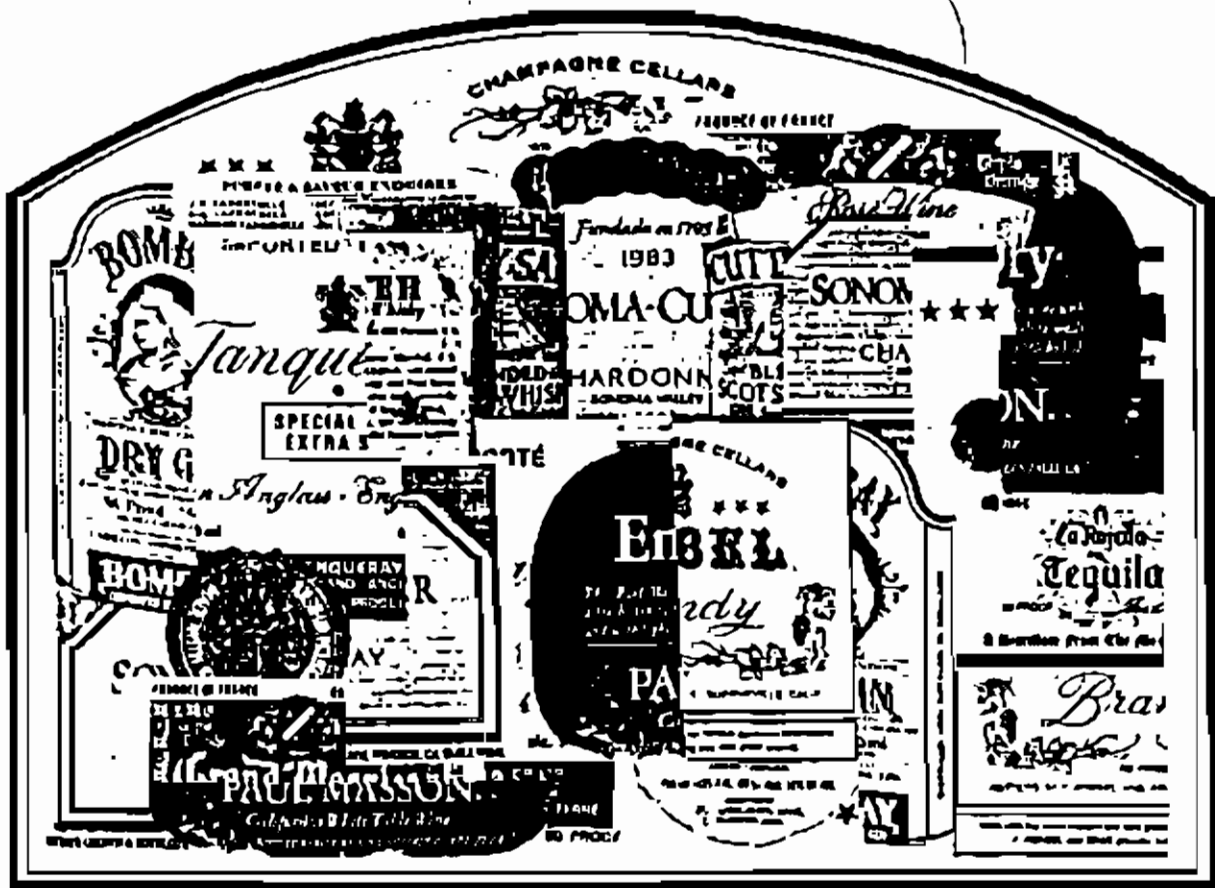


# AHP Perspective

Association for Humanistic Psychology

August–September 1986

## Adult Children of Alcoholics



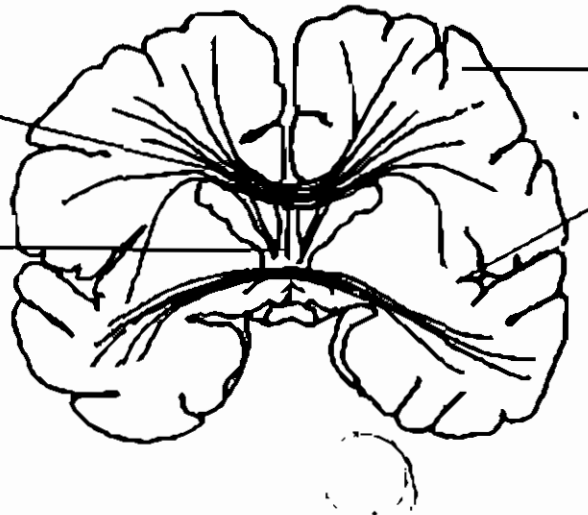
- *Implications for Treatment*
- *The ACA's Vulnerabilities: a psychodynamic view*
- *Alcoholism and Spirituality: a transpersonal view*
- *I'm O.K., and You're Not: a social psychology view*
- *ACA: Label, not Diagnosis*
- *The Walking Wounded*
- *Clinical Observations*

In the diagram of the frontal cut through the brain we can see some areas where differences occur.

**LEFT HEMISPHERE**

posterior portion of corpus callosum (connects visual pathways) thicker to women & left-handed men

massa intermedia (connects left & right thalamus. Thalamus organizes all fibers going to & from cortex) often absent in males



**RIGHT HEMISPHERE**

frontal lobe (seat of consciousness) larger in females

Sylvian fissure (important language functions) more asymmetric in males

temporal plane (portion of temporal lobe containing important speech areas): left side longer in males, right side longer in females (controversial)

*General references:*

Benson, D.F., & Zaidel, E. (Eds.). (1985). *The Dual Brain: Hemispheric Specialization in Humans*. UCLA Medical Sciences, 26. Los Angeles: Guilford Press.

Geschwind, N., & Galaburda, A.M. (1985). "Cerebral lateralization: Biological mechanisms, associations, and pathology," I, II. *Arch. Neurol.*, 42, 428-459; 521-654.

*Elizabeth Schmid Stevens is a Staff Psychiatrist at Camarillo State Hospital and Assistant Clinical Professor at UCLA. She is speaking on this topic at AFIP's Annual Meeting in San Diego.*

## Designer Drugs Damage

by Carol Turkington

Repeated use of amphetamines and related designer drugs such as Ecstasy produces potentially irreversible brain damage, according to two psychologists at the University of Chicago.

