The New Promise of Psychedelics

August 09, 2023

Recently there has been a remarkable renaissance of medical research into psychedelic drugs, which were widely banned a half-century ago. The risks and dangers of these drugs still need to be better understood, but it’s becoming clear that they may have important potential benefits. New studies suggest that psychedelics, carefully administered in controlled settings with trained therapists, can help treat mental illnesses like depression, addiction and PTSD. But just how do psychedelics achieve these therapeutic effects?

A new study in the journal Nature by the neuroscientist Gul Dolen at Johns Hopkins and colleagues tackles this question. What psychedelics have in common, the study finds, is that they return the relatively rigid, developed adult brain to a more flexible, open state, more like the childhood brain. This may be key to their positive effects.

Each of the classic psychedelic drugs—MDMA (Ecstasy), LSD, psilocybin, ketamine, ibogaine—is a different kind of chemical with a different effect on the brain. MDMA leads to strong feelings of social connection; the LSD experience is more like solitary mysticism; ketamine is also an anesthetic. The effects of some last for hours, others for days. And, of course, people can have similar experiences without chemicals—the ecstasies of religious mystics or the epiphanies of Romantic poets.

…