

behavioral sciences notes

MUSICAL MEMORY

Pitch learned from single note

People apparently remember musical pitch by learning thoroughly a single tone. That tone then becomes an automatic reference point for all other notes.

The single tone method has long been used by musicians in teaching pitch. Its scientific justification comes from Dr. Lola L. Cuddy of Queen's University in Kingston, Ontario, who tested 10 music students on pitch identification.

Dr. Cuddy asked the students to identify 10 notes including the fourth A on the piano keyboard. Then, splitting them into two groups, Dr. Cuddy trained the students for several weeks by different methods. One group learned each note individually. The other students learned only A4 and did not know whether they had correctly identified the other nine notes.

After eight sessions of this, the first group showed no improvement in pitch memory, while the other group made less than half as many errors as on their original test.

The effectiveness of A4 training is in keeping with theories of memory which argue the importance of a reference point.

BRAIN RESEARCH

Fats low in mental disease

The brains of former mental patients show a deficiency of one class of fats, the glycolipids, which generally perform a structural, cementing function in the brain.

The deficiency was observed in a number of mental conditions, including schizophrenia, senility, alcoholism and degenerative diseases of the nervous system. It probably is a result of disease, not a cause, and may be due to degeneration of particular brain areas, says Dr. George D. Cherayil of the Marquette School of Medicine in Milwaukee.

Dr. Cherayil observed glycolipid loss in three lobes of the cerebrum, which controls higher thought processes. The three were the frontal, temporal and hippocampal lobes, but not the occipital, the lobe concerned with vision.

About half the total solids of the brain consist of fatty substances. Among these, the glycolipids show a very slow rate of chemical turnover and are thought to have a structural rather than a nutritional function in the brain.

Dr. Cherayil believes their loss may serve to indicate the extent of degeneration from mental disease.

ABORTION

Laws approved by majority

Three-quarters of the people surveyed in a new Gallup poll favor abortion legislation such as that passed in Colorado and a few other states. The laws broaden grounds for abortion to include the woman's health, deformed child, rape or incest.

A majority of Catholics—63 percent—approve such legislation. In fact, the majority of no religious group opposes abortion for these reasons. Among Jewish

people, 94 percent approve; among Protestants, 78 percent approve; for other religions, the figure is 75 percent and for those without religion, 88 percent.

The number of people favoring abortion for social (unwed mother, unwanted child) and financial reasons has more than doubled in two years but still remains a minority. About a quarter of those surveyed by Gallup in the fall of 1967 approve these grounds, which are not legal in any state.

The Population Council, which commissioned the new poll, notes that liberalized abortion laws "thus seem to have a firm base in public opinion." Consensus is further indicated by the fact that similar attitudes are expressed by men and women and by different age groups.

MORES

Breast feeding linked to sex

A woman's readiness to breast feed her child is strongly influenced by sexual attitudes as well as by cultural fashion, according to Dr. Niles Newton, psychologist at Northwestern University.

An aversion to breast feeding seems to be related to a dislike of nudity and sexuality, and also a higher incidence of sexual-emotional disturbances. On the other hand, women who do breast feed show more tolerance for sexual play in their children. They also feel that women get the best break in life.

With her husband, Michael Newton, director of the American College of Obstetricians and Gynecologists, Dr. Newton has studied patterns of breast feeding in the United States and its dramatic decline in the Western World over the past quarter century. Between 1946 and 1956, the U.S. rate dropped by almost half.

Currently, college-educated American women are more likely to suckle their children than those with less education. But, says Dr. Newton in the June issue of *PSYCHOLOGY TODAY*, the woman who wishes to breast feed "must go to considerable trouble to do so," often overcoming negative attitudes of hospital personnel.

Dr. Newton has found that production of milk is closely associated with attitudes. Women who want to breast feed usually can produce enough milk; those who do not wish to breast feed cannot.

ANTHROPOLOGY

Dreams of Cuna Indians studied

An American authority on dreams has carried his studies to Cuna Indians living on the San Blas Islands off Panama. For a month this summer Dr. Robert L. Van de Castle of the University of Virginia Medical School will measure Western influence on dreams.

From past work, Dr. Van de Castle has found that among tribesmen "the more devils and spirits in dreams, the less outside contact they have had."

He will also test optical perception among the Indians and conduct experiments in extra-sensory perception. A colleague plans genetic studies of the Cunas, particularly those who are albinos. An inbred people, Cunas have the highest rate of albinism in the world. There are more than 250 "moon children," so called because Cunas believe the albino's mother looked too long at the moon.

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