

# SMI Eye-tracking glasses station – 25min

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## **The experiment**

In this experiment, the goal is to score the highest number of hits by a ping pong paddle. Either you are the participant 1 (scoring person) or the participant 2 – referee (counting the hits). The hits are performed vertically at any height. There are no redos, just the first run counts.

As a scoring person you are allowed to move your body in case you need to balance for the hits. As a referee, you count the hits of the ball on the paddle. If you cannot assume the role of the scoring person or referee, you become either the researcher or research assistant. Researcher is responsible for the eye-tracker to be recording, and research assistant just pays attention to the whole process.

## **What to do**

Researcher: make your equipment workable: put glass instead of the paper filling in the glasses, connect both the devices with the Y cable, and turn them on. Wait for the devices to connect and go to Quick settings.

The participant (1 or 2) puts the glasses on.

The researcher: swipe to the participant setting on the screen and see if you are getting a good image, if not adjust according to the information on the screen (adding nose holds, etc)

Researcher: Calibrate – ask the participant to look at a clear landmark, corner, etc; tap the screen to freeze it, move the cross to the landmark and tap „done“/“accept“. When you are satisfied with the calibration, start recording – save under “PPscoreNameS” where PP stands for ping pong, score for participant 1, name for first name, and S for the first letter of surname. Alternatively, save under “PPrefNameS”, where PP stands for ping pong, ref for referee, name for the first name and S for the first letter of the surname.

Switch roles so that each of you is recorded at least once either as a Participant 1 or 2. If you have more time, make sure that everyone tries each of the roles.

# Remote eye-tracking Red250Mobile station –25min

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## Experiment

In this experiment, your task as a participant is to count how many passes of ball have there been for a given team. You will see a short video, and receive the tasks instruction on the screen beforehand. In this experiment, you assume either the role of the participant, or the role of the researcher. The researcher is responsible for seating the participant so that the eyes of the participant are tracked, and for recording the experiment data.

Researcher, when you are satisfied with the camera settings, start recording – save under “ET2remNameS” where ET2 stands for course abbreviation, rem for remote, name for first name, and S for the first letter of surname. If you cannot assume the role of the participant, you are either the researcher or research assistant (pay close attention to everything, advise with camera settings, etc).

## What to do

Researcher: run iView and Experiment Center (Experiment Center needs a dongle, if you don't have a dongle at that moment, just run iView and practice calibrating each other until you get the dongle).

Researcher: in iView, look around the settings to find how to show the eye-image on the screen, position the participant so that the eye-tracker can follow the eyes (follow the arrows for sitting closer/further), get a good eye image on the screen, see if you can still track the eyes when the participant looks at the corners of the screen. Talk to the participant about everything you are doing.

Researcher: when you get the dongle, run Experiment Center, load the experiment, make sure it is locked and the connection between the eye-tracker and Experiment Center opened. When you are satisfied with the eye-image from iView, press „record“ in Experiment Center and save your data as advised above. Do not record if your validation values are not at 0,5° or below on both x and y axis. The researcher is responsible for getting the data.

Participant – be a nice participant and allow yourself to be positioned by the researcher. Don't move much during the recording so that you get good data.

Switch roles so that each of you is recorded at least once. If you have more time, keep setting up the camera and calibrating each other, and/or collect additional data.

# SMI Hi-Speed – Tower – 25min

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## Experiment

In this experiment, your task as a participant is to perform the reading comprehension tasks and answer questions on the screen. In this experiment, you assume either the role of the participant, or the role of the researcher. The researcher is responsible for seating the participant so that the eyes of the participant are tracked, and for recording the experiment data.

Researcher, when you are satisfied with the camera settings, start recording – save under “ET2towNameS” where ET2 stands for course abbreviation, tow for Tower, name for first name, and S for the first letter of surname. If you cannot assume the role of the participant, you are either the researcher or research assistant (pay close attention to everything, advise with camera settings, etc).

## What to do

Researcher: run iView and Experiment Center (Experiment Center needs a dongle, if you don't have a dongle at that moment, just run iView and practice calibrating each other until you get the dongle). Make sure the eye-tracking camera is switched on.

Researcher: in iView, set the eye-tracker to be recording monocularly on the right eye (Hardware settings). Restart iView if needed. Click on the space of eye image to establish connection between eye-tracker and iView. Play around to get a good eye image, see if you can still track the eyes when the participant looks at the corners of the screen. Talk to the participant about everything you are doing.

Researcher: when you get the dongle, run Experiment Center, load the experiment, make sure it is locked and the connection between the eye-tracker and Experiment Center opened. When you are satisfied with the eye-image from iView, press “record” in Experiment Center and save your data as advised above. Do not record if your validation values are not at 0,5° or below on both x and y axis. The researcher is responsible for getting the data.

Participant – be a nice participant and allow yourself to be positioned by the researcher. Sit still.

Switch roles so that each of you is recorded at least once. If you have more time, keep setting up the camera and calibrating each other, and/or collect additional data.