

Digital Stress Test Collaboration Information (Short)

Short Description

The Digital Stress Test (DST) is a recently developed digital stress paradigm that allows to easily conduct stress induction experiments with a smartphone or computer and collect videos capturing stress related behavior of the participants (Norden et al., 2022).

The paradigm comprises a mental arithmetic part and a verbal answering task. Both tasks and the underlying app framework are enhanced with several stress-inducing framings and other functional or design elements to elicit feelings of uncontrollability and social-evaluative threat (Dickerson & Kemeny, 2004).

The DST framework also includes information on study background, privacy, consent and debriefing as well as several mood questionnaires which can be adapted for specific study purposes. The whole procedure takes about 5-10 minutes. A demo-version can be found at www.digitalstresstest.org.

Ethical Considerations

1. Deceptions need to be revealed in a debriefing (within app or externally):
 2. Burden of the participants through DST:
 3. A) *Online-Setting: conduction in one's own setting (at home) and option to immediately and without obligation terminate the participation*
B) *Lab-Setting: participants will be under supervision and advised that participation is voluntary, and they can withdraw at any time.*
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Technological Setup

There are three different study and technical scenarios for the use of the DST:

1. *use the DST solely for stress induction:* If you are only looking for a tool to induce stress digitally, you can use a version that does not store data. If you are interested, we will create and send you a link that you can then use directly for your study. Further, we can also assist you with some general information for your data security officer and ethics committee.
2. *use the DST with data collection (behavior and/or video) in cooperation with Bielefeld Uni:* If you want to collect behavioral and/or video data with the DST, we are open for research collaborations. In this case, the DST runs and stores data directly and securely on servers at Bielefeld University. A transfer of the data to you will then take place after the study. If you are interested, we can also cooperate in the analysis of the data. The responsibility for you study lies with you, but we can support you with info for your ethics committee and data protection officer.
3. *use the DST by running the OpenSource code:* In the spirit of OpenScience, we have made the code of DST (and C-DST) publicly available at www.digitalstresstest.org/code. If you have the technical skills, you can implement, customize, and conduct studies with the DST on your own.

Norden, M., Hofmann, A. G., Meier, M., Balzer, F., Wolf, O. T., Böttinger, E., & Drimalla, H. (2022). Inducing and Recording Acute Stress Responses on a Large Scale With the Digital Stress Test (DST): Development and Evaluation Study. *Journal of Medical Internet Research*, 24(7), e32280. <https://doi.org/10.2196/32280>