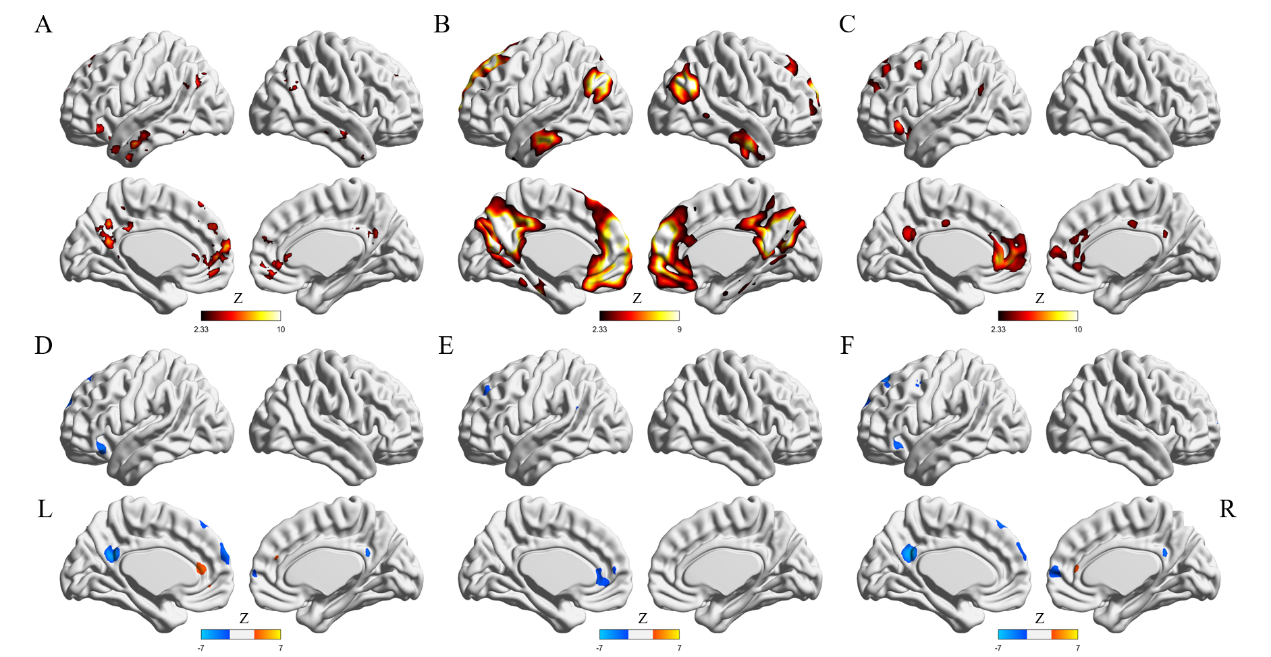
补充材料和方法

Supplementary methods and results

**1 神经成像元分析方法**

本文采用激活可能性估计法（Activation Likelihood Estimation，ALE）进行神经成像研究的元分析。其基本原理是：以激活峰值为中心，将坐标点还原成3D高斯分布球体。体素越靠近激活峰值点，其激活的可能性越高，反之则越低[1]。正文部分的分析使用Jupyter Notebook作为分析平台，采用Python 3.8.5作为运行环境，安装Nimare工具包[2]（https://nimare.readthedocs.io/）进行基于坐标的元分析，分析过程采取模拟次数为10000次，设置簇水平的阈限为0.001，采用族错误率法（familywise error rate, FWE）[3]进行多重比较校正，P < 0.05为阈值，。补充材料中图5和表1的元分析结果则是采取相同的参数，利用Matlab 2018软件作为运行平台，借助与Eickhoff 合作所得的ALE工具包进行分析。元分析结果的可视化采用BrainNet Viewer[4]，通过SPM Anatomy Toolbox图谱工具包[5]标记显著激活的簇所在的脑区解剖位置，利用脑成像数据处理和分析工具包DPABI 6.1[6]导出具体的激活脑区的医学名称。



**补充材料 图5 使用Matlab进行分析得到的不同数据库间自我参照的元分析比较图。（A）Neurosynth的元分析结果图；（B）NeuroQuery预测的结果图；（C）本数据库的元分析结果图；（D）自我vs名人与自我vs非人称的元分析结果差异图；（E）自我vs亲密他人与自我vs名人的元分析结果差异图；（F）自我vs亲密他人与自我vs非人称的元分析结果差异图。**

**Supplementary Figure 5 Self-reference meta-analysis comparison between different databases using Matlab.**

**( A ) Neurosynth meta-analysis results ; ( B ) Results of NeuroQuery meta-analysis results ; ( C ) Meta-analysis results for this database ;** **(D) Map of self vs celebrity and self vs impersonal meta-analysis results difference; ( E) Map of self vs celebrity and self vs intimate others meta-analysis results difference; (F ) Map of self vs intimate others and self vs impersonal meta-analysis results difference.**

**补充材料 表格1 元分析的结果**

**Supplementary Table 1 Results of meta-analysis using Matlab.**

| **脑区** | **体积**  **(voxel)** | **Z-值峰值坐标** | | | **解剖位置** |
| --- | --- | --- | --- | --- | --- |
| **x** | **y** | **z** |
| (Self - Close\_other) > (Self > non-Person) | | | |  |  |
| 1 | 69 | 6 | 36 | 14 | Cingulate Gyrus, anterior division (R) |
| (Self - non-Person) > (Self - Close\_other) | | | |  |  |
| 1 | 467 | 10 | 64 | 10 | Frontal Pole R |
| 2 | 422 | -6 | -52 | 26 | Precentral Gyrus (L) |
| 3 | 329 | -52 | 30 | -6 | Inferior Frontal Gyrus, pars triangularis (L) |
| 4 | 171 | -8 | 38 | 50 | Superior Frontal Gyrus (L) |
| 5 | 128 | -48 | -62 | 20 | Lateral Occipital Cortex, superior division (L) |
| 6 | 114 | -40 | 6 | 46 | Middle Frontal Gyrus (L) |
| (Self - Celebrity) > (Self - non-Person) | | | |  |  |
| 1 | 576 | 0 | 34 | 12 | Cingulum\_Ant\_L |
| 2 | 109 | -26 | 42 | 36 | Frontal Pole (L) |
| 3 | 77 | -60 | -46 | 16 | Supramarginal Gyrus, posterior division (L) |
| 4 | 29 | -8 | 56 | 6 | Paracingulate Gyrus (L) |
| (Self - non-Person) > (Self - Celebrity) | | | |  |  |
| 1 | 391 | -6 | -52 | 26 | Cingulate Gyrus, posterior division (L) |
| 2 | 376 | -4 | 62 | 26 | Frontal Pole (L) |
| 3 | 324 | -46 | 28 | -14 | Frontal Orbital Cortex (L) |
| 4 | 120 | -4 | 38 | 50 | Superior Frontal Gyrus (L) |
| 5 | 94 | -40 | 6 | 46 | Middle Frontal Gyrus (L) |
| 6 | 66 | -44 | -64 | 26 | Lateral Occipital Cortex, superior division (L) |
| (Self - Close\_other) > (Self - Celebrity) | | | |  |  |
| NA | NA | NA | NA | NA | None |
| (Self - Celebrity) > (Self - Close\_other) | | | |  |  |
| 1 | 408 | -10 | 36 | 10 | None |
| 2 | 133 | -18 | 40 | 44 | Frontal Pole (L) |
| 3 | 108 | -56 | -52 | 20 | Angular Gyrus (L) |
| 4 | 15 | -26 | 56 | 26 | Frontal Pole (L) |

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