

MIND AND BRAIN DISCOVERY.

WHAT NEUROSCIENCE HAS TO SAY ABOUT PSYCHODYNAMIC CONFLICTS?



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HISTORY OF PSYCHOTHERAPY

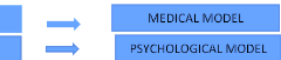
(stage 1)



René Descartes (1596 – 1650)



Cartesian dualism



Cartesian dualizm



HISTORY OF PSYCHOTHERAPY

(stage 1)

1. MEDICAL MODEL

- Empirical verification of diagnostic and treatment methods
- Scientific research and evidence-based practices

2. PSYCHOLOGICAL MODEL

- Charismatic therapists (supershrinks)
- Theory has no empirical evidence



HISTORY OF PSYCHOTHERAPY

(stage 2)

- Emergence and development of various psychotherapy schools (psychoanalytic, psychodynamic, humanistic, behavioral, cognitive-behavioral etc)
- Competition for priority (lack of objective evaluation)



HISTORY OF PSYCHOTHERAPY

(stage 3)

- Psychotherapy works !!! ()
- Research shows comparable effectiveness of psychotherapy irrespectively from theoretical background

*How important are the common factors in psychotherapy? An update. Bruce E Wampold
World Psychiatry. 2015 Oct; 14(3): 270–277.*

- The common healing factors (alliance, empathy, expectations, cultural adaptation, personality of a psychotherapist)

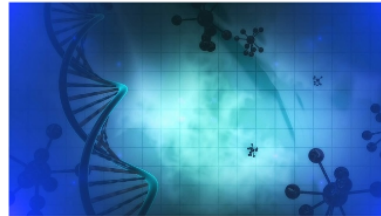
*Evidence-based practice in psychology. APA Task Force on Evidence-Based Practice. (2006).
American Psychologist, 61, 271–285.*



HISTORY OF PSYCHOTHERAPY

(stage 4)

- Research focused on common neurobiological roots for psychological change.
- Neuroscientific explanations instead of common healing factors.





MIND AND BODY UNITY



Intellectual Framework for Psychiatry Eric
R.Kandel, M.D.
(Am J Psychiatry 1998; 155:457-469)

Mind and brain are in mutual interactions

- All functions of mind reflect functions of brain
- Psycho- and pharmacotherapy may induce similar alterations in gene expression and structural changes in the brain

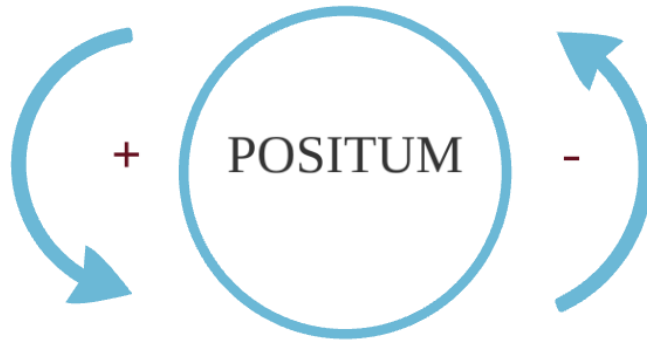
Eric Kandel

Nobel Prize (2000) in physiology or medicine



NEUROSCIENCE AND PSYCHOTHERAPY

neuroplasticity



neurogenesis



NEUROSCIENCE AND PSYCHOTHERAPY

- Implicit memory
- Target emotional memories
- Memory reconsolidation



MEMORY RECONSOLIDATION



A memory reconsolidation is a process that can actually unwire and delete longstanding emotional conditioning held in implicit memory.

Memory reconsolidation is the only known form of neuroplasticity of the brain.

Bruce Ecker



RECONSOLIDATION WINDOW

Reconsolidation window.

After a target learning has been reactivated and mismatched, its neural circuits remain in a deconsolidated or labile state for about five hours, as demonstrated by a variety of animal and human studies.



(Duvarci & Nader, 2004; Pedreira, Pérez-Cuesta & Maldonado, 2002; Pedreira & Maldonado, 2003; Schiller et al., 2010; Walker, Brakefield, Hobson & Stickgold, 2003).



NEUROSCIENCE AND PSYCHOTHERAPY



Extinction is not reconsolidation

Memory reconsolidation is a fairly new process of unlocking, recoding and reorganizing the information in a memory, which allows the mind to form a more healthy version of the memory.

Symptoms extinction is the gradual weakening of a conditioned response that results in the behavior decreasing or disappearing.





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MEMORY RECONSOLIDATION AND NEW SCHOOLS OF PSYCHOTHERAPY

- Coherence therapy
- Interpersonal neurobiology (INB)
- Emotion focused psychotherapy (EFT)
- EMDR
- Ericsonian hypnotherapy
- Positive and transcultural psychotherapy ???



MEMORY RECONSOLIDATION AND NEW SCHOOLS OF PSYCHOTHERAPY

Assumptions:

- Emotional learnings → psychodynamic conflict
(misconceptions/ behavioral-emotional
patterns/ symptoms)
- Psychotherapy objectives → target emotional learnings
(reconsolidation)
- Psychodynamic conflicts resolution
- Dysfunction subsiding/symptom cessation



MEMORY RECONSOLIDATION PHASES

STEPS OF PROCESS FOR CLINICAL APPLICATION OF MEMORY RECONSOLIDATION	
Therapeutic Reconsolidation Process	
1. Accessing sequence (preparation)	A. Symptom identification B. Retrieval of target learning (symptom-requiring schema) C. Identification of disconfirming knowledge
2. Transformation sequence	A. Reactivation of symptom-requiring schema B. Activation of disconfirming knowledge C. Mismatching symptom-requiring schema (repetitions)
3. Verification	Observations of: A. Emotional non-reactivation B. Symptom cessation C. Effortless permanence



Memory Reconsolidation in Psychotherapy
The Neuropsychologist Special Issue M.
Dahlitz, G. Hall

PSYCHODYNAMIC/ INTRAPSYCHIC CONFLICT

- A mental struggle arising from the clash of incompatible or opposing impulses, wishes, drive, or external demands.

(<https://medical-dictionary.thefreedictionary.com/>)

- Psychoanalysis (Freud)
A clash between **superego** (social morals and values) and **id** (biological drive: Eros, Thanatos)
- **Positive and Transcultural Psychotherapy (Peseschkian)** Disbalance between social norms (**secondary capabilities**) and attachment needs (**primary capabilities**)



