

# behavioral sciences

## PSYCHOLOGY

### Schizophrenia and birth complications

Eight years ago, Dr. Sarnoff A. Mednick, a psychologist at the New School for Social Research, began a long-term study of some 200 children with schizophrenic mothers. It is well known that such children are likely to develop schizophrenia themselves, but the causative factors are much disputed.

Dr. Mednick reports in the January *MENTAL HYGIENE*, that 20 of the children in his study show schizoid tendencies. This sick group is distinguished from the others by a number of factors, particularly by an irregularity in the functioning of their autonomic nervous system.

The autonomic irregularities are, in turn, correlated with histories including serious pregnancy and birth complications. Dr. Mednick speculates that the birth difficulties resulted in damage to the hippocampal brain regions of the sick group.

"If we can avoid pregnancy and birth complications in high-risk populations," says Dr. Mednick, "we may avert hippocampal damage and hence reduce the probability of mental illness."

## PSYCHIATRY

### Inherent homosexuality

Homosexuality in males is usually explained as a product of a childhood environment in which the mother dominates and the father remains detached or hostile. The evidence is still in dispute (SN: 12/13, p. 557) and research continues to turn up contradictory conclusions.

His study of the familial environment of 25 persistently effeminate young boys failed to reveal the classic childhood environment patterns, says Dr. Bernard Zuger, a clinical psychiatrist at New York University School of Medicine.

Although the boys he studied expressed a desire to be female and behaved in many ways like girls, their families were not significantly different from the families of non-effeminate boys, Dr. Zuger reports in the February *AMERICAN JOURNAL OF PSYCHIATRY*.

In a number of families the father was the dominant parent, he notes, and, "In most of the families the father was initially affectionate toward the boy" until the child withdrew affection.

Apparently, Dr. Zuger concludes, effeminate behavior "is inherent in the boys themselves."

## SOCIOLOGY

### Normal extremists

It has become almost a truism among sociologists and psychologists that radical right-wing politics should be interpreted as a symptom of individual or social pathology.

However, Dr. Alan C. Elms, a psychologist at the University of California at Davis, reports in the February *PSYCHOLOGY TODAY*, the traditional interpretation is exaggerated.

A survey of an apparently average sample of right-wing activists in Dallas, Tex., says Dr. Elms, revealed

that "the majority seemed to be psychologically healthy and stable and appeared never to have been otherwise."

Probably, Dr. Elms notes, the political attitudes of these activists were to some degree self-serving and reflected their personal needs. But, he adds, "the attitudes seemed to be serving the common ordinary functions of any common ordinary set of political attitudes."

Right-wing views, Dr. Elms says, must be considered in relation to their particular social environment, "in this case the Dallas environment, which is so accepting of rightist politics that Birchism can become a simple habit." As a form of entertainment, he concludes, politics is becoming increasingly popular.

## NEUROCHEMISTRY

### Modifying murderous rats

Several neurochemicals, when applied to a specific area of the brain, appearing to control killing behavior in laboratory rats, report Dr. Bartley G. Hoebel, a psychologist at Princeton University, Dr. Melvyn B. King, a psychologist at the State University of New York at Cortland, and Douglas E. Smith, a Princeton graduate student.

In the Feb. 6 *SCIENCE*, the three researchers report locating a system that regulates killing behavior in the rats' lateral hypothalamus, situated in the base of the brain above the roof of the mouth.

One chemical, methyl atropine, will inhibit normal killing behavior if present in the hypothalamus site, they say. Other chemicals, carbachol or neostigmine, introduced in the same site, will stimulate repeated killing attacks in rats who normally evidence no spontaneous killing.

"Even though we have barely begun to understand the neurochemistry of aggression," says Dr. Hoebel, "it is not too soon for society to start coping with both the good and the bad potentials of this branch of brain research."

## HALLUCINOGENS

### Marijuana effects turned off

Most clinical researchers studying the behavioral effects of marijuana report that the drug has little effect of people's ability to carry out laboratory tasks (SN: 2/7, p. 156).

In the December *PERCEPTUAL AND MOTOR SKILLS*, Drs. D. F. Caldwell, S. A. Myers, E. F. Domino and P. E. Merriam of Lafayette Clinic in Detroit report an experiment in which subjects under the influence of marijuana were given tests of auditory and visual acuity.

The performance of these subjects was only minimally different from the performance of subjects who were administered a placebo. Although this is the normal result of such experiments, the researchers noted that some of the marijuana smokers claimed an ability to turn off the drug high when taking the tests.

This ability, says the researchers, if it is a real one, "raises the issue whether such tests (which comprise the majority of those used in studies reported to date) are valid indicants of the marijuana experience or simply measures of an interesting concomitant of the drug's effect, namely, the ability to respond normally at will."