

LOG SHEET ~TIME Theta EEG

Date: _____ Start time: _____ Participant Code: _____

Participant Group: _____ Date of Birth: _____

Degree/Occupation: _____

Task 1: Rating task

Instructions: The experiment today will take about 30 to 40 minutes. You will be presented with a short, three-second video, along with a three-second sound clip. The sound clip is of music that is not directly related to the contents of the video. You can think of the sounds like the soundtrack for the video. Suppose the movie is of a gorilla sitting in some grass. The sun is up, and the gorilla is scratching itself and looking very content. Now suppose that the sound is some nice, soft, orchestral music. you can almost picture David Attenborough narrating. In that case, you might say that the sound suits the content of the movie. On the other hand, if the sound was a distorted electric guitar, playing a wild solo, using a whammy bar and sounding crazy, then you might say that the sound does not suit the content of the movie very well.

After watching the video and listening to the sound, you will have to make a judgement as to how well you think the sound suited the contents of the video, using the number keys 1 through 5, where 1 is "the sound really does not suit the video at all", and 5 is "the sound suits the contents of the video very well."

There will be 16 video-sound pairs in each task block. After rating the 16 pairs, you could take a short break if you need. There will be 8 blocks in total. From block 3 to block 8, it will be just a repetition of the first three blocks. Please do your best to imagine how a sound suits the content of the video, even you have seen or heard them in the previous blocks.

We will start with a practice block of just a few trials so that you get a feel for how the experiment looks and works.

Practice: Run `theta_long_rating_practice.m` (if the participant belongs to the LONG group) or `theta_short_rating_practice.m` (if the participant belongs to the SHORT group)

Okay, now let's start the real task. When you complete all 8 blocks, you will see please alert the experimenter, please wait for me to give you further instructions.

Real experiment: Run `theta_long_rating_block1_8.m` / `theta_short_rating_block1_8.m`

Comments (EEG noisy channels, other problems):

Task 2: Distractor task

Instructions: now you're going to do a brief task that involves counting backwards by 3 for 30 seconds. You will be presented with a random number on the screen. Let's say that the number is 198. You have to say that number out loud, and then subtract 3 and say the result out loud. You continue doing this until you're prompted to stop. So, you would say, out loud, 198, 195, 192, 189, 186,... and so on.

Run `theta_long_distractor.m` / `theta_short_distractor.m`

Comments: _____

End time: _____

Delay time: long (24 hr)/short (min)

Date: _____ Start time: _____

Task 3: Memory test task

Instructions: Today's task will be a memory task of yesterday's sound-video pairs you saw and heard (if it's the short delay group, just say now you're going to do a memory task of the sound-video pairs you just saw and heard). The way the memory test will work is that you will hear one of the sounds that you had heard played along with one of the video clips yesterday (just now), but there will be still images from four of the videos presented on the screen. Your job is to select the video that was playing when you heard that same sound yesterday (just now). You need to use the keys 1 through 4 to select the correct video. After you have made your choice, you will be presented with another sound, and you will have to do the same task, and so on, until you have done this for all videos and sounds saw and heard yesterday (just now). There will be two blocks in total. It will last around 15 – 20 minutes.

We will start with a practice block of just a few trials so that you get a feel for how the experiment looks and works.

Practice: Run `theta_long_testing_practice.m` / `theta_short_testing_practice.m`

Okay, now let's start the real thing. When you complete all 2 blocks, you will see please alert the experimenter, please wait for me to give you further instructions.

Real experiment: Run `theta_long_testing_sync.m` / `theta_short_testing_sync.m`

Comments: _____

Task 4: Synchrony perception tasks

Instructions: You will be presented with a 3s sound together with a 3s video again. This time, you don't need to memorise the association between them. Instead, you need to listen carefully and watch carefully and indicate whether the changes of brightness of the video and changes of volume of the sound are in synchrony or out of synchrony. In synchrony means, when the video gets brighter and brighter, you feel the sound also gets louder and louder. Or when the video gets darker and darker, at the same time the sound also gets less and less loud. In contrast, if you feel when the video gets brighter and brighter, at the same time, the sound gets less and less loud, or when the video gets darker and darker, you feel the sound gets louder and louder. In that case, you should indicate the pair as out-of-synchrony. Press 1 for out-of-synchrony and 2 for in-synchrony. You will do 16 pairs for one task block, which will take around 2 minutes. This is the last task for the whole study.

Press J to continue

Comments: _____

End time: _____

Payment or credits amount: _____

Feedback:

Task difficulty?

Strategy for memory?

Do you play any instruments? Music knowledge?

Any other feedback?