PSYCHOLOGY

Help Subnormal Children

TEACHERS may be able to build up the intelligence of subnormal children.

This may be possible, suggests a New York University psychologist, by teaching them to see the relations existing between the objects and experiences of their lives, and to cope with concepts difficult for them.

For example, the child should be aided in discovering how wagons, automobiles and bicycles are basically the same; they all produce movement, have wheels, etc.

This conclusion about intelligence was based on results of a new intelligence test developed by the N. Y. U. psychologist, Dr. Herbert N. Hoffman. Dr. Hoffman's test does not require facility with words as do many intelligence tests, nor does it measure manual dexterity, as do the nonverbal tests.

The world, comments Dr. Hoffman, contains three kinds of people. One group consists of individuals who reveal the upper limits of their mental capacity through use of language. Those in the second group are more capable in manual than in linguistic activities.

Those in the third group do not reveal their highest level of mental attainment in either words or manual activity. Standard intelligence tests put this third group at a great disadvantage.

It is for this third group that Dr. Hoffman's new test is designed. The test has a perceptual approach and tests the ability of the person to form, or deal with con-

Faced with cards, each containing a pair of drawings, the person tested had to observe in what way one drawing differed from the other in every pair. In one series of cards, the difference was in size. Thus, size was one concept tested. Others were symmetry, depth, acuteness (lack of roundness), thickness and solidity.

The test was given to 90 school children from 12 to 17 years old. They were in three groups of 30 each according to their performance on a standard intelligence test. One group was subnormal with IQ from 50 to 85, the second group was "average," IQ 86 to 115, and the third was superior, IQ over 115.

Interesting differences showed up between the performance of the three groups on Dr. Ĥoffman's concept test.

On series I, testing the concept of size, the subnormal group scored slightly higher than the average group and they were not far from the average of the superior group. At least half of the subnormals were able to cope with the concept of size as effectively as, or more effectively than, the

Series II, symmetry, was the most difficult for the three groups combined, but on this the average group and superiors were equal in performance, the subnormals lagged behind.

Dr. Hoffman questions whether there really is such a thing as a person of average intelligence. This may be just a statistical label attached to persons whose different aspects of thinking vary greatly, but whose successes and failures happen to balance each other.

The subnormal group, Dr. Hoffman found, have common weaknesses and common strengths, but their weaknesses overbalance their strengths. The superior persons are also much like each other in their thinking, but their common strengths overbalance their weaknesses.

The average person is more individual in his thinking.

Science News Letter, March 3, 1956

PHYSIOLOGY

Would Revise Ideas Of Nose Functions

➤ OUR IDEAS of the nose and its functions need revising, Sir Victor Negus of the Middlesex Hospital reports in the British Medical Journal (Feb. 18).

The nose in mammals, including man, is designed to protect the smelling function rather than to protect its breathing function as generally thought, Sir Victor says.

Close to the nostrils there is an airconditioning plant, but the humidifying it does is intended to protect the smelling apparatus rather than the breathing function. The olfactory area and the humidifying area are both small in species of mammals with feeble powers of scent and extensive in keen-scented animals.

Science News Letter, March 3, 1956

PUBLIC HEALTH

Speed Up Malaