Research Project and Declaration of Consent

General Information about the Research Project “A Quiet World: Exploring Technology to Reduce Sensory Overload Through Speculative Design” of Karlsruhe Institute of Technology (KIT)

The Research Group for Human-Computer Interaction and Accessibility plans to conduct workshops and/or one-on-one sessions with participants who experience sensory overload, e.g., neurodivergent people, in which the requirements and use of technology are assessed in a speculative setting. Specifically, this means that participants can create their own vision of future technologies that can support sensory self-regulation with crafting materials or digital tools and discuss it with peers or the researchers. The process is participant-led which means that participants can choose the mode of participation (in person or online, in a group or one-on-one, with an accessibility assistant/trusted person or alone), the content of the sessions are defined by the participants (e.g., deciding which kind of speculative scenario to discuss, or which crafting material to use), and the session procedure can be adapted to participant needs (e.g., taking breaks, skipping questions or activities, adapt sensory environment).

The goal of this project is the human-centered establishment of needs and preferences of people that experience sensory overload regarding accessibility and usefulness of technology, especially regarding opportunities for sensory self-regulation, and to derive design considerations and directions for future research and development.

1. Course of the Project

Initial contact between potential participants and the researchers will take place via e-mail. Participants express their interest to participate and share their preferred mode of participation. Together with the researcher, a date for a session will be scheduled. If needed further information on personal needs regarding accessibility and regulation during the session can be shared.

Before the session, participants receive a link to an online survey that participants can fill out beforehand, about their socio-demographic data, e.g., age, gender, experiences of sensory overload.

The session itself takes about 120 minutes and is structured as follows:

1. The researcher welcomes the participant(s), explains the structure of the session, and answers questions on the process.
2. The participants give written consent to participate in the workshop and fill out a consent form for bank transfer of the participant compensation.
3. The participants who have not done so beforehand fill out the survey on their demographics (e.g., age, gender, experiences of sensory overload).
4. The researcher explains the topic of the session and answers participant questions.
5. Optionally, an ice-breaker game can be played.
6. Participants suggest scenarios in which sensory overload played a role for them. The group decides on one or two scenarios to focus on for the session.
7. The participants immerse themselves in the collected what-if-scenarios and after each scenario speculate on their experience. Participants can think for themselves, prototype, craft, take notes, and talk to each other. Afterwards, they discuss their outcomes with the group.
8. The participants can ask final questions and give feedback.
9. Participants can answer a post-session questionnaire about their experience and how they felt during the session, which will also be provided again via e-mail. There will be space for feedback on the modalities of the workshop, e.g., the what-if-scenarios and the methods used for discussion in-between scenarios.

In a one-on-one session, the researcher stands in to discuss with the participant. Online sessions take place on the “Big Blue Button” platform hosted by KIT. Participants can pause, skip, or stop any part of the session at any time without giving reason and without any penalty.

The session will be audio- and video-recorded, and the researcher will take notes. The survey data, recordings, and notes will be analyzed scientifically. For this purpose, a so-called transcript will be set up. This means that the audio and video of the recordings is transcribed according to certain rules.

Every participant will be offered EUR 30 for their participation. This payment will be made by bank transfer. For that, the participants have to give the according processing information (i.e., their name, address, IBAN, BIC). The bank information is collected solely for

remuneration purposes, stored separately from the research data, and deleted once payment processing has been completed and legal obligations to keep the data have been fulfilled.

2. Participation Criteria

Inclusion criteria: age ≥ 18 , self-reported experience with sensory overload (no formal diagnosis needed), ability to give informed consent, willingness to participate in recorded sessions, proficiency in either English or German.

Exclusion criteria: inability to give informed consent, inability to attend workshop in person or remote.

3. Use of the Data in the Research Project

Video recordings, in addition to audio recordings, are necessary because participants may communicate ideas through enactments, gestures, and interactions with physical artifacts. Furthermore, video recordings help to identify speakers during transcription of group discussions. If artifacts are created during the workshop, they will be collected, photographed, and annotated with the transcription. Participants will be asked not to include identifying information on workshop artifacts. If identifying information is present, it will be removed or redacted where possible before analysis and storage. Video and audio recordings are only used for transcription and interpretation of enactments and are deleted after transcription. Only pseudonymized transcripts, (photographs/digital copies of) workshop artifacts, and anonymized analysis materials are retained. To pseudonymize the research data, every questionnaire and observational note is marked with a participant ID. The participant ID is assigned by the researcher and consists of letters and numbers that have no reference whatsoever to your name (i.e. no initials, etc.). When the recordings are transcribed, any identifying information will be replaced with non-identifying codes such as the ID, e.g., “My name is Lea and I live in Karlsruhe” will be transcribed to “My name is [P1] and I live in [city]”. After transcription, the recordings will be deleted. Data from the study will only be published in aggregated or anonymous form, so that it will not be possible to identify individuals. E.g., an individual age will only be published in ranges (e.g., “P1’s age is 20-25 years.”). If quotes from participants are published, these will not contain any identifying information.

The allocation of the participant ID to your name can be found in a list. This list and your declaration of consent will be kept separately from the research data in electronic format. The list can be accessed by the project head only.

The bank transfer information does not contain the participant ID and is stored separately from the research data. Using this information, it will not be possible to allocate the research data to your person. The research team passes the bank transfer information to the finance management division of KIT via encrypted data transfer. The finance management division of KIT then initiates the transfer. After the bank transfer process is initiated, we will delete the bank transfer information.

Your contact details will only be stored for the time of the study and then deleted. Even if you have signed the declaration of consent, you can terminate your participation anytime without having to indicate the reasons. If you wish to do so, the data collected will be deleted completely or partly. Participants may withdraw their own data until the start of analysis. However, complete removal of references made by other participants during group discussions may not always be possible. Deletion of personal data in general is possible only before the allocation table and contact data are deleted. Afterwards, the data can no longer be allocated to individuals.

Contact Persons

If you have questions, concerns, or doubts, please do not hesitate to contact us:

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Declaration of Consent

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(Date, last name, first name of participant)

I have read the general information about the research project “A Quiet World: Exploring Technology to Reduce Sensory Overload Through Speculative Design” and consent to my participation in the research project and the associated processing of my data. My consent also covers the collection of data on my state of health (e.g., how and why I experience sensory overload). I also agree that the data may be used in a master’s thesis at KIT on the topic of “Technologies for Reducing Sensory Overload”.

I am aware of the fact that consent must be given voluntarily and may be refused or withdrawn (also separately) without the indication of reasons and without any negative consequences for me. I know that in the case of the withdrawal of my consent, lawfulness of processing based on my consent until its withdrawal will not be affected. I have understood that I can withdraw my consent simply by mail to the contact person named in the information and that refusal or withdrawal of my consent will not result in any negative consequences for me.

I have received the information on the collection of personal data in the research project “A Quiet World: Exploring Technology to Reduce Sensory Overload Through Speculative Design”.