

Mindfulness and psychedelics: A neurophenomenological approach to the characterization of acute and sustained response to DMT in experienced meditators

ABSTRACT:

Background

This study explores the intersection of meditation and psychedelics, focusing on potential synergistic effects of *N,N*-dimethyltryptamine (DMT) and harmine (HAR) on experiential and neurodynamic outcomes.

Aims

The primary aim is to investigate changes in experiential markers and brain activity following DMT/HAR intake during meditation. Specifically, it seeks to elucidate the mindfulness-related effects of DMT.

Method

We conducted a double-blind, randomized, placebo-controlled study involving 40 experienced meditators (22 m, 18 f) that received either DMT/HAR (120 mg each) or placebo in a mindfulness group retreat. Outcomes included psychometric assessments (mindfulness, compassion, insight, transcendence) and changes in resting-state fMRI brain connectivity before and after the retreat.

Results

Significantly higher levels of mystical experiences, non-dual awareness, and emotional breakthroughs were reported in response to acute DMT/HAR, with greater psychological insight one day later. Mindfulness and compassion did not differ significantly between groups. At one-month follow-up, the DMT/HAR group rated their experience as more meaningful and well-being enhancing. Functional network connectivity was increased in several brain regions in the DMT/HAR group, while the placebo group showed reduced network connectivity after the retreat.

Conclusions

This study provides novel evidence that DMT combined with harmine may enhance meditation practice by facilitating deeply meaningful experiences and psychological insights, contributing to meditation-related well-being. The findings suggest that the benefits are more related to eliciting insight, transcendence, and meaning rather than improving mindfulness or compassion.

Keywords

DMT, Ayahuasca, Psychedelics, Meditation, fMRI

Published Work:

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