Methamphetamine depletes levels of the neurotransmitters dopamine and serotonin in specific regions of the brain, according to Charles Schuster and Lewis Seiden, and destroys serotonin neurons. Serotonin depletion is even greater with designer drugs like MDA and Ecstasy.

Unfortunately, Schuster noted, the levels needed to produce effects in users are very close to neurotoxic levels.

Behavioral evidence indicates that serotonin neurons play a major role in pain perception and sleep and affect regulation and expression of aggressive and sexual behavior.

Decreased levels of dopamine have been implicated in a host of problems in the elderly, including Parkinson's disease. Dopamine levels in normal individuals begin to decrease by 10 percent for each decade after age 30. Heavy drug users could prematurely lower their levels of dopamine to the point where, Schuster said, a 45-year-old former drug user might show symptoms of a 70-year-old.

Researchers found that...

long-lasting and possibly permanent decreases in the enzymes that synthesize the two transmitters. They also found a decrease in the number of sites that take up the two transmitters, which suggests a reduction in the number of actual nerve endings.

The neurotoxic effects on the transmitters occur when they are converted by the drug into neurotoxins. The neurons that had released the parent dopamine or serotonin then take up these toxins and are destroyed by them. It is the first demonstration of a neurotransmitter being modified to a neurotoxin.

In animal studies of some of the amphetamine analogs or "designer drugs" such as MDA (3,4-methylenedioxyamphetamine) and Ecstasy (MDMA or 3,4-methylenedioxymethamphetamine), serotonin levels and transmitter uptake sites were depleted after a single dose. They never regained their former levels.

There is little data to suggest that MDMA, which had been used by psychiatrists in the past, is an effective psychotherapeutic agent, Schuster said. Furthermore, lab studies suggest it could harm serotonin cells in the brain.

