Multidimensional Scaling

THE IDEA

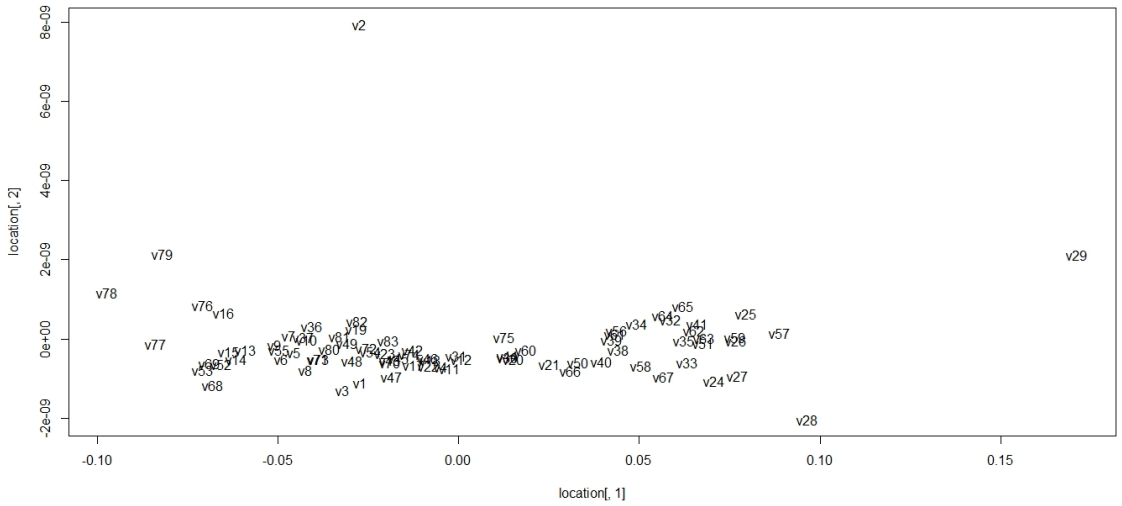
- Connectivity is essentially a correlation value between the signals captured and projected in each voxel
- Thus, similar values of connectivity imply similar correlation to our ROI
- So if the absolute value of the difference between two different regions is small, we can interprete that these two regions are in cooperation between each other, whilst high differences in connectivity would seem to imply competition between regions

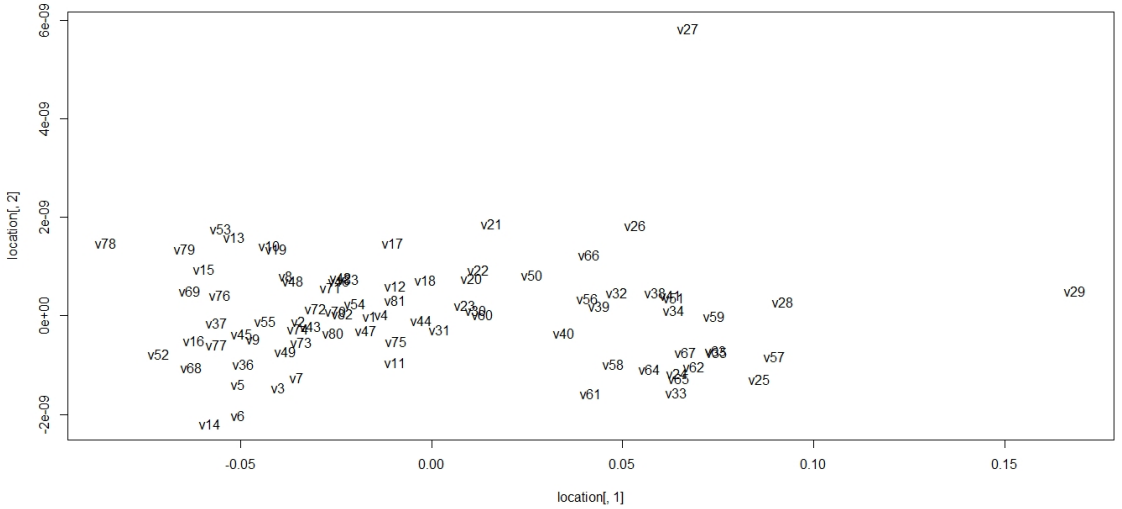
What we expect

- That the regions highlighted by the loadings of each PC with the same sign to be close to each other, and those with opposite sign to be distant from each other
- We expect closeness in the regions of the brain which are in cooperation to a specific function (e.g. those involved in the reward mechanisms)
- We expect the distances between regions of the schz population to be smaller in coherence with the hypothesis that Schizophrenia hinders a subject by taks interference

