

The Flash Technique in EMDR

How and why it works, as understood according to memory reconsolidation research

Bruce Ecker, MA, LMFT

Co-director, Coherence Psychology Institute
<http://www.CoherenceInstitute.org>

I'm Bruce Ecker and this is a mini-webinar on the Flash Technique in EMDR therapy, an analysis of how and why the Flash Technique works, in light of the principles of memory reconsolidation.

This mini-webinar is intended for EMDR practitioners who are already familiar with how the Flash Technique is carried out. So I won't be explaining the step-by-step Flash Technique protocol, and I'll be assuming you know the procedure.

The formal debut of Flash Technique was in this 2017 article by Philip Manfield, Joan Lovett, Lewis Engel, and David Manfield.* The explanation of Flash Technique's effectiveness that I'm about to spell out differs in some significant ways from the explanation provided by these authors, and I'll say more about that farther along.

Flash Technique is for cases where the client cannot tolerate or allow any experiential accessing of the traumatic memory, and has a SUDs level of 9 or 10 just from anticipating touching the memory at all, before even doing so. (Flash Technique is also effective for less severe SUDs levels). Access to the memory is strongly blocked by dissociation or some type of avoidance, or else accessing begins but immediately creates hyperactivation, retraumatization and dissociation. Either way, it's then impossible to proceed with the standard EMDR protocol.

What I propose is that these are cases in which the client's subcortical, emotional brain has designated the traumatic memory as having what I'll call *absolute lethal status*. In other words, the client's emotional brain has formed an implicit, non-conscious expectation, which, if put into

* Manfield, P., Lovett, J., Engel, L., & Manfield, D. (2017). Use of the Flash Technique in EMDR therapy: Four case examples. *Journal of EMDR Practice and Research*, 11(4), 195–205. doi: <https://doi.org/10.1891/1933-3196.11.4.195>

words, would be something like, “If there is any smallest degree of conscious experience of this memory, I’ll be completely overwhelmed by agony and helplessly stuck in that agony with no exit and never recover. This memory is vastly more powerful than I am, and touching the memory even once will engulf me in agony forever, destroying my life.”

That expectation is what’s making the memory maximally terrifying to touch and maximally urgent to always keep deeply and totally suppressed out of awareness.

In my opinion, what’s critical to recognize—in order to see how the Flash Technique works—is that *the assigning of that absolute lethal status to the memory by the emotional brain is itself an emotional learning, one that is distinct from the contents of the traumatic memory*. It’s the implicit emotional learning that “any conscious contact with this memory will destroy me.”

The key idea I’m proposing is that the Flash Technique’s target is that emotional learning of the memory’s absolute lethal status—*not* the content of the traumatic memory itself, but rather, its absolute lethal status.

With that idea in mind, now let’s look at what happens to that target learning of absolute lethal status as the Flash Technique is carried out.

And as we do that, let’s bear in mind also what we know from memory reconsolidation research: A target learning’s neural encoding becomes destabilized and de-consolidated—in other words, unlocked—when that target learning is reactivated and, while reactivated, is mismatched by a perception or experience that is different from what the target learning knows and expects.

Then, during that unlocked state that lasts for a few hours, a new learning that is contradictory to the target learning can make the target learning be profoundly unlearned, unwired and replaced by that new, contradictory learning. Not just *regulated* by the new learning, but *erased and replaced* by it, for a transformational change that is permanent.

Ok, now let’s look at what happens to the target learning of absolute lethal status as the Flash Technique procedure is carried out.

First, the client listens to the therapist’s instructions to have contact with the traumatic memory in an extremely brief and indistinct way. Well, that certainly reactivates the target learning of absolute lethal status. *Any* suggestion to make contact with the traumatic memory activates and alarms the emotional brain’s knowledge that that memory has absolute lethal status. And those instructions go on for many minutes. So, that is a lengthy, solid reactivation of the target learning.

