**Supplementary Table 1:** Demographical information on all subsamples

|  |  |  |  |
| --- | --- | --- | --- |
| **Sample** | **N** | **Age (M±SD)** | **Sex (F:M)** |
| All | 53 | 15.70±.61 | 24:29 |
| fMRI data | 41 | 15.63±.59 | 22:19 |
| Heart rate data | 36 | 15.61±.60 | 18:18 |

**Supplementary Table 2:** Comparison between moderate and low stress conditions with flexible factorial analysis of variance

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Region** | **H** | **Cluster size**(voxels) | **t**(peak) | **p**(uncorr.) | **p**(FWE) | **MNI coordinates**(peak) |
|  |  |  |  |  |  | x | y | z |
| **t-contrast: moderate > low** |
| **Inferior Parietal Lobule**  | **L** | **62** | **4.05** | **<.0001** | **.619** | **-51** | **-52** | **40** |
| SupraMarginal Gyrus  | L |  | 3.55 | <.0001 | .974 | -54 | -52 | 28 |
| **Insula Lobe** | **R** | **52** | **4.77** | **<.0001** | **.102** | **33** | **17** | **-8** |
| **Middle Frontal Gyrus** | **R** | **38** | **4.02** | **<.0001** | **.650** | **36** | **32** | **16** |
| Middle Frontal Gyrus | R |  | 3.62 | <.0001 | .953 | 33 | 44 | 16 |
| **ACC** | **R** | **35** | **3.71** | **<.0001** | **.908** | **3** | **17** | **22** |
| Middle Cingulate Gyrus | L |  | 3.67 | <.0001 | .928 | -9 | 23 | 25 |
| ACC | L |  | 3.61 | <.0001 | .954 | -3 | 38 | 22 |
| **Superior Medial Gyrus** | **L** | **28** | **3.91** | **<.0001** | **.754** | **-6** | **35** | **37** |
| **Posterior Medial Frontal** | **R** | **13** | **3.57** | **<.0001** | **.966** |  | **20** | **49** |
| **t-contrast: low > moderate** |
| **Olfactory cortex** | **R** | **169** | **5.20** | **<.0001** | **.025** | **6** | **23** | **-14** |
| Mid Orbital Gyrus | R |  | 5.18 | <.0001 | .026 | 12 | 50 | -8 |
| Caudate Nucleus | R |  | 5.05 | <.0001 | .041 | 6 | 11 | -8 |
| **Postcentral Gyrus** | **L** | **41** | **4.88** | **<.0001** | **.072** | **-51** | **-13** | **19** |
| **Rectal Gyrus** | **L** | **32** | **5.63** | **<.0001** | **.005** | **-15** | **20** | **-11** |
| Superior Orbital Gyrus | L |  | 4.24 | <.0001 | .426 | -18 | 29 | -14 |
| **Rolandic Operculum** | **R** | **13** | **3.99** | **<.0001** | **.671** | **39** | **-4** | **13** |

*Note.* Peak voxel coordinates and t-values for activation clusters across the entire brain at p < .001 uncorrected, cluster size ≥ 10. H = hemisphere; L = left, R = right, MNI = Montreal Neurological Institute

**Supplementary Table 3:** Comparison between high and moderate stress conditions with flexible factorial analysis of variance

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Region** | **H** | **Cluster size**(voxels) | **t**(peak) | **p**(uncorr.) | **p**(FWE) | **MNI coordinates**(peak) |
|  |  |  |  |  |  | x | y | z |
| **t-contrast: high > moderate**  |
| **ACC** | **L** | **9008** | **9.14** | **<.0001** | **<.0001** | **-3** | **29** | **16** |
| Insula Lobe | R |  | 9.01 | <.0001 | <.0001 | 33 | 17 | -14 |
| ACC | R |  | 8.44 | <.0001 | <.0001 | 3 | 35 | 22 |
| **Precentral Gyrus** | **R** | **198** | **4.84** | **<.0001** | **.081** | **33** | **-7** | **55** |
| Middle Frontal Gyrus  | R |  | 4.27 | <.0001 | .391 | 27 | -4 | 43 |
| Posterior-Medial Frontal | R |  | 4.13 | <.0001 | .533 | 12 | 5 | 55 |
| **Superior Parietal Lobule**  | **L** | **63** | **4.87** | **<.0001** | **.072** | **-18** | **-61** | **55** |
| **Paracentral Lobule** | **R** | **41** | **3.95** | **<.0001** | **.714** | **12** | **-34** | **64** |
| Precuneus | R |  | 3.78 | <.0001 | .862 | 3 | -46 | 61 |
| **Cerebelum (Crus 1)** | **R** | **35** | **4.15** | **<.0001** | **.514** | **30** | **-73** | **-35** |
| Cerebelum (Crus 1) | R |  | 3.76 | <.0001 | .878 | 24 | -82 | -32 |
| Cerebelum (Crus 1) | R |  | 3.51 | <.0001 | .981 | 30 | -79 | -26 |
| **Cerebelum (Crus 1)** | **L** | **35** | **4.48** | **<.0001** | **.233** | **-27** | **-70** | **-35** |
| Cerebelum (Crus 1) | L |  | 4.20 | <.0001 | .459 | -21 | -79 | -32 |
| **Paracentral Lobule** | **L** | **29** | **3.90** | **<.0001** | **.763** | **-6** | **-28** | **61** |
| **Middle Frontal Gyrus** | **R** | **27** | **4.05** | **<.0001** | **.615** | **27** | **26** | **46** |
| **Precentral Gyrus** | **R** | **26** | **4.64** | **<.0001** | **.148** | **39** | **-4** | **31** |
| **Middle Temporal Gyrus** | **R** | **24** | **5.05** | **<.0001** | **.042** | **54** | **5** | **-29** |
| **Cerebelum (VI)** | **L** | **20** | **4.15** | **<.0001** | **.511** | **-30** | **-61** | **-20** |
| **Hippocampus** | **R** | **13** | **3.71** | **<.0001** | **.910** | **27** | **-37** | **-2** |
| Lingual Gyrus | R |  | 3.31 | <.0001 | .998 | 27 | -46 | -2 |
| **Rolandic Operculum** | **R** | **12** | **3.79** | **<.0001** | **.859** | **54** | **-19** | **22** |
| **t-contrast: moderate > high** |
| No significant clusters |

