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REPRESSED MEMORIES: FACT OR FAKE?

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Abstract

The term 'repression' is closely associated with Sigmund Freud's psychoanalysis and was frequently linked to 'traumatic amnesia.' Both terms refer to the loss of conscious access to past (and probably problematic) memories. The term repression also found its way into current cognitive theories, clinical psychology and neuroscience. A number of experimental psychologists questions the existence of repression and traumatic amnesia, while many clinicians use and accept this term. Because of this controversy, it was spoken of the "memory war." Some researchers suggested that "after the 1990s, when the term *repressed memory* was widely criticized, proponents began to favor the term *dissociative amnesia* instead", while others argued that they are not the same. We will argue for the existence of repressed memories on the basis of cases with dissociative amnesia. By doing so, we will center on the concept of state-dependent memories and on relations between stress and amnesia, mechanisms by which repressed memories are likely to occur. Furthermore, the results of brain imaging studies are used to support the existence of repressed memories.

Keywords: *Autobiographical memory, mnestic block syndrome, functional amnesia, false memories.*

1. Introduction

Sigmund Freud introduced the terms 'repression' and 'suppression', meaning that the first is an unconscious and the second a conscious process (Langnickel & Markowitsch, 2006). Freud (1915/1957) wrote: "repression […] cannot arise until a sharp cleavage has occurred between conscious and unconscious mental activity (Freud, 1915a/1957, p. 147). He added that there had to be a strong connection between repression and what is unconscious (Freud, 1915a/1957, p. 148). Freud assumed that repression is directed by an internal source of danger, an instinctual impulse whose satisfaction would be incompatible with other demands of the mental apparatus. Freud postulated that repression is an instinctual vicissitude (Freud, 1915a/1957, p. 148) and instincts or instinctual representatives constitute the core of the unconscious (Freud, 1915b/1957, p. 185). The simplest citation on Freud and repression was published by Conway (2001, p. 319): "the essence of repression lies simply in turning something away, and keeping it at a distance from the conscious."

At present repression is frequently used in connection with *dissociative amnesia*, a psychiatric disease for which retrograde amnesia in the episodic-autobiographical domain is the core symptom (Staniloiu & Markowitsch, 2014; Markowitsch & Staniloiu, 2016, 2022). Markowitsch (2002) has introduced the term 'mnestic block syndrome' as an alternative to dissociative amnesia, in order to indicate that the memories are not lost forever, but are only temporary inaccessible – that is, they are repressed. *Memory repression* is therefore a mechanism for reducing psychological conflict (Breuer & Freud, 1895). McNally linked repression with 'traumatic amnesia' (McNally, 2004) and equalized it with 'dissociative amnesia' (McNally, 2023). In the paper of Pope et al. (2023) repressed memory was equalized with a subform of dissociative amnesia, namely "localized or selective dissociative amnesia." 'Localized amnesia' means a failure to recall events from a circumscribed period of time, and 'selective amnesia' a failure to recall certain events (or certain kinds of events). The opposite would be 'generalized amnesia', where most or all of the individual's life history is (temporarily) lost. In our experience with more than 100 patients with dissociative amnesia, the generalized form was the rule, with less than ten exceptions.

Memory suppression, on the other hand, was introduced by Michael Anderson in the last years, though some neuroscientists had used it already in the last century (e.g., Kensinger & Schacter, 1999). He studied the conscious suppression of previously learned material experimentally in a series of studies (Anderson & Hulbert, 2021; Anderson & Florescu, 2022). (Only very early in Anderson's studies, 2006, he used the inappropriate term 'repression'.)

1.1. The "memory wars"

In the 1990s the so-called memory wars started (Loftus & Ketcham, 1994) and remained ongoing until the present (Otgaar et al., 2019; Lynn et al., 2023; McNally, 2023; Staniloiu & Markowitsch, 2024; Markowitsch & Staniloiu, 2025). Other scientists wrote about the "memory debate" or the "memory dispute" (DePrince & Freyd, 1997). Otgaar et al. (2019) are of the opinion that "after the 1990s, when the term *repressed memory* was widely criticized, proponents began to favor the term *dissociative amnesia* instead" (Otgaar et al., 2019, p. 1079), while others argued that the expressions are not interchangeable (Piper et al., 2008, with respect to *psychogenic amnesia*). In fact, the term *dissociative amnesia* was used much later; at that time *psychogenic amnesi*a was the common term used. The link between psychogenic or functional or dissociative amnesia, traumatic amnesia, and repression indeed remained. Dissociative amnesia refers to an inability to recall autobiographical information in the absence of overt brain damage (Staniloiu & Markowitsch, 2014). Stress or trauma situations in the past are the usually assumed triggers for dissociative amnesia and are part of the definition in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR)* (American Psychiatric Association, 2022).

