

NONSPECIFIC COMMON FACTORS THEORY MEETS MEMORY RECONSOLIDATION: A GAME-CHANGING ENCOUNTER?

BY BRUCE ECKER

Nonspecific common factors theory asserts, based on 75 years of randomized controlled trials of different types of psychotherapy, that specific processes and procedures cannot contribute powerfully to therapeutic change. This assertion derives from finding essentially the same rather modest level of efficacy for all of the many therapies studied using randomized controlled trials, or RCTs. Advocacy of nonspecific common factors theory has been especially strong in the last decade (e.g., Duncan, Miller, Wampold & Hubble, 2009).

The fact that the efficacy measured by RCTs doesn't change from therapy to therapy appears to imply that efficacy is due not to the specific methods and procedures used—which researchers call *specific factors*—but rather is due to the qualities of the client, the therapist, and the client-therapist relationship—which researchers call the *nonspecific common factors*, and

which include qualities of trust, empathy, and therapeutic alliance, among other things.

According to the statistical data from RCTs, only about 15% of the efficacy of therapy is attributable to specific factors, whereas 85% of the efficacy is due to the nonspecific common factors.

For the last couple of decades, nonspecific common factors theory has come to be accepted as final truth among many clinical psychologists and researchers. It has such a strong following that in some circles, to question it is heretical.

A critical minority has nevertheless continued to challenge its validity (e.g., Coughlin, 2012). That challenge is now entering a new phase with the discovery of memory reconsolidation, a specific process shown by neuroscientists to induce potent change. In this column, I'll describe this situation and offer my speculation about its outcome.

EVEN BEFORE

memory reconsolidation entered the picture, various clinicians and researchers were pointing out that nonspecific common factors theory was on thin ice because of how RCTs analyze therapy outcome data: They measure the average outcome of large groups of therapy cases.

This means that buried in those averages are those exceptional individual cases in which profound change occurred—a transformational shift and lasting therapeutic breakthrough. These ultra-effective “outlier” sessions are never closely studied in RCTs to identify possible specific factors associated with such strongly effective results in those sessions.

In short, the RCT is a measurement method that by design heavily obscures the effects of specific factors and generates data that are insensitive to specific factors. That’s why some of us think it’s illogical and even unscientific to conclude from RCTs, as nonspecific common factors theory does, that specific factors are fundamentally weak.

Another indication of thin ice prior to memory reconsolidation came from psychotherapy process research, which in a controlled manner does examine specific factors and measure their influence on outcome. Each of the cases in a process study is scrutinized individually in order to identify the role of specific ingredients.

Process studies such as those listed in the table have consistently found a specific factor that correlates more strongly with successful therapy outcome than do the nonspecific common factors. The specific factor that surpasses the nonspecific factors most decisively is the *facilitation of an emotional experience that was previously blocked, combined with conscious reflection on the*

emotional meanings that have emerged.

For example, the meta-analysis by Weinberger (1995) found that one of the most widely emphasized common factors, the therapeutic alliance, accounted for 11 percent of the variance in therapy outcomes, whereas 40 percent of variance was due to the specific factor of guiding clients to face and feel what they had been avoiding. Such findings directly contradict the central prediction of nonspecific common factors theory.

I’ll speculate here that if these considerations somehow haven’t been enough to bring about a revision in nonspecific common factors theory, the decisive disconfirmation coming from memory reconsolidation research findings could and should finally tip the scales.

Since 2000, neuroscience researchers studying memory reconsolidation have amassed evidence showing it to be a specific process, innate to the brain, that causes profound change of a kind previously believed impossible: A target emotional learning or conditioning is unlearned so thoroughly that it is erased. What’s erased is both the target learning’s neural circuitry and the subjective and behavioral response it had been generating. (For a summary of research findings, see Ecker, Ticic & Hulley, 2012, 2013.)

The counter-training process of extinction, extensively researched throughout the 20th century, always yielded only temporary suppression, never erasure, of the target learning. So the discovery of memory reconsolidation was a major development.

Controlled studies with human subjects have demonstrated such erasure for learned