*Note.* Peak voxel coordinates and t-values for activation clusters across the entire brain at p < .001 uncorrected, cluster size ≥ 10; H = hemisphere; L = left, R = right, MNI = Montreal Neurological Institute **Supplementary Table 4:** Comparison between low and high stress conditions with one sample *t*-test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Region** | **H** | **Cluster size**(voxels) | **t**(peak) | **p**(FWE) | **MNI coordinates**(peak) |
|  |  |  |  |  | x | y | z |
| **t-contrast: high stress > low stress** |
| **ACC/medial prefrontal** | **L** | **400** | **8.71** | **<.0001** | **-3** | **35** | **19** |
| ACC/medial prefrontal | bil |  | 8.20 | <.0001 | 0 | 26 | 16 |
| ACC/medial prefrontal | L |  | 6.92 | .0001 | -3 | 29 | 1 |
| **Insula Lobe** | **R** | **107** | **8.51** | **<.0001** | **30** | **17** | **-11** |
| Insula Lobe | R |  | 7.69 | .006 | 39 | 14 | -8 |
| **Insula Lobe** | **L** | **41** | **6.58** | **.002** | **-27** | **17** | **-8** |
| Insula Lobe | L |  | 5.61 | .024 | -30 | 11 | -17 |
| **Middle Temporal Gyrus**  | **R** | **37** | **7.70** | **.006** | **60** | **-13** | **-23** |
| **Angular Gyrus** | **L** | **22** | **6.05** | **.007** | **-54** | **-58** | **34** |
| **Middle Temporal Gyrus** (anterior) **/ Temporal Pole** | **R** | **16** | **6.60** | **.002** | **54** | **5** | **-29** |
| **t-contrast: low stress > high stress** |
| **Subgenual ACC** |  **R** |  **13** | **6.50** | **.002** | **6** | **23** | **-14** |

*Note.* Peak voxel coordinates and t-values at p < .05 FWE corrected across the whole brain, cluster size ≥ 10 voxels; H = hemisphere; L = left, R = right, bil = bilateral, MNI = Montreal Neurological Institute

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Region** | **H** | **Cluster size**(voxels) | **t**(peak) | **p**(FWE) | **MNI coordinates**(peak) |
|  |  |  |  |  | x | y | z |
| **t-contrast: high stress > low stress** |
| **ACC/medial prefrontal** | **bil** | **428** | **6.51** | **<.0001** | **0** | **35** | **22** |
| ACC/medial prefrontal | bil |  | 6.37 | <.0001 | 0 | 26 | 19 |
| ACC/medial prefrontal | L |  | 5.51 | .0001 | -3 | 29 | 1 |
| **Insula Lobe** | **R** | **109** | **8.43** | **<.0001** | **30** | **17** | **-11** |
| Insula Lobe | R |  | 7.59 | .006 | 39 | 14 | -8 |
| **Insula Lobe** | **L** | **31** | **6.58** | **.002** | **-27** | **17** | **-8** |
| **Middle Temporal Gyrus**  | **R** | **35** | **7.70** | **.006** | **60** | **-13** | **-23** |
| **Angular Gyrus** | **L** | **24** | **6.27** | **.005** | **-54** | **-58** | **34** |
| **Middle Temporal Gyrus** (anterior) **/ Temporal Pole** | **R** | **18** | **6.60** | **.000** | **54** | **5** | **-29** |
| **t-contrast: low stress > high stress** |
| **Subgenual ACC** |  **R** |  **11** | **6.43** | **.003** | **6** | **23** | **-14** |

 **Supplementary Table 5:** Comparison between low and high stress conditions with one sample *t*-test while co-varying for age and gender

*Note.* Peak voxel coordinates and t-values at p < .05 FWE corrected across the whole brain, cluster size ≥ 10 voxels; H = hemisphere; L = left, R = right, bil = bilateral, MNI = Montreal Neurological Institute