Emotional Faces

Stimuli properties

This stimuli set consists of 56 unique videos with 4 different actors (2 male: AL, BP; 2 female: AK, JvG) showing 6 different emotions: Anger, Disgust, Fear, Happy, Pain and Sad in 2 different intensities. Additionally there are for each actor 2 neutral videos (one with and one without movement).

Videos are 1.5 seconds with 0.5 second (12 frames) neutral face and then 1 second (25 frames) of emotion. (These videos are also available with 1 second neutral face and 1 second emotional face).

Videos are named with first the initials of the actor (AK,AL,BP,JvG), then the emotion portrayed (A,D,F,H,N,P,S) and finally with a number referring to the original number of that video clip. The name thus does not have the intensity of the emotion incorporated. This can be found in the excel files of the validation results.

Validation

These videos have been validated online using Gorilla to build the online task (https://gorilla.sc/) and Prolific to recruit participants (https://www.prolific.co/).

The stimuli have been validated in 4 different ways, each with a different participant pool:

- All Emotions

For this validation, participants had to rate each video on all the 6 different emotions on a scale from 0 (emotion is not present) to 10 (highest intensity imaginable). Participants had to give an example for each emotion of highest imaginable intensity, which was then used next to the rating scale (see Validation\_task\_overview.pptx for more details).

Each unique video was thus shown 6 times, where the participant had to rate it for happy, sad, disgust, fear, anger or pain. Since the task would be to long for a single participant, we had to cut the task in two, meaning that half of the participants would rate each unique video on 3 emotions and the other half of the participants on the other 3 emotions. The results of this validation is shown in a confusion matrix where for each unique video you see the average rating of all participants for all emotions (see allEMO\_validation.xlsx).

- target Emotions

For this validation, participants had to rate each video only on the emotion the actor was showing (e.g. the target emotion). Each unique video was therefore only shown once.

This type of validation (with only rating the target emotion) was also done, since we noticed in earlier validation sessions, that if participants are asked to also rate non-target emotions, this affected the way they rated. Since these videos were created for subjects to passively view them and get engaged with the target emotion showing, we wanted to have a validation subset where only the target emotion had to be rated.

Since it would be strange to ask for the neutral videos the highest imaginable neutral experience, neutral videos were rated on the 6 different emotions. In order to achieve this we ran the task with 6 different participant pools where we counterbalanced the 6 different emotions that had to be rated for each unique neutral video. This would lead to at least 1 emotional rating per unique neutral video, see below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | rand1 | rand2 | rand3 | rand4 | rand5 | rand6 |
| AK\_N\_01.mp4 | anger | disgust | fear | happy | pain | sad |
| AL\_N\_01.mp4 | sad | anger | disgust | fear | happy | pain |
| BP\_N\_01.mp4 | pain | sad | anger | disgust | fear | happy |
| JvG\_N\_08.mp4 | happy | pain | sad | anger | disgust | fear |
| AK\_N\_09.mp4 | fear | happy | pain | sad | anger | disgust |
| AL\_N\_06.mp4 | disgust | fear | happy | pain | sad | anger |
| BP\_N\_07.mp4 | pain | sad | anger | disgust | fear | happy |
| JvG\_N\_17.mp4 | fear | happy | pain | sad | anger | disgust |

- Arousal

For this validation participants were asked to rate the stimuli on Arousal using the SAM (Self-Assessment Manikin) scale for arousal

- Valence

For this validation participants were asked to rate the stimuli on Valence using the SAM (Self-Assessment Manikin) scale for valence.