Also, the client’s emotional brain then notices that what is being requested *is* an extremely brief and indistinct contact with the memory, much more brief and indistinct than the client’s emotional brain ever considered to be a possibility. That’s a surprise to the emotional brain—and remember, surprise means a mismatch or prediction error is happening.

Next, the prospect of going ahead and contacting the memory in this extremely brief and indistinct way feels workable to the client’s emotional brain, it feels not too unsafe to do, and that too is a

surprise and another mismatch. And because it feels workable, resistance and fear do not block the process.

And then the client goes ahead for the first time and flashes on the memory in this extremely brief and indistinct way, and finds that, sure enough, it wasn't harmful to do that. And that's the biggest surprise of all, to the emotional brain, and it registers as a distinct mismatch of the target learning, the absolute lethal status of the memory.

In other words, the experience in the client's emotional brain, depicted in words, is something like, "What? I touched that memory and nothing bad happened to me? That's not what I expected! That means it's not absolutely lethal after all!"

And that is the creation of the contradictory knowledge, "I touched that memory and wasn't harmed by touching it." Now, the activated expectation of absolute lethality, and the *disconfirmation* of that expectation, are in the same field of awareness, in juxtaposition.

That juxtaposition experience is the biggest, strongest mismatch yet, and as I reviewed earlier, mismatch during reactivation is exactly what unlocks the neural encoding of the target learning, launching the memory reconsolidation process. Now the destabilized target learning of absolute lethal status is available to being fundamentally unlearned, nullified and replaced by new learning. And that new learning is then supplied by several more flashes. Flash Technique protocol calls for a total of 6 to 12 flashes, each of which again puts the target learning into juxtaposition with the experiential, contradictory recognition, "I touched the memory and *wasn't* harmed by doing that."

That knowledge of being unharmed and safe is of course bolstered by the dual focus that maintains awareness of being accompanied by the therapist in the therapist's office, in parallel with doing the flashes.

At the end of the flashes, the absolute lethal status of the traumatic memory has been thoroughly unlearned and nullified. But there has been *no* change made in the specific content of the traumatic memory itself, including the emotional distress that the client would feel from bringing that content into awareness. What has changed is only the emotional brain's expectation of being plunged into unending mental and emotional agony by touching that memory at all.

It's *that* terrifying expectation that was generating the client's high level of distress, the high SUDs level; so the unlearning of that expectation is what causes the observed dramatic reduction in the client's SUDs level, according to this analysis.

In this view, for the Flash Technique to work, what's needed is reactivation of that expectation of the absolute lethality of the memory, not reactivation of the memory's contents.

Some EMDR practitioners wonder how such an ultra-brief and completely blurry glance at the traumatic memory can possibly reactivate it adequately for new processing to occur, and people are citing memory research on rapid reactivation. However, according to the analysis I'm delineating here, that entire question is irrelevant, because in this view, the traumatic memory isn't the target of the Flash Technique. The target is the expectation of being permanently engulfed,

tortured and deranged by the memory after touching it once. And that expectation is reactivated explicitly, directly, solidly, and at length by the Flash Technique protocol, as I described earlier, and then is very specifically disconfirmed and unlearned by a contradictory new learning again and again and again.

In contrast, in the article by the Flash Technique originators, the traumatic memory itself *is* viewed as the target. They do invoke memory reconsolidation and they identify mismatches and contradictory experiences to support that analysis. Nevertheless, the extreme brevity and, perhaps even more importantly, the total *blurriness* of the flash do raise doubts about reactivating the traumatic memory, because studies of ultra-rapid memory reactivation have used highly specific reactivation cues that are components of the target learning being reactivated.

There is one other consideration that I think warrants mentioning here because it independently arrives at the same conclusion: It's a frequent observation made by trauma therapists, including EMDR practitioners, that what reduces the emotional distress of a traumatic memory is a deep change in the implicit beliefs and expectations involved in the memory—what EMDR terms *negative cognitions*.