While this is the common view of clinicians, psychiatrists (and, of course, psychoanalysts) (e.g., Lego, 1996; Brewin, 2021; Ross, 2022; see also the extensive theoretical paper of Erdelyi, 2006, and the clinical review of Brandt & Van Gorp, 2006), some experimental psychologists challenge the existence of repression and traumatic amnesia (Giesbrecht et al., 2008; Lynn et al., 2014, 2019, 2023; Patihis et al., 2014; Mangiulli et al., 2023; De Brigard, 2024; Otgaar et al., 2019; Schemmel & Volbert, 2025; Radcliffe & Patihis, 2025).

An example for the controversy between the two camps is the article of Vissia et al. (2016), the critique of it by Merckelbach et al. (2016), and the reply of B. L. Brand et al. (2016). The controversy concerns Dissociative Identity Disorder (DID), a rare disease, characterized by the appearance of two or more personalities in an individual, with each personality being more or less amnesic towards the other(s). In a detailed article with a sample of 17 patients with genuine DID, 16 with simulating DID, 16 with post-traumatic stress disorder, and 16 healthy controls, Vissia et al. addressed the validity of two DID-models: the Trauma Model and the Fantasy Model. "The Trauma Model … posits that DID is etiologically related to chronic neglect and physical and/or sexual abuse in childhood" (p. 111) and the Fantasy Model states that "DID can be simulated and is mediated by high suggestibility, fantasy proneness, and sociocultural influences" (p. 111). They obtained convincing evidence for the Trauma Model, which nevertheless was criticized by Merckelbach et al. (2016). Six of the seven authors of the original article (plus a newly adopted scientist) then reacted to the critique by doing additional re-analyses and further confirmed their original conclusions, namely a consistent support for the Trauma Model of DID and evidence against the core hypothesis of the Fantasy Model.

Researchers with interest in the legal aspects of the memory debate question the relevance of experimental false memory research – such as the Roediger-McDermott paradigm on false memories (Roediger & McDermott, 1995) or Elizabeth Loftus' studies on implanting memories (Loftus et al., 1994) – for trauma-related amnesias and for cases of "forgotten" or "recovered" sexual abuse in court situations (DePrince & Freyd, 1997)

2. The pros and contras of memory repression

There are, of course, numerous clinicians, working in the field of psychiatry and in related areas, who take it for granted that memory repression exists. As evidence for their opinion, they usually take their experience with patients who had lost their memories at least temporarily or in part. They also had learned, how to assess memory repression, namely by applied clinical interviews and a number of scales and other instruments. They also are familiar with instruments, allowing to detect malingering (e.g., Ortega et al., 2012, 2014). Furthermore, they had learned and applied techniques that may help to recover lost memories (e.g., B. L. Brand et al., 2009; Staniloiu & Markowitsch, 2018; Schemmel et al., 2024).

The idea of the existence of repressed memories has a long tradition, which started with the findings of the French school of Jean-Martin Charcot, Pierre Janet and Sigmund Freud in Austria. On the other hand, in the later 20th century, findings of false beliefs, and of memory suggestibility, promoted by Elizabeth Loftus and others, questioned the assumptions that memories of a traumatic content are repressed from conscious accessibility. Especially, research on false memories – both in brain-damaged patients (Borsutzky et al., 2010) and in healthy individuals (Kühnel et al., 2008) – and demands from the legal system (e.g., Markowitsch & Merkel, 2011) led to a more cautious approach in studying repressed memories.

The equation of repressed memories with dissociative amnesia, as suggested mainly by authors who question the existence of both, is certainly a reduction, as the illness of dissociative amnesia implies more than just a memory retrieval failure (e.g., change of the self and of autonoetic awareness; Staniloiu et al., 2010). (Because Pope et al., 2023, were possibly aware of this, they limited the equation of repressed memories to localized or selective dissociative amnesia.). Repressed memories, furthermore, can be seen in a continuum from the tip-of-the-tongue-phenomenon (e.g., the name of another person is suddenly not retrievable, in spite of that one is sure, to principally know it; Schwartz & Metcalfe, 2011) over amnesia in a sudden stress situation (e.g., car accident: later, one has forgotten the time period around the crash), to limited or generalized dissociative amnesia. There are, for example, case reports from soldiers, who due to shell shock and other war-related stress situations, lost their autobiographical memories (Sargant & Slater, 1941; Jones et al., 2007; Linden & Jones, 2014; Stone, 2016). All these examples can also be viewed under the umbrellas of state-dependent memory (Tulving, 2002; Radulovic et al., 2018) and general influences of stress on memory (Shields et al., 2017).

Further support for the existence of repressed memories comes from genetic analyses (e.g., Rajkumar, 2022), morphological changes in the brain (Reinders et al., 2018) and from numerous studies in which metabolic changes in the brain were found by using various imaging techniques (e.g., M. Brand et al., 2009; Staniloiu et al., 2011; Taïb et al., 2023).

All in all, the listed evidence strongly speaks for the existence of repressed memories.

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