

PSYCHIATRY

Child Psychiatry Criticized

Children should be given credit for individual adaptability, such as the heroes of American success stories have shown, critic of child psychiatry urges.

► THE AMERICAN success story of log-cabin-to-president, slums-to-executive shows that much psychiatric theory is wrong, Dr. John D. Campbell of Atlanta, Ga., declared at the meeting of the American Medical Association in Miami, Fla.

Parental neglect, misunderstanding, rejection, discord in the home and poor environment are too often blamed for nervous and emotional disorders in children and adults, he said. This kind of thinking allows the child no credit for individual adaptability to difficulties such as the heroes of American success stories have shown.

"Very little attention has been given to the stock from which an individual sprang or to the constitutional make-up of the child himself," Dr. Campbell said in criticism of some child psychiatry.

There are such things, he said, as emotional disorders that originate in the individual and they occur in children much oftener than has been supposed.

Manic-depressive illness is one such disorder, he thinks. It is, he said, an important cause of suicide in children and accounts for three-fourths or more of otherwise well-adjusted children who develop "school phobia."

Dr. Campbell said these children suffer mood changes "out of the blue" and are "as perplexed by the illness as anyone." Adult manic depressives often describe depressed moods, feelings of unreality, queer headaches, and periods of retardation and over-stimulation since childhood years, he said. Children have these complaints with-

out actually experiencing a trigger episode such as that which may bring on other types of emotional disorders.

These children inherently like people, are friendly and outgoing, and strive for group approval. Unlike other types of emotionally ill, they are not seclusive or eccentric, and are uniformly well-liked. They take a serious, anxious, worrying attitude toward life and are notably lacking in ability to analyze their reactions.

"As a result of the timidity, feelings of insecurity, self-consciousness, and depressed mood," manic-depressive children may develop the "school phobia" although they are usually of average intelligence and often are selected by their classmates as leaders, Dr. Campbell explained.

The manic-depressive child frequently is brought to the psychiatrist only as the result of an emotional conflict between the patient and one or both parents, he said. Inability to explain the problem and inability of the parents to help often leads to feelings of guilt on both sides—in the child because of his resentment toward the parents, and in the parents because they are led to believe the problem is their fault.

"It is interesting that in several of my manic-depressive children the morbid history of the child almost exactly paralleled the morbid history of a manic-depressive parent, as to age of onset, recurrences, types of reaction and complications," he said. He called it "the most familial of all psychiatric diseases."

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PHYSICS

Unveil Speedy Computer

► NORC, A speedy computer for vital defense problems, will soon be put to work at the Naval Proving Grounds at Dahlgren, Va., which already has a battery of electronic calculators. The machine is called NORC for Naval Ordnance Research Calculator.

It was built by International Business Machines, and performs its arithmetic tasks just as a schoolboy does, one digit at a time. It calculates as fast as the information can be fed into it on magnetic tape, at a rate of 1,000,000 digits a second.

Numbers stored in the machine's cathode ray tube memory can be recalled in eight-millionths of a second. The "brain" can print its calculations as it proceeds, thus enabling the scientists to follow its operations if they desire.

A special magnetic tape feeding device five times faster than those in current use is incorporated in the machine. Research leading to the development of NORC began in 1946 and construction and testing has been under way since 1951.

NORC has been fed a complex naval problem concerning the motion of objects underwater. The solution to this puzzler is beyond the practical capacity of existing computers, but NORC came through with the answer.

The machine was dedicated at Columbia University, where it was built, before a group representing the Navy, the university, and industry. B. L. Havens, who supervised the construction of NORC, described its operation.

Science News Letter, December 11, 1954

• RADIO

Saturday, Dec. 18, 1954, 5:00-5:15 p.m. EST
"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

Watson Davis will list the outstanding science events of the year and discuss the highlights of technological and scientific progress.

ENGINEERING

Powerful Diesel Engine Used in Potash Mine

► A POWERFUL diesel engine so large that it would not go through the entrance and had to be assembled underground is now hauling ores in a potash mine in Carlsbad, N.M.

Although it is not much taller than an automobile, it is much longer and wider and is believed to be the largest and most powerful underground diesel-electric in the world.

The 40-ton locomotive can travel 37.5 miles an hour and can pull up to 1,000 tons on a level track. A special exhaust conditioning system lowers the temperature of the engine's burned gases from 1,000 degrees Fahrenheit to 160 degrees Fahrenheit by "scrubbing" the exhausts in large water tanks.

The engine is 47 feet seven inches long, seven feet wide and six feet high. Designed by General Electric Engineers, it is now speeding through the shafts of the U. S. Potash Company's mine in Carlsbad.

Science News Letter, December 11, 1954

VITAL STATISTICS

One-in-a-Hundred Chance Parent Will Die in a Year

► IN FAMILIES with young children, the chances are now less than one in 100 that one of the parents will die in a year.

The long-term decline in mortality has had a strong stabilizing influence on family life in the U. S., latest figures by the Metropolitan Life Insurance Company show.

More than 700,000 families are broken by the death of a mother or father each year.

Over a five-year period, chances are only nine in 1,000 that the father will die, and only 10 in 1,000 that either the mother or the infant will fail to survive. This is the case with the typical new family in which the husband is 20 and the wife is 19.

The probability of death in this five-year period increases with larger families and when parents are older.

The husband is usually the first member of his family to die. In 1953, death claimed 122,000 husbands under 55, during the time when their families were most dependent on them.

The chances that the new father, age 25, will survive for 20 years, covering the usual time taken to bring up and educate his children is 1,000 to 56.

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