Most of the emotional distress of a traumatic memory arises directly from those negative cognitions, as a rule, so when those cognitions are dissolved, the distress in turn reduces sharply. But Flash Technique does *not* act upon or change the negative cognitions of a traumatic memory, as is acknowledged in the 2017 Flash Technique article by Manfield et al.; and that implies that the big reduction of emotional distress produced by Flash Technique is not due to any change induced in the traumatic memory itself.

The negative cognition that *is* targeted and dissolved by Flash Technique is the one I've identified in this analysis, namely, "I'll be engulfed and trapped in torment if I give that memory any opening at all." So we have to infer that it's the dissolving of *that* negative cognition that causes the reduction of the client's SUDs level. And that negative cognition is distinct from the traumatic memory itself, as I said earlier.

This analysis can be pushed a little further, in the following way: What if we assume that after the Flash Technique procedure has been completed, essentially all distress due to the absolute lethal status expectation is gone, so any remaining distress must be due to the traumatic memory itself, which is unaffected by Flash Technique, according to this analysis.

So, when Flash Technique drops a client's SUDs level all the way to zero, and the client now attends to the memory directly and easily, that would mean that essentially all of the client's initial distress was due to the anticipated effect of touching the memory, and almost none of that distress was due to the actual contents of the traumatic memory.

And the fact that the client can now attend to the memory itself without intense distress would mean that the memory itself was not a source of significant distress in the present, not actually traumatic in the present. But the client's emotional brain had originally categorized the memory as being traumatic and having absolute lethal status, and essentially all of the distress was arising only from that expectation.

In contrast, in some cases Flash Technique only moderately reduces the SUDs level down to 6 or 7. If we're assuming that the post-Flash Technique distress level is what's due to the actual contents of the memory, here the implication is that the major portion of the client's initial distress was due to the actual contents of the memory, and that portion of the distress persists after Flash Technique; and only a minor portion was due to the expected tormenting effect of touching the memory, but that portion of the distress has been eliminated.

In these cases of moderate reduction of the SUDs level, the client can now tolerate accessing the memory, and the standard EMDR protocol is now begun.

My final topic of this mini-webinar is this: Right after the original article on Flash Technique was published, Philip Manfield and Lewis Engel were already teaching an even more elegant and subtle form of Flash Technique. In this version, the client is no longer instructed to make an ultra-brief and blurry glance at the traumatic memory. Instead, the client is instructed to feel only an ultra-brief flash of *intention* to attend to the memory, without actually attending to it at all. This flash of intention is launched from a baseline state of engagement in some pleasant imaginal scene, and the flash is experienced as just a momentary static or disturbance in that baseline state.

This version of Flash Technique is found in practice to be just as reliably effective as the original version that does involve a fast, blurry glance toward the memory. To explain the fact that it works without any conscious accessing of the memory, Phil Manfield and Lewis Engel invoke "subconscious" accessing of the memory and they describe the Flash Technique as a "subliminal" process.

Well, we know it certainly is possible to reactivate a memory with a very fast subliminal cue, but what has to be explained here is not just reactivation, but a major change in the memory that causes the client's SUDs level to drop from 10 to 0 in some cases. And we know from MR research that a change in the memory requires not just its reactivation, but also a disconfirmation of the memory's particular model of reality. And Manfield and colleagues have acknowledged that Flash Technique does not do that; it does not reprocess any contents of the traumatic memory. So, the subliminal reactivation hypothesis doesn't seem to account for the observed effects of the Flash Technique.

However, the client's absolute lethal status expectation would still be reactivated, mismatched and disconfirmed just as much as in the original Flash Technique. This is the slide we saw earlier, revised for the newer, subtler version of Flash Technique where the client flashes only the intention to attend to the memory.

The client's emotional brain harbors its absolute lethal status expectation, and when it feels the client hold the intention to attend to the memory, that registers as a conscious opening up to the memory and as a breach of the urgent necessity of allowing no opening whatsoever. But then, finding oneself unharmed after that breach is once again the key mismatch and contradiction of the expectation. In short, the entire analysis I've proposed remains relevant to this subtler version of Flash Technique and does account for its observed therapeutic effects.