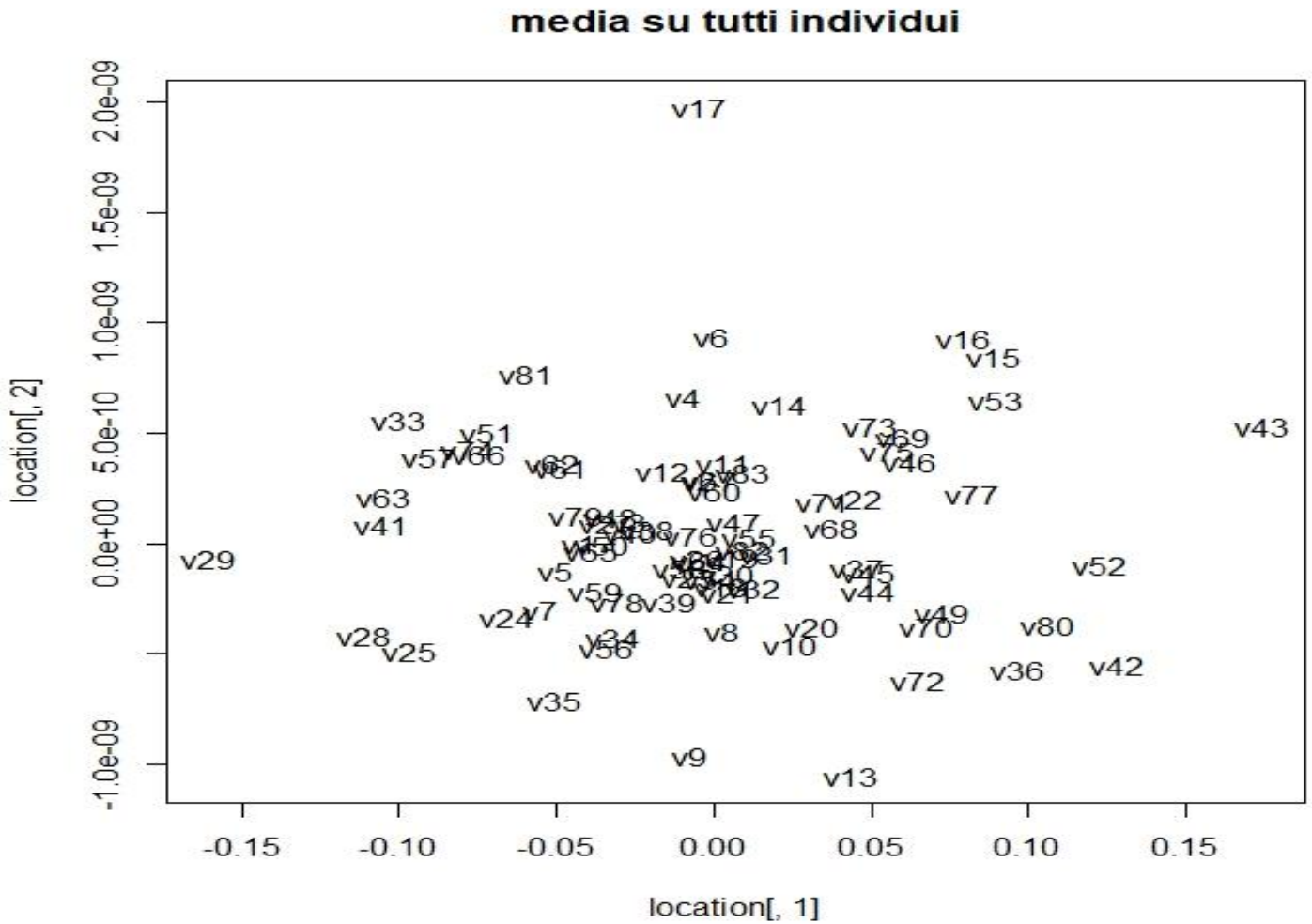
What we saw

Distances between regions of control pop (on the right) of schz pop (on the left)





On the entire population



Questions

- Are our interpretations correct?
- Is the scale factor on the y axis of the charts a problem?

EXTRA

- La questione sulle pca separate è da abbandonare?