For further information, contact Lewis Seiden, Dept. of Pharmacology, 947 E. 58th St., Abbott Hall, Room 109, (312) 962-9640 or Charles Schuster, Dept. of Psychiatry, 5841 S. Maryland Ave., Box 411, (312) 962-6360, both at the University of Chicago, Illinois 60637.

Carol Turkington is a staff writer for the APA Monitor. This article was reprinted with permission from the APA Monitor.

## MDMA Responses

The following letters are edited due to space restrictions. Complete copies may be obtained from AHP or by writing the authors directly.

Dear Editor:

This letter is in response to Carol Turkington's article, "Designer Drugs Damage" in the August-September *Perspective*.

I personally administered MDMA to about 75 people from 1980 to 1985, and have pursued the scientific issue of brain damage a great deal.

[Greer says evidence on brain damage from MDMA and MDA comes from studies on rats. The oral toxic level of MDMA for humans would be "about 17 times the effective dose."] These comparisons have been ignored by Seiden and Schuster when they say the toxicity occurs at doses close to the doses taken by humans. Neither have responded to letters and phone calls from me inquiring for people who have taken MDMA and who are worried that they might be brain damaged. . . .

[After pointing out that MDMA does not cause depletion of the neurotransmitter dopamine, linked to Parkinson's disease, Greer states:] The only disorder obviously linked to depleted serotonin is depression. Depressions *do* occur after MDMA treatment, but last a day or so at the most after an MDMA session. . . . The depression can be worse if MDMA is taken frequently and at high doses. Older people have reported no lasting depression after MDMA sessions.

Turkington's article mentions that "serotonin neurons play a major role in pain perception and sleep and affect regulation and expression of aggressive and sexual behavior." There have been no persistent or delayed problems in these areas reported with MDMA. In fact, both people I treated who happened to have chronic back pain . . . reported dramatic and lasting pain relief lasting from six weeks to several months after MDMA sessions, and with no untoward effects. All previous treatment, including surgery, medication and self-hypnosis, had not been nearly as effective. . . .

Finally, Schuster is paraphrased as saying that, "there is little data to suggest that MDMA, which had been used by psychiatrists in the past, is an effective psychotherapeutic agent." Why is it then that, without exception, every psychotherapist that I (or anyone I know) have heard of using MDMA to assist therapy has found it immensely helpful?

Certainly, controlled studies costing . . . millions of dollars have not been done with the unpatentable drug. The FDA would not even allow me, after the emergency

animal studies were needed to determine the toxicity, including the specific toxicity reported by Seiden and Schuster. The patient died before this occurred.

The latest development in the MDMA saga is that the Drug Enforcement Administration's own administrative law judge has found that MDMA *does* have accepted medical use, *does* have accepted safety for use under medical supervision and *does not* have a high abuse potential; and he officially recommended that the Administrator place MDMA in Schedule III of the Controlled Substances act and not Schedule I as the DEA proposed.

In the same *Monitor* issue that Turkington's article appeared, it was announced that Schuster had been appointed the new Director of the National Institute of Drug Abuse. . . .

George Greer, M.D., 3 Azul Drive, Santa Fe, New Mexico 87505.

Dear Editor:

I sponsored and coordinated the MDMA oral LD 50 study by Phil Goad. It was a preliminary toxicity study and has been followed up with a 28-day oral toxicity study in both the dog and the rat.

[After technical discussion of the study, Doblin states: No significant changes were observed in any organ systems, or in blood or urine analysis, even at repeated doses of up to 50 times the human therapeutic dose.

In conjunction with the National Center for Toxicological Research (NCTR), a branch of the FDA, I sponsored and coordinated a study designed to replicate the Ricaurte, Schuster, Seider et al. study done at the University of Chicago. They failed to find any evidence of brain damage using all the standard techniques. . . .

These studies have been submitted to the FDA, which have opened up Drug Master File 6293 in the name of non-profit organization called MAPS, the Multidisciplinary Association for Psychedelic Studies. Researchers from Harvard Medical School, University of California San Francisco Medical School, and University of New Mexico Medical School have all received formal permission to cross-reference the data in Drug Master File 62 and have submitted applications to the FDA for human studies. . . . [Research groups wanting to] investigate MDMA could contact MAPS at 2105 Robinson Avenue Sarasota, Florida 33582 (813-921-1624) concerning cross-referencing the animal toxicity studies in their FDA research applications.

