

# Why does MDMA work for PTSD? A new study yields clues about psychedelics and trauma therapy.

[V vox.com/future-perfect/24051647/psychedelics-trauma-mdma-ptsd-self-compassion](https://www.vox.com/future-perfect/24051647/psychedelics-trauma-mdma-ptsd-self-compassion)

Sigal Samuel

January 29, 2024



Finding the best ways to do good.

Bessel van der Kolk, one of the world's top trauma experts, was skeptical when he was first approached about studying the effects of psychedelics on post-traumatic stress disorder (PTSD). But his research findings ultimately proved him wrong — in the best of ways.

Published in a study this month, the findings provide new insights into how therapy combined with MDMA — the psychedelic drug commonly known as ecstasy — can help people who are suffering from trauma.

Van der Kolk, author of the bestselling book *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*, had heard all the buzz about the therapeutic potential of MDMA. Research had already shown that offering MDMA-assisted therapy led to a significant reduction in symptoms for people with PTSD, so significant that some of them no longer met the criteria for PTSD after just a few sessions.

But when Rick Doblin, the founder of the Multidisciplinary Association for Psychedelic Studies (MAPS), invited van der Kolk to help lead a new study on MDMA and trauma, van der Kolk offered a warning.

“I tried to put pressure on Rick to exclude people from the study,” he recounted. “I told him, for God’s sake, don’t include people who have *never* felt safe.”

He was differentiating between PTSD sufferers who’ve endured a single trauma later in life (say, a car crash) and those who’ve endured developmental trauma stretching all the way back to childhood, like those who were abused by their parents. The latter group doesn’t tend to respond as well to psychotherapy, so van der Kolk didn’t think they’d get better over the course of the study.

The stakes were high: This was the final phase — phase 3 — of MAPS’s study aiming to convince the FDA to approve MDMA-assisted therapy for PTSD. Doblin knew that if the participants didn’t see improvement, it might mar his research results. Still, he refused to heed the warning.

“I said: Bessel, in our phase 2, we did work with people with complex PTSD, with childhood sexual abuse, with all sorts of poor attachment styles — and they seemed to get better! So we will continue to include those,” Doblin recalled.

Now, van der Kolk is happy Doblin stuck to his guns. Not only were participants with early childhood trauma allowed into the study, they made up 84 percent of the sample — and they responded very well to treatment. “We had the best outcome data here with MDMA that I’ve ever seen for any study” attempting to treat the imprints of developmental trauma, van der Kolk told me.

But the big question is why, exactly, MDMA has this amazing effect. What is the mechanism by which MDMA helps with trauma treatment?

This new study offers a tantalizing answer, one that suggests PTSD sufferers with childhood trauma may actually benefit the most from MDMA’s therapeutic effects.

## **How MDMA changes people’s experience of themselves**

---

The researchers started with the observation that many trauma survivors struggle with a variety of emotional capacities, which makes it hard for them to successfully complete trauma-focused psychotherapy. Some are unable to notice and identify what they’re feeling inside. Others wrestle with intense shame and self-blame. Others find it incredibly difficult to tolerate distress.

All of these correlate with poor treatment outcomes. If you feel an overwhelming sense of shame, for example, you might not believe you deserve to get treatment and feel better. The researchers wondered if MDMA might work in part by helping people overcome these impairments.

So the researchers enlisted 90 study participants suffering from PTSD and split them into two groups: Half received therapy with MDMA and half received therapy with a placebo. The study measured how they fared with a variety of emotional capacities before and after treatment.

The people who took MDMA, it turned out, improved a lot more — both on specific emotional capacities and in terms of PTSD itself.

One striking improvement involved the ability to notice, identify, and describe what one is feeling inside. Scientists call an inability to do that alexithymia, which is Greek for “no words for emotion.”

People who grew up in traumatizing or neglectful environments sometimes display alexithymia — perhaps because they learned as kids that communicating about their feelings is ineffective or even dangerous, so they disengage from their internal experiences instead.

Scientists know that alexithymia has negative implications for mental health. By contrast, its opposite — emotional granularity — is good for our mental health. It makes us more aware of our subjective experiences, which in turn makes it easier for us to regulate our emotions and maintain equanimity. That’s why we teach preschoolers to identify their feelings; acknowledging “I’m mad” or “I’m sad” is the first step toward learning how to manage those emotions.

