**EMERGE study set-up guide**

**Before participant arrives**

- Replace water in cold pressor. Set to 2 degrees and turn on.

- Turn on main computer and laptop

- Access EMERGE folder on computer desktop

- Open word document with links to study surveys. Open demographics survey and IAPS rating survey

- Access Tones folder and open task (Tones task final) in EPrime

- Access TTL module configuration in the start menu – once loaded press output channel 8 (red) – should set output to 80 hex

- Make sure the red light goes on in the TTL module. This red lights should stay on for the EDA to be able to access the Biopac at the same time

- If at any time the EDA channel disconnects – open the configuration module and press 8 for the red light, the configuration cannot run at the same time as Eprime (they cannot access the serial port COM 4 at the same time). Press quit. The red light should stay on.

- On the laptop, open Acqknowledge.

- Select Graph template: EMERGE\_baseline\_template

- Check that the EDA Smart amp is connected – MP160 > data acquisition settings > Smart amp > EDA channel should be green. If at any point the signal cuts out, check this setting

**Participant arrival**

- Participant pack (info sheet, consent form x2 and SITBI) and assign a participant ID

- Bring participant to lab and explain the study. Go through the information sheet and sign 2 versions of the consent form

- On the computer, access the survey. Ensure the participant puts in their PID

- Once demographics have been completed, set the participant up with the EDA electrodes. Ensure the participants hands are clean and dry, provide a tissue to wipe, but not an alcohol wipe.

- Place electrodes on the distal phalanges of the middle and index fingers of the non-dominant hand, as in picture provided. Ensure they feel firmly on and the lead is not pulling too much. Ask the participant does it feel ok.

- Tell the participant to try to keep their hand relatively still during the study, with their hand resting on the desk.



**Baseline measurement**

- Once attached, on the laptop open acqknowledge where the baseline template should be open. Press ‘Start’

- Let readings settle for around 2-3 minutes. Use this time to explain that the electrodes are recording sweat responses in the hand that is generated by our physiological systems.

- Check data quality by asking them to take a deep breath. A clean signal should be between 2- 20 mSem and the onset between 1-3 secs.

- If there is no response (below 2 mSem) at this stage they may be a non-responder. Wait a few minutes and ask them to take another breath.

- To take an initial baseline recording the participant’s tonic electrodermal activity in the presence of limited stimuli, ask the participant to look at the X on the wall for 3 minutes.

- Press F1 when they start looking and put the timer on for 3 minutes. Press F2 at the end of 3 minutes.

- Press ‘Stop’. Save this recording by creating a folder for the PID in documents, and save the file as PID\_baseline

**Tones task**

- In Acknowledge, open the Tones task template.

- Explain that the first task will involve listening to some tones, and that they don’t have to do anything except listen out for them and watch the screen

**-** Instruct the participant to put the headphones on, make sure they are comfortable**.**

**-** Press ‘Start’ again on the Acqknowledge programme.

- Press the blue running man on the Eprime experiment, ensuring that it runs ok. Check that the red light remains on (except briefly when the lines are cleared)

- Check that the signals are being received in the digital input (TONES) and that the EDA signal is still recording (Smart amp should stay green)

- When the participant informs you they are finished, press ‘Stop’ on the recording.

- Save this recording in the PID folder as PID\_tones

**IAPS task 1**

- Explain the next task will involve looking at some images. Again they don’t have to respond to these images right away, simply look at the screen as they are presented.

- On Acqknowledge, open the graph template for IAPS

- On Eprime, open the IAPS experiment

- Check that the red light is on – if not open the configuration and reset to 80 hex (before running the experiment)

- Check the participant’s electrodes are still secure

- Press ‘Start’ on Acqknowledge

- Press the running man on IAPS Eprime and ask the participant to follow the instructions

- Check that the image event marks are being sent through and recognised in the Aqc software, and that the Smart amp is still green

- When the participant says they are finished, stop the data recording.

- Save the graph in the PID folder on the laptop, named PID\_IAPS1

- On the computer, open the first IAPS rating survey (A or B depending on counterbalancing) and ask the participant to complete it, explain the rating attributes. Ensure they use their dominant hand for the keyboard.

**MAST task**

- When closing down the rating survey, open the MAST experiment on Eprime.

- Open the MAST graph template on Acqknowledge. Check that the light is red, and if not open the configuration unit and press 8 (80 hex) on the output.

- Explain that the next task will involve some more challenging tasks.

- Explain what the cold pressor is, that it has water held at 2 degrees and they will be asked to submerge their dominant hand in the water for short periods of time (60 – 90 secs), and they must try to keep it in for the whole time period, although if very uncomfortable they can remove. Recommend that they try not to talk during this part of the experiment. Make sure you have tissues ready for the participant’s hands.

- Then explain the counting down number task is counting down units of 17 from 2043 (make sure you have the sheet with the answers).

- Set up the tripod with the camcorder, ensure that it is facing them (depending on whether they are left or right handed you may have to move their position in relation to the cold pressor). Explain that the video recording is for tracking their facial expression during the trials.

- Check the electrodes are still fixed to the non-dominant hand.

- Press the running man on Eprime and allow them to go through the instructions themselves.

- When they start reading the instructions, press ‘Start’ on Acqknowledge. This will allow for recording before the stress task itself begins. When they inform you they are finished, check that the red light is on, and that the EDA smart amp is still connected.

- Tell the participant to get ready to emerge their hand in the cold pressor by hovering their hand over the water bath. Press enter on the keyboard when they are ready.

- Check that the event marker signal has come through on the ‘ARM IN’ input on Acqknowledge, and that there has been a response on the EDA signal.

- Keep an eye on the screen for the retract arm instruction, and get the sheet with numbers ready.

- Once the screen changes, make sure the participant starts counting down from 2043. Check that the signal has come through on the RETRACT ARM input. Once they get one wrong, tell them to go back to the start.

- Run through all the trials, giving the participant tissues if required.

- When they have finished, press ‘Stop’ on the Acqknowledge. Save the data file in the PID folder under PID\_MAST

- Put the camcorder away and get ready to set up the final IAPS run through.

**IAPS task 2**

- Open the IAPS experiment in Eprime and inform the participant they are going to run through the images again.

- Open the IAPS graph template in Acqknowledge. Check that the red light is on, and use the configuration unit of not.

 -Check the electrodes are still secured to the participant hand.

- When the participant is ready, press ‘Start’ on the Acqknowledge software, and press the running man on Eprime. Check that the signals are coming through as expected.

- Once finished, press ‘Stop’ on the recording. Save in the PID folder as PID\_IAPS2

- Open the second IAPS rating survey (A or B depending on counterbalancing), and ask the participant to rate the images as before.

- Inform the participant that is the end of the experimental part of the study, and they can now remove the electrodes. Provide a wipe to clean the gel off their hand.

**Participant measures and debrief**

- Before completing the study measures online, complete the SITBI and medical history form with the participant. Make sure the PID is included at the top of each paper form.

- Open the final EMERGE survey on the computer. Explain that this last part of the study may take about 20 minutes, and to complete the measures as accurately as possible, and to ask if there is anything they are unsure of.

- After the participant has finished, thank them for their participation in the study. Debrief the participant about the nature of the study, letting them know the recording was fake.

- If the participant is in the suicidal ideation group, complete the risk assessment form.

- Provide all participants with a support sheet.

- Give the participant the study payment (£30), and make sure they sign the receipt.

- Check that they are happy to be contacted in one-month to complete a short follow-up for the study.

**After the participant has left**

- Transfer the participant folder to the appropriate folder on the One drive

- Make sure to shut down all study equipment and clean up any tissues etc.