DR. DOBLIN 2105 Robinson Avenue Sarasota, Flor

## One More on MDMA

Dear Editor:

This is in response to Carol Turkington's article, "Designer Drugs Damage" in the August-September *Perspective*.

I sent for the published and unpublished papers by Schuster and Seiden on their research with MDA and MDMA, on which the piece by Turkington was based. Metzner notes the dose levels injected into rats was five, 15 and 20 times "the average dose used in therapeutic sessions with MDMA." Two weeks later the rats were killed (they did not die naturally), and their brains were found to have lowered serotonin levels — a condition assumed to be "damaging," without evidence.

In the *Science* paper, "Hallucinogenic Amphetamine Selectively Destroys Brain Serotonin Nerve Terminals," by G. Ricaurte et al (*Science*, Vol. 229, 986-988), the authors admit that "the doses of MDA typically ingested by humans may not be sufficiently high to induce serotonin neurotoxicity"; but this caveat was ignored by the author of the *Monitor* article. The authors of the *Science* article also made the interesting observation that "even the highest dose (40 mg/kg) produced no lethality, and two weeks after drug administration MDA-treated rats could not be distinguished from control rats by observation."

In other words, what we have here is the deliberate distortion of already methodologically flawed research findings to portray psychoactive drugs as toxic . . . .

Those interested in perusing first-person accounts of therapeutic experiences with MDMA might wish to refer to the book *Through the Gateway of the Heart: Accounts of Experiences with MDMA and Other Empathogenic Substances*, edited by Sophia Adamson and published by Four Trees Publications, San Francisco.

Ralph Metzner, *California Institute of Integral Studies*, Box 5, 765 Ashbury, San Francisco, California 94117.

## Green Peace Tree Dog

Two weeks before Christmas, the green-sweatered dog along the beach was wearing a holly wreath, a red bell and a peace symbol. Back and forth, he ran and crested like green waves, guarding gratefully the pungent winter air from nightmares of his own dead bones hanging, just not being there.

Norm Leer

## HANDBOOK OF STATES OF CONSCIOUSNESS

edited by Benjamin B. Wolman and Montague Ullman  
Van Nostrand Reinhold Company, 1986, \$54.50 hardback.

Reviewed by Thomas B. Roberts

As a field of intellectual endeavor grows, theory and observation become more complex, areas of specialization develop and become more elaborate, and a self-correcting process of critical commentary refines the field. The *Handbook of States of Consciousness* shows these trends and indicates that consciousness studies is steadily becoming a recognized field of scientific and scholarly work.

The twenty chapters by 23 authors address theory, manifestations and accessibility to different states of consciousness. Topics range from neuroscience and dimensionality of states of consciousness to studies of specific states and the psychotechnologies for producing them. Each chapter is detailed and contains splendid lists of references. The writing styles and complexity vary a great deal: some articles are quite dense; as university course material, they are clearly graduate level. It is a pleasure to have consciousness articles well documented and referenced.

The title is a bit misleading. In addition to covering states of consciousness (overall patterns such as sleep, dreaming, meditative states and wakefulness) the authors write about consciousness as self-reflexive knowing, stream of consciousness and spiritual/psychological "states." The social/political aspect of consciousness, such as women's consciousness, or proletarian consciousness is omitted, as it probably should be in a book on the narrower psychological-physiological aspects of this topic. There is need for a chapter on the various meanings and approaches to the ambiguous word "consciousness."

The *Handbook* is a certain purchase for university libraries as it verges on being a reference book. It is a probable purchase for experts in the field, too advanced for most beginners. I hope that this book will be the first in a series of handbooks on consciousness research, perhaps yearbooks or a biennial series. Such a series would be an excellent way for consciousness researchers to keep up to date and would contribute to the overall development of the fast growing field of consciousness studies.

Thomas Roberts is a professor of educational psychology at Northern Illinois University, where he teaches courses on psychedelic research, transpersonal education, and related topics.