In the study, MDMA-assisted therapy was associated with a significant drop in alexithymia, meaning that participants were better able to identify and verbalize their emotions. (Those who got therapy with a placebo did not show that improvement.) “This suggests that MDMA-assisted therapy can facilitate accessing painful memories and experiences that under ordinary conditions are too overwhelming and terrifying to confront,” the authors write.

The study also found that participants who got MDMA developed significantly more self-compassion than those who got therapy with placebo.

To measure self-compassion, the researchers used a scale designed by psychologist Kristin Neff, who pioneered the scientific study of self-compassion two decades ago. She identified three components of self-compassion: self-kindness, common humanity, and mindfulness.

Self-kindness means you're warm toward yourself when you suffer or mess up, rather than judging yourself harshly. Common humanity means you remind yourself that everyone suffers or messes up sometimes, rather than succumbing to the feeling that you're the only one going through such challenges. Mindfulness, in this context, means you neither under- nor over-identify with your painful thoughts: You acknowledge them as painful, but you also recognize that they're just thoughts, not your whole being.

A mindset of self-compassion, the authors of the new study note, can help give people the resilience they need to face the traumatic experiences they're trying to process. Self-compassion is also a powerful counter to the shame that often plagues trauma survivors.

Finally, emotion regulation is also key to mental health and to the effective treatment of PTSD. Because treatment typically involves exposing you to the painful memory so you can then modify it, you have to be able to tolerate the distress that the painful memory brings up. But managing that kind of emotion can be very hard for people with PTSD, and it's one of the main reasons why people drop out of treatment.

The study found that therapy with MDMA had a major effect on emotion regulation, reducing emotional instability and dysregulation roughly twice as much as therapy with a placebo.

## **How does this fit into what we already know about MDMA and psychedelics?**

---

We already know a good amount about the psychological effects of MDMA, both from non-PTSD studies of the drug and from more, well, informal observations.

As anyone who's ever seen a cuddle puddle at a rave can attest, MDMA makes us more social. It's known to promote a feeling of openness and connectedness with others. Research also shows that it enhances how positively we feel about pleasant memories and reduces how negatively we feel about painful memories. And it inhibits how fearfully we respond to emotionally threatening stimuli.

These effects could be laying the groundwork for people to put their traumatic experiences into a more adaptive perspective. I asked van der Kolk what he thinks the relationship is between these known effects and the effects he uncovered on alexithymia, self-compassion, and emotion regulation.

His current hypothesis: The changes in emotional capacities underwrite the other changes we already know are associated with MDMA. For example, boosting your capacity for self-compassion might be the mechanism by which you start to feel less negatively about painful memories. You might find yourself thinking, "I did the best I could with the understanding and awareness I had at the time" instead of thinking "I messed up in that way because I'm a terrible, shameful person."

Another example: Improved capacity for emotion regulation, as the study found among patients using MDMA, might be the mechanism by which you're able to respond less fearfully to emotionally threatening stimuli — including, perhaps, the distressing memories you bring up when processing trauma.

“Strategically, when I had to figure out what drug [to test] and what condition [to treat], I did think that MDMA is more likely to get good results than any of the other classic psychedelics, because of that fear reduction that you get from MDMA,” Doblin told me.

Although there's already research showing that psychedelics help us unlearn old associations and learn new ones, and other psychedelics have been used to treat trauma — sometimes successfully, as in the case of LSD administered to Holocaust survivors — Doblin believes MDMA may be better suited.

“There's no fear reduction in the LSD experience, whereas there is with MDMA,” Doblin said. In his experience offering psychedelic-assisted therapy, people attempting to process trauma with LSD sometimes become so panicked by their painful memories that they can't make progress. That's where MDMA's fear-reducing effects can be helpful. (Note, though, that determining which psychedelics are best for processing a condition like PTSD would require head-to-head studies.)

None of this is to say that psychedelics alone are a cure-all for trauma. The healing comes about not just because of some neurochemical change that's triggered automatically when the drug is ingested, but because it's ingested in the context of psychotherapy.

Van der Kolk said he'd recommend therapy as the first step for people with PTSD. Some score just fine on capacities like alexithymia, self-compassion, and emotion regulation. And as his new study shows, “If people started off having these mental capacities, they did very well in psychotherapy alone,” he said.

But for the portion of people who struggle with these capacities, psychotherapy alone might not get them very far. That's where psychedelics could come in.

---