

Electrophysiological evidence for differing autobiographical memory retrieval routes

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Theoretical models of autobiographical memory often describe two distinct retrieval modes which can be utilised to retrieve past events. Direct retrieval is considered effortless and immediate, whilst generative retrieval requires a deliberate search process to successfully access a memory. To our knowledge, no study has explored how these two retrieval modes differ in relation to their neural temporal activations. In the present study, 26 participants completed a memory task whilst their brain neurophysiological activity was recorded via a 40-channel electroencephalography cap. Single words were presented on screen and participants were instructed to press the spacebar to indicate the moment a specific autobiographical event was accessed. After reporting which retrieval mode was used, participants elaborated the memory in as much as detail as possible and answered a series of follow up questions (e.g., how personally significant the event was). Preliminary analysis of behavioural data revealed that participants accessed direct memories significantly faster and direct memories were rated as significantly more detailed and personally significant. Results from ongoing EEG data analysis will be discussed in relation to autobiographical memory theories.

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No

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No

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