But of course, we don't know what we don't know yet, so we will have to wait for some cleverly designed controlled study, or perhaps a comparative brain imaging study, to show us which analysis is relevant, or perhaps that somehow both are relevant.

To finish, I want to point out that the analysis I've proposed here for the effectiveness of Flash Technique is yet another demonstration of how an understanding of memory reconsolidation illuminates the process of change in psychotherapy, whatever may be the therapeutic methods that are being used.

Further reading

Unlocking the Emotional Brain: Eliminating Symptoms at Their Roots Using Memory Reconsolidation — by Bruce Ecker, Robin Ticic & Laurel Hulley

New York: Routledge (2012).

A therapist's guide to utilizing memory reconsolidation, the brain's built-in process of transformational change. Identifies how this process occurs in a range of very different-seeming therapies—such as AEDP, Coherence Therapy, EMDR, EFT and IPNB—and shows how memory reconsolidation is poised to create four breakthroughs in the psychotherapy field: enhanced effectiveness, a unified understanding of diverse therapies of deep, lasting change, clarification of the role of attachment in therapy, and an empirical disconfirmation of nonspecific common factors theory.

Clinical Translation of Memory Reconsolidation Research: Therapeutic Methodology for Transformational Change by Erasing Implicit Emotional Learnings Driving Symptom Production — by Bruce Ecker

International Journal of Neuropsychotherapy (2018, in press).

PsyArXiv preprint posted online 5 Dec. 2017, retrievable from: <https://psyarxiv.com/zrq2m/>

A comprehensive, rigorous account of how memory reconsolidation research translates into clinical application.

Links for free access to the following articles are available here:

<http://www.coherencetherapy.org/discover/bibliography.htm>

Memory reconsolidation understood and misunderstood — by Bruce Ecker

International Journal of Neuropsychotherapy, 3(1), 2-46 (2015). doi:10.12744/ijnpt.2015.0002-0046

This article identifies and examines 10 common misconceptions regarding memory reconsolidation research findings and their translation into clinical practice. The research findings are poised to drive significant advancements in both the theory and practice of psychotherapy, but these benefits depend on an accurate understanding of how memory reconsolidation functions, and misconceptions have been proliferating.

Unlocking the emotional brain: Is memory reconsolidation the key to transformation?

— by **Bruce Ecker, Robin Ticic and Laurel Hulley**

Psychotherapy Networker, 37 (4), pp. 18-25, 46-47 (July 2013).

An introduction to memory reconsolidation and how its use in therapy puts therapists in control of more consistently facilitating deep, liberating change. Illustrated with case examples of Coherence Therapy. Adapted from the book, *Unlocking the Emotional Brain*, listed above.

A primer on memory reconsolidation and its psychotherapeutic use as a core process of profound change — by **Bruce Ecker, Robin Ticic and Laurel Hulley**

The Neuropsychologist, 1, pp. 82-99 (April 2013).

An introductory account adapted from the book, *Unlocking the Emotional Brain*, listed above. Illustrated with a case example of Coherence Therapy.

Reconsolidation: A universal, integrative framework for highly effective psychotherapy

— by **Bruce Ecker**

MentalHelp.net blog (posted January 13, 2011).

A short introduction to memory reconsolidation, how it works, and why it ushers the psychotherapy field into a new era of greatly enhanced effectiveness and a unified understanding of how diverse forms of therapy bring about deep, lasting change.

The brain's rules for change: Translating cutting-edge neuroscience into practice

— by **Bruce Ecker**

Psychotherapy Networker, 34 (1), pp. 43-45, 60 (Jan-Feb 2010).

Describes how therapists can utilize memory reconsolidation, the brain's built-in process for actually unwiring and deleting an unwanted emotional response learned earlier in life. Read about how the steps of the process were first identified clinically in the development of Coherence Therapy in the early 1990s, and subsequently were discovered independently by neuroscientists using very different methods. A case example of Coherence Therapy illustrates the art that implements the science.
