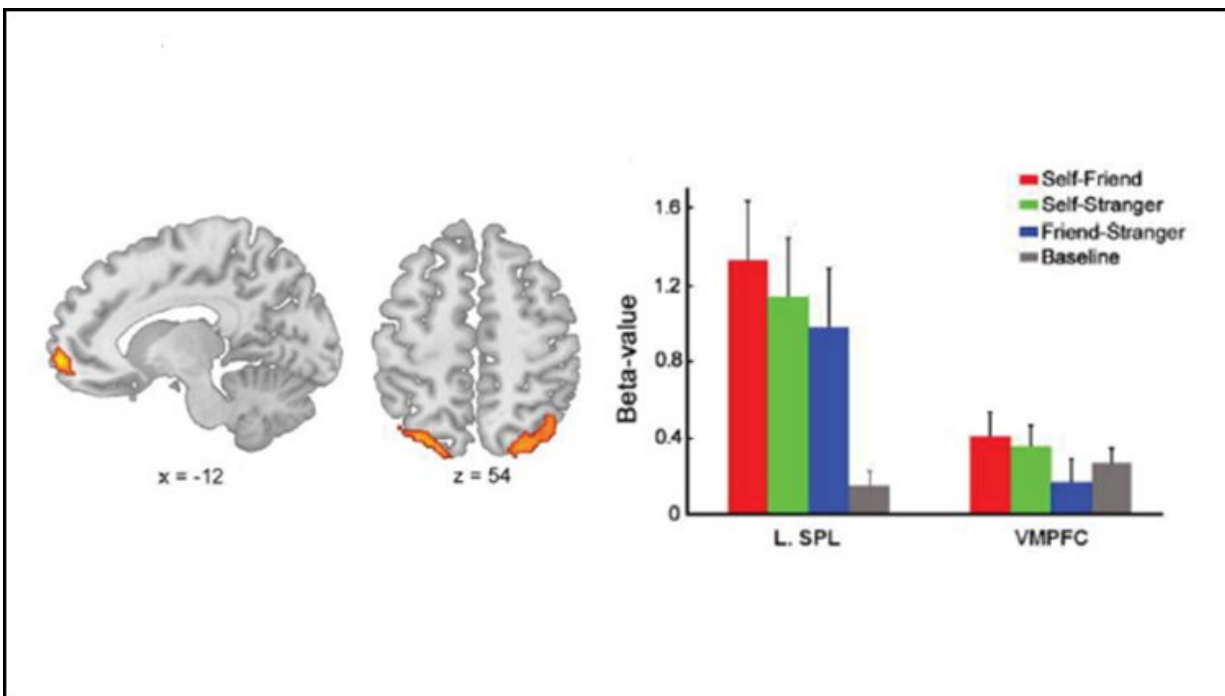


The brain region responsible for self-bias in memory

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Regions showing enhanced activation during the maintenance of self-associated stimuli (left), including both classic self-referential processing regions (VMPFC) and regions in the working memory network. Credit: Yin et al., *JNeurosci* 2021

A brain region involved in processing information about ourselves biases our ability to remember, according to new research published in *JNeurosci*.

People are good at noticing information about themselves, like when your eye jumps to your name in a long list or you manage to hear someone address you in a noisy crowd. This self-bias extends to working memory, the ability to actively think about and manipulate bits of information: people are also better at remembering things about themselves.

To pinpoint the source of this bias, Yin et al. measured participants' [brain activity](#) in an fMRI scanner while they tried to remember the location of different colored dots representing themselves, a friend, or a stranger. The participants' fastest response time came when recalling the dot representing themselves, even though it was an arbitrary connection. When people held the self-representing dot in working memory, they had greater activity in the [ventromedial prefrontal cortex](#) (VMPFC)—an area involved in processing self-relevant information.

Greater synchrony between the VMPFC and working memory regions corresponded to faster response times. When the researchers interfered with VMPFC activity with [transcranial direct current stimulation](#), the self-bias disappeared, indicating activity in the region drives the bias.

More information: Ventromedial Prefrontal Cortex Drives the Prioritization of Self-Associated Stimuli in Working Memory, *JNeurosci* (2021). [DOI: 10.1523/JNEUROSCI.1783-20.2021](https://doi.org/10.1523/JNEUROSCI.1783-20.2021)

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