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The contribution of different prefrontal cortex regions to recollection and familiarity. A review of fMRI data.

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Highlights:

- Greater role of the ventrolateral PFC in familiarity than in recollection.
- The dorsomedial PFC mediates familiarity but not recollection.
- Medial and lateral BA10 subtend recollection and familiarity respectively.

ABSTRACT

Dual-process theories of recognition memory sustain that recollection and familiarity reflect different mnemonic processes and rely on separate neural substrates that are located primarily in the medial temporal lobe (MTL). Aggleton and Brown's model (1999) assumes that this distinction extends to other brain regions, including the thalamus, and that both recognition memory processes interact with the prefrontal cortex (PFC). Nevertheless, it is still unclear whether recollection and familiarity are subtended by separate prefrontal regions. Here we provided a review of the literature