**Supplementary Table 1.** Bivariate correlations between pain catastrophizing, magnification and helplessness and regional gray matter volume using age and total GMV as covariates

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Region |  Cluster Peak MNI - coordinates   x y z  | z-Score | Cluster size k = 1.5 mm3 |
| Overall Pain catastrophizing | R cuneus (-)L MFG (-)R cingulate cortex (-) | 14-1715 | -7927-19 | 19 3936 | 3.473.273.23 | 9147 |
|  | R MFG (+)R MTG (+)R midbrain (+)L cuneus (+)R STG (+) | 174117-953 | -66-25-96-6 | 63-32-930-9 | 4.363.423.283.193.17 | 35329957 |
| Magnification | L PCC (-) | -9 | -55 | 0 | 3.54 | 82 |
|  | L MFG (+) R Inf. parietal lobule (+)R STG (+)L Middle Occipital Gyrus (+)R MFG (+)R SMA (+)R cingulate gyrus (+) | -38-94241-1712128 | 2-28-459-9338-19-13 | 485551-3013375230 | 3.473.223.643.703.543.423.323.21 | 119147148630613 |
| Helplessness | R IOG (-) | 30 | -93 | -5 | 3.31 | 45 |
|  | R MFG/ SMA (+)R MFG (+)R SMA (+)R STG (+)L MFG (+)L SOG (+)R PCC (+) | 1727125654-48-93 | -720-12-3938-97-49 | 60676102225287 | 5.003.933.494.273.553.483.233.16 | 4031871112125 |

Significant Correlations between pain catastrophizing, magnification and helplessness and GMV. Reported are the MNI coordinates, z-score and the cluster size in mm3, PCC: posterior cingulate; MFG: medial frontal gyrus; SMA: supplementary motor area; STG: superior temporal Gyrus; IOG: Inferior Occipital Gyrus; SOG: superior occipital gyrus; (+): positive correlation; (-): negative correlation. Statistical maps were set at a cluster threshold of 5 voxels corresponding to an uncorrected p < 0.001.

**Supplementary Table 2.** Bivariate correlations between pain catastrophizing, magnification and helplessness and regional gray matter volume using age, total GMV and depression as covariates

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Region |  Cluster Peak MNI - coordinates   x y z  | z-Score | Cluster size k = 1.5 mm3 |
| Overall Pain catastrophizing | L Cuneus (-)L PCC (-)R Fusiform (-)R Lingual Gyrus (-)L Fusiform (-)R Precuneus (-)L MFG (-)R Fusiform (-)R SMA (+)R MTG (+) | -11-82714-3821-17301241-36421727-32 | -64-57-85-79-78-6627-49-162-45-242-3 | 621-321-143437-1563-324851-96764 | 3.863.643.823.703.513.323.253.203.973.703.523.523.503.333.15 | 338512415172951634942191175 |
|  |  |  |  |  |  |  |
| Magnification | L PCC (-)R STG (+)L MFG (+) R Inf. parietal lobule (+)R MFG (+)L Middle Occipital Gyrus (+)R SMA (+)L MFG (+)L angular gyrus (+)R cingulate gyrus (+) | -841-38-41-354212-1712-8-368 | -61921111-4538-93-19-30-70-13 | 6-3048574551371352554230 | 3.883.623.603.383.243.593.553.483.333.283.263.14 | 239401236039552765 |
|  |  |  |  |  |  |  |
| Helplessness | L IOG (-)R Cuneus (-)R MTG (-) L ITG (-)R IOG (-)R MTG (-)R MTG (-)L Cuneus (-)L PCC (-)R Fusiform Gyrus (-)R STG (-)R STG (+)R MFG (+) | -231451-54-51304857-11-9365057561727 | 17-79-46-58-55-93-72-42-91-57-57-37-15-15-62 | -17216-17-9-59-2624-1261226067 | 3.993.983.453.313.163.313.293.293.263.253.233.164.803.444.503.52 | 4029152745158251013152651022715 |
|  |  |  |  |  |  |  |

Significant Correlations between pain catastrophizing, magnification and helplessness and GMV. Reported are the MNI coordinates, z-score and the cluster size in mm3, PCC: posterior cingulate; MFG: medial frontal gyrus; SMA: supplementary motor area; STG: superior temporal Gyrus; IOG: Inferior Occipital Gyrus; SOG: superior occipital gyrus; MTG: middle temporal gyrus; (+): positive correlation; (-): negative correlation. Statistical maps were set at a cluster threshold of 5 voxels corresponding to an uncorrected p < 0.001.