TABLE 1

Some Psychotherapy Process Studies Demonstrating Specific Factor Dominance

- Baikie, K. A., & Wilhelm, K. (2005). Emotional and physical health benefits of expressive writing. *Advances in Psychiatric Treatment, 11*, 338-346.
- Elliott, R., Greenberg, L., & Lietaer, G. (2003). Research on experiential psychotherapy. In M. Lambert (Ed.), *Bergin & Garfield's handbook of psychotherapy & behavior change* (pp. 493-539). New York: John Wiley.
- Greenberg, L. S., Warwar, S. H., & Malcolm, W. M. (2008). Differential effects of emotion-focused therapy and psychoeducation in facilitating forgiveness and letting go of emotional injuries. *Journal of Counseling Psychology, 55*, 185-196.
- McCarthy, K. S. (2009). *Specific, common, and unintended factors in psychotherapy: Descriptive and correlational approaches to what creates change*. Doctoral dissertation, University of Pennsylvania. Available online: <http://repository.upenn.edu/edissertations/62>
- Missirlian, T. M., Toukmanian, S. G., Warwar, S. H., & Greenberg, L. S. (2005). Emotional arousal, client perceptual processing, and the working alliance in experiential psychotherapy for depression. *Journal of Consulting and Clinical Psychology, 73*, 861-871.
- Oei, T. P. S., & Shuttlewood, G. J. (1996). Specific and nonspecific factors in psychotherapy: A case of cognitive therapy for depression. *Clinical Psychology Review, 16*, 83-103.
- Oei, T. P. S., & Shuttlewood, G. J. (1997). Comparison of specific and nonspecific factors in a group cognitive therapy for depression. *Journal of Behavior Therapy and Experimental Psychiatry, 28*, 221-231.
- Pennebaker, J. W. (1997). *Opening up: The healing power of expressing emotion*. New York: Guilford Press.
- Weinberger, J. (1995). Common factors aren't so common: The common factors dilemma. *Clinical Psychology: Science and Practice, 2*, 45-69.

fear (Oyarzún et al., 2012; Schiller et al., 2010), heroin craving triggered by seeing items associated with heroin use (Xue et al., 2012), and pleasure-seeking operant learning (Galluccio, 2005).

In clinical work, my colleagues and I have applied the specific steps of the memory reconsolidation process to a wide range of symptoms and have observed the same markers of profound change that neuroscientists regard as the distinctive signature of erasure (Ecker, Ticic & Hulley, 2012). The steps of the process have also been identified as being fulfilled in several different psychotherapy systems that yield transformational change (Ecker, Ticic & Hulley, 2012).

Erasure of emotional learnings causes no loss of autobiographical memory of events in one's life. What is nullified are acquired emotional schemas and responses, not memories of events. Erasure of the emotional learning underlying a therapy client's presenting symptom is the ideal form of liberating therapeutic breakthrough, and we now know from reconsolidation research that it results from a specific procedure.

These developments indicate that specific factors can make psychotherapy be far more effective than the modest efficacy ceiling measured when the nonspecific common factors dominate the statistics in RCTs. What RCTs might really be showing is that typically only about 15% of the therapists in the studies have been applying highly effective specific factors. Perhaps the updated message of nonspecific common factors theory II will be that more therapists need to recognize and master the critical specific factors.

Of course, the client-therapist relationship remains indispensably important for good psychotherapy. This is not an either/or situation. It now seems clear that in the most

effective psychotherapy, an environment of good nonspecific common factors supports facilitation of the specific factors of emotional accessing and memory reconsolidation.

References

- Coughlin, P. A. (2012). The case for specific factors in psychotherapy outcome. Retrieved May 30, 2013 from http://www.youtube.com/watch?v=UJIVCzKM_gA
- Duncan, B. L., Miller, S. D., Wampold, B. E., & Hubble, M. A. (Eds.) (2009). *The heart and soul of change: Delivering what works in therapy* (2nd ed.). Washington, DC: American Psychological Association Press.
- Ecker, B., Ticic, R., & Hulley, L. (2012). *Unlocking the emotional brain: Eliminating symptoms at their roots using memory reconsolidation*. New York: Routledge.
- Ecker, B., Ticic, R., & Hulley, L. (2013). A primer on memory reconsolidation and its psychotherapeutic use as a core process of profound change. *The Neuropsychotherapist, 1*, 82-99. DOI: 10.12744/npt(1)082-099
- Galluccio, L. (2005). Updating reactivated memories in infancy: I. Passive- and active-exposure effects. *Developmental Psychobiology, 47*, 1-17. doi: 10.1002/dev.20073
- Oyarzún, J. P., Lopez-Barroso, D., Fuentemilla, L., Cucurell, D., Pedraza, C., et al. (2012). Updating fearful memories with extinction training during reconsolidation: A human study using auditory aversive stimuli. *PLoS ONE 7*(6): e38849. DOI:10.1371/journal.pone.0038849
- Schiller, D., Monfils, M.-H., Raio, C. M., Johnson, D. C., LeDoux, J. E., & Phelps, E. A. (2010). Preventing the return of fear in humans using reconsolidation update mechanisms. *Nature, 463*, 49-53. DOI: 10.1038/nature08637
- Xue, Y.-X., Luo, Y.-X., Wu, P., Shi, H.-S., Xue, L.-F., Chen, C., et al. (2012). A memory retrieval-extinction procedure to prevent drug craving and relapse. *Science, 336*, 241-245. DOI: 10.1126/science.1215070