

Involuntary Autobiographical Memories: Mechanisms and Applications

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Involuntary autobiographical memories are conscious recollections of personal events that come to mind spontaneously – that is, with no immediately preceding attempt at retrieval. Evidence suggests that involuntary autobiographical memories are highly frequent in daily life and predominantly positive in clinically healthy individuals. They represent a context-sensitive, associative, and relatively automatic way of recollecting past episodes that involves little executive control and may be an evolutionary forerunner of strategic retrieval of past events. Recent findings show that involuntary memories of past events are present early in childhood, and that their frequency appears to increase in older adulthood, relative to strategic recall. Mechanisms underlying the activation of everyday involuntary memories have been used to stimulate autobiographical memories in older adults diagnosed with Alzheimer's disease. This population has difficulties accessing autobiographical memories, but this deficit tends to spare memories dated to earlier parts of their lives, and may partially reflect retrieval deficits rather than complete memory loss. We have shown that exposure to concrete everyday objects historically dated to the participants' youth (e.g., a skipping rope), relative to verbal cues (i.e., the verbal label for the objects) facilitate access to autobiographical memories in Alzheimer's patients. Although generally adaptive, involuntary memories also have dysfunctional aspects: Self-reported frequency of involuntary memories and involuntary future projections correlates positively with measures of hallucination proneness and psychotic-like experience, and mechanisms facilitating everyday involuntary memories may be extended to account for intrusive, involuntary memories in clinical disorders.