

Emotion Regulation Task

During the Emotion Regulation Task, blood oxygenation level-dependent contrast functional images will be acquired with echo-planar T1*-weighted imaging using 3.0 Tesla GE Discovery MR750 scanner (GE Healthcare, Milwaukee, Wisconsin) with a 32-channel head coil. Each whole brain volume will consist of 45 interleaved 3 mm thick axial/oblique slices (74 x 74 matrix; TR, 2000 ms; TE, 27.5 ms; size, 3 x 3 x 3 mm; FOV, 222 mm; flip angle, 77°). For the emotion regulation task, 350 volumes will be acquired over 11 minutes and 40 seconds. To ensure BOLD saturation, three dummy scans will be acquired at the start of each acquisition. A high-resolution T1-weighted structural scan will be acquired using a 3D spoiled gradient echo (SPGR) sequence at the end of the imaging session for use in normalization of the fMRI data into standard space.

Verbal instructions: In this task, you will be seeing a series of positive, negative, and neutral images. Some of these images can be intense, so if you would prefer to stop for any reason, please just let me know. After you see the image on the screen, you'll be instructed to increase your experienced positive emotion, decrease your experienced negative emotion, or simply watch the image. For the "decrease/increase" sets, you can use any of the strategies we discussed earlier. Afterward, a rating scale will pop up on the screen, and using the buttons in your left hand, you can rate how strong your adjusted emotion was, 1 being the weakest, and 4 being the strongest. We will start with a short practice, then I will check in before you begin.



Example images used in Emotion Regulation practice for "increase positive emotion", and "decrease negative" respectively.