

Challenging decades of demonization, LSD appears to improve human cognition

Researchers grew tiny brain tissue in their lab, which they exposed to solutions containing the powerful psychedelic drug LSD. Under the microscope, the scientists could see evidence that LSD enhances neuroplasticity — the capacity of neurons and neural networks in the brain to change their connections and behavior in response to new information. Subsequent investigations also showed LSD made rats more eager to explore and improved memory in humans.

Previously, LSD has shown promising results in clinical trials for a variety of psychiatric disorders and mental health problems, including depression, PTSD, and addiction.

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In another experiment, the researchers gave 76 rats a small dose of LSD or an inert saline solution. Days later, the rats who had received LSD spent more time exploring novel objects, but the overall time spent exploring familiar objects was not affected compared to the control rodents.

“Our results show that LSD pre-treatment can substantially increase novelty preference in rats several days after dosing, with a significant single dose effect,” the researchers told [PsyPost](#). “The results imply that LSD-induced plasticity enhanced novelty-seeking.”

Finally, the researchers performed a randomized, double-blind, placebo-controlled study with 25 healthy volunteers who received a low, 50 micrograms dose of LSD in one session and an inactive placebo in another session.

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