

PVT Study Participant Information

1. Prerequisites for participating in this study

To participate in this study, you should generally feel healthy and use an Android smartphone.

2. Goal of the study

Our goal is to investigate if it is possible to use PVT reaction time measurements to infer circadian phase in free living.

3. Participation in the study

Participation in this study is voluntary. There are no disadvantages if you choose not to participate or revoke your previously given written consent at any time during recordings. You have the opportunity to revoke your consent at any time during the study recordings. No reason needs to be given if you choose to revoke your consent. Data recorded prior to revocation of consent will still be used.

4. Study protocol

4.1 Before participation

After you decide to participate, come to Florian's with your Android device and a signed copy of the informed consent form. He will help you install the application, supply you with the journal sheets, and explain the protocol.

4.2 Day protocol description

We kindly ask you to conduct PVT measurements throughout the day at least every two hours after getting up until going to bed in the evening. You should start as soon as possible after waking up and then follow a timer (e.g. from the Android Clock app) throughout the day to take at least one PVT test every two hours. Before going to bed, take one more test. If possible, increase the number of tests you take in the evening and try to take a test every day before lunch.

In addition, we kindly ask you to fill out one journal sheet every day. This contains 15-minute slots for the entire day and different events. When an event takes place, please mark the appropriate box, e.g. when you had lunch between 12:00 and 12:30 you tick the food intake boxes of 12:00 and 12:15. For the medication column, you should record medication that would prevent you from driving a car or operating heavy machinery. All other medication can be left out. Feel free to state which medication you took, if you like to share the information.

Please follow this protocol for 10 days.

In summary

1. Take one measurement at least once every 2 hours (maybe set a timer).
2. Take a measurement after waking up.
3. Take a measurement before going to bed.
4. If possible, increase the number of tests you take in the evening.
5. Keep a journal about alcohol intake, caffeine consumption, nicotine consumption, food intake, sleep times, sports, and if applicable medication use.
6. Follow the protocol for 10 subsequent days.

please turn over

4.3 After completion of the protocol

Use a file manager on the Android device (e.g. ASTRO file manager).

Perform the following steps:

1. Go to the path: /Internal storage/Android/data/com.pvt/files/default_study
2. Mark all files
3. Send the files to wahl@fim.uni-passau.de

5. Risks

The execution of the study protocol should not introduce any risk or discomfort to participants. Please inform a study manager immediately should you feel uncomfortable. It is possible to pause or cancel recordings at any time.

6. Data handling and privacy

6.1 What data will be recorded?

We will record your reaction times (multiple times per day) together with a timestamp, when you took the test.

In addition you agree to self-report the timing of the following activities/events in a journal:

1. Alcohol consumption
2. Caffeine consumption
3. Nicotine consumption
4. Food intake
5. Sleep times
6. Sport activities
7. Medication (if the medication would prevent you from driving a vehicle or operating heavy machinery)
8. Whether you used an alarm clock or not
9. Whether today is a free day or work day
10. Voluntary: Which medication you used

All data will be anonymised, which means we will assign you a participant ID which will be coupled to your data. A study manager can then look up which participant ID was allocated to a participant in a separate table stored independent of the data. All data will be stored on the secure servers of the Chair for Sensor Technology at the University of Passau.

6.2 Who has access to your data?

Data is only accessible to study managers of this study.

6.3 Data use

The data is used for scientific analysis of circadian rhythms in human beings and their influence on the reaction time. Specifically we aim to analyse the relationship of circadian phase and reaction time. Results of this study may be published in anonymous form.

7. Information about study results

If you are interested in the study results we share a statistical summary of the study results with you. Please indicate so on the informed consent form.

8. Contact information

The following people are responsible for this study:

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Thank you for your participation.