## **Noah Hass-Cohen**

## Are Memories Forever? Memory Reconsolidation, and Expressive Arts Psychotherapy

Do autobiographical memories change each time we review them? If so, how could this information support positive therapeutic outcomes and personal happiness and inform expressive arts theory and practices?

Memory reconsolidation (MR) occurs during the retrieval of memories. As consolidated past long-term memories are revisited, they are reinforced, modified, or contextualized by current information. During MR, proteins that bind long-term memories and fears go through a process of neurochemical destabilization. As these implicit and explicit memories become pliable, they can be paired with and updated by novel information and positive experiences and then once restabilized they are reconsolidated.

MR has been documented for episodic and spatial memories as well as for behavioural and relational-based learning. Pharmacological interventions, given either before the consolidation of a traumatic event or after a traumatic memory reactivation have proven the efficacy of MR. In psychotherapy, it is likely that memory retrieval processes contribute to helping people safely modify the impact of traumatic memories. Under the right therapeutic conditions and interventions, MR contributes to lasting changes; negative reactions are downregulated, the person's relationship to the problematic memory is modified and the hold of distressing memories may fade away.

The expressive arts psychotherapies practices are uniquely advantageous for MR as both non-verbal and verbal memories undergo change. Furthermore, sensory memories and experiences which have shown to increase cognitive function increase the capacity for memory which is often impaired because of stress and trauma.

The presenter will review the above MR research and relevant neuroscience, highlight the advantages of MR informed expressive arts psychotherapy and describe the necessary MR conditions such as: a) briefly reactivating previously consolidated memories, b) encouraging contextual reminder conditions, c) triggering emotive updating, d) reducing retroactive interference, and e) engaging in critical time frames. She will conclude with examples from her clinical and research.

## **Biography**

**Dr. Noah Hass-Cohen Psy.D ATR-BC** is a professor at the Couple and Family Therapy program at Alliant International University in Los Angeles. She is an expert on relational neuroscience art therapy on which she publishes and presents nationally and internationally. Dr. Hass-Cohen is the author of two books: *Art Therapy & Clinical Neuroscience* and *Art Therapy & the Neuroscience of Relationships, Creativity & Resiliency*, which was published by Norton's Interpersonal Neuroscience series. In 2019, she received the prestigious Rawley Silver Research Award for her research on trauma and chronic pain. In her practice, Dr. Hass-Cohen works with individuals and families affected by pain, grief, trauma, and weight management. Her integrative positive psychology approach focuses on compassionate, mindfulness arts psychotherapy. In addition to her teaching and clinical work, she also provides therapy, consultation, and supervision to other therapists.