Figure 8–Source Data 3. Associations with expected value (EV) based on fits to heat-evoked SCRc

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Correction** | **Analysis** | **Effect** | **Anatomical label** | **x** | **y** | **z** | **# of voxels** | **Volume (mm3)** |
| Pain modulatory network | Instructed Group | Positive association with EV | L Putamen | -16 | 16 | -10 | 1 | 27 |
| R Insula Lobe | 32 | 20 | -10 | 8 | 216 |
| L sgACC | -10 | 34 | -4 | 5 | 135 |
| L rACC | 2 | 34 | 10 | 5 | 135 |
| R rACC | 14 | 44 | 14 | 4 | 108 |
| Negative association with EV | *No voxels survive* |
| Uninstructed Group | Positive association with EV | *No voxels survive* |
| Negative association with EV | *No voxels survive* |
| Main effect of EV, controlling for Group | Positive effect | *No voxels survive* |
| Negative effect | *No voxels survive* |
| Group differences in EV (Instructed - Uninstructed) | Positive effect | *No voxels survive* |
| Negative effect | *No voxels survive* |
| Whole brain correction | Instructed Group | Positive association with EV | R Anterior Insula | 32 | 20 | -10 | 9 | 243 |
| Negative association with EV | *No voxels survive* |
| Uninstructed Group | Positive association with EV | R DLPFC | 44 | 8 | 26 | 1 | 27 |
| Negative association with EV | L Anterior Insula | -26 | 26 | 10 | 12 | 324 |
| L rdACC | -16 | 40 | 16 | 2 | 54 |
| Main effect of EV, controlling for Group | Positive effect | *No voxels survive* |
| Negative effect | *No voxels survive* |
| Group differences in EV (Instructed - Uninstructed) | Positive effect | L Superior Medial Gyrus | -10 | 40 | 26 | 8 | 216 |
| Negative effect | *No voxels survive* |
| Uncorrected | Instructed Group | Positive association with EV | L Putamen | -32 | 2 | -8 | 52 | 1404 |
| R Anterior Insula | 32 | 20 | -8 | 17 | 459 |
| R Caudate Nucleus | 16 | 20 | 4 | 33 | 891 |
| R rdACC | 14 | 40 | 14 | 7 | 189 |
| R rdACC | 8 | 16 | 22 | 29 | 783 |
| Middle Cingulate Cortex | 2 | -22 | 34 | 49 | 1323 |
| Negative association with EV | L OFC | -26 | 44 | -14 | 17 | 459 |
| R Retrosplenial Cortex | 20 | -52 | 8 | 14 | 378 |
| R Occipital Cortex | 8 | -64 | 14 | 23 | 621 |
| L DLPFC | -44 | 26 | 22 | 60 | 1620 |
| Uninstructed Group | Positive association with EV | R DLPFC | 58 | 16 | 16 | 16 | 432 |
| Negative association with EV | L Inferior Frontal Gyrus | -40 | 8 | -20 | 56 | 1512 |
| R Fusiform Gyrus | 28 | -34 | -4 | 61 | 1647 |
| L Fusiform Gyrus | -34 | -38 | -4 | 29 | 783 |
| L Prefrontal cortex | -22 | 64 | -2 | 21 | 567 |
| L Posterior hippocampus | -14 | -34 | 4 | 23 | 621 |
| L Anterior Insula | -26 | 28 | 10 | 25 | 675 |
| R Retrosplenial Cortex | 14 | -56 | 20 | 40 | 1080 |
| L Thalamus | -20 | -22 | 16 | 24 | 648 |
| L DMPFC | -14 | 40 | 26 | 8 | 216 |
| Main effect of EV, controlling for Group | Positive effect | R Cerebelum VIII | 26 | -68 | -56 | 26 | 702 |
| L Inferior Temporal Gyrus | -62 | -34 | -26 | 7 | 189 |
| R Inferior Occipital Gyrus ( Area hOc3v [V3v]) | 34 | -92 | -8 | 26 | 702 |
| R Insula Lobe | 32 | 22 | -4 | 34 | 918 |
| R MCC | 2 | -20 | 38 | 19 | 513 |
| L Postcentral Gyrus ( Area 3a ) | -32 | -34 | 46 | 6 | 162 |
| L Precentral Gyrus | -34 | -10 | 52 | 59 | 1593 |
| L Posterior-Medial Frontal | -10 | -8 | 58 | 29 | 783 |
| Negative effect | R Cerebelum Crus 1 | 14 | -76 | -28 | 4 | 108 |
|  L medial OFC (Area Fo3 ) | -10 | 50 | -26 | 11 | 297 |
| R ParaHippocampal Gyrus | 28 | -38 | -8 | 39 | 1053 |
| R Precuneus | 16 | -46 | 10 | 47 | 1269 |
| Group differences in EV (Instructed - Uninstructed) | Positive effect | L Anterior Insula, contiguous with L Putamen | -38 | 4 | -16 | 78 | 2106 |
| L MPFC, ACC | -4 | 46 | 4 | 396 | 10692 |
| R Occipital Cortex | 26 | -86 | 2 | 57 | 1539 |
| L Thalamus (prefrontal) | -14 | -16 | 16 | 26 | 702 |
| Negative effect | *No voxels survive* |

c. This table presents group results from voxelwise analyses of associations between expected value (based on fits to heat-evoked SCR) and brain activation on medium heat, as measured by AUC estimates (see Methods). Group results were analyzed using robust regression. See Methods for additional details.