

Publication

Alterations of consciousness and mystical-type experiences after acute LSD in humans

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)**ID** 3720773**Author(s)** Liechti, Matthias E.; Dolder, Patrick C.; Schmid, Yasmin**Author(s) at UniBasel** [Liechti, Matthias Emanuel](#) ;**Year** 2017**Title** Alterations of consciousness and mystical-type experiences after acute LSD in humans**Journal** Psychopharmacology**Volume** 234**Number** 9-10**Pages / Article-Number** 1499-1510**Keywords** Altered states of consciousness; Lsd; Mystical experiences**Mesh terms** Adult; Consciousness, physiology; Consciousness Disorders, psychology; Cross-Over Studies; Double-Blind Method; Female; Hallucinogens, blood; Healthy Volunteers; Humans; Lysergic Acid Diethylamide, blood; Male; Middle Aged; Mysticism, psychology; Surveys and Questionnaires; Switzerland

Lysergic acid diethylamide (LSD) is used recreationally and in clinical research. Acute mystical-type experiences that are acutely induced by hallucinogens are thought to contribute to their potential therapeutic effects. However, no data have been reported on LSD-induced mystical experiences and their relationship to alterations of consciousness. Additionally, LSD dose- and concentration-response functions with regard to alterations of consciousness are lacking.; We conducted two placebo-controlled, double-blind, cross-over studies using oral administration of 100 and 200 μ g LSD in 24 and 16 subjects, respectively. Acute effects of LSD were assessed using the 5 Dimensions of Altered States of Consciousness (5D-ASC) scale after both doses and the Mystical Experience Questionnaire (MEQ) after 200 μ g.; On the MEQ, 200 μ g LSD induced mystical experiences that were comparable to those in patients who underwent LSD-assisted psychotherapy but were fewer than those reported for psilocybin in healthy subjects or patients. On the 5D-ASC scale, LSD produced higher ratings of blissful state, insightfulness, and changed meaning of percepts after 200 μ g compared with 100 μ g. Plasma levels of LSD were not positively correlated with its effects, with the exception of ego dissolution at 100 μ g.; Mystical-type experiences were infrequent after LSD, possibly because of the set and setting used in the present study. LSD may produce greater or different alterations of consciousness at 200 μ g (i.e., a dose that is currently used in psychotherapy in Switzerland) compared with 100 μ g (i.e., a dose used in imaging studies). Ego dissolution may reflect plasma levels of LSD, whereas more robustly induced effects of LSD may not result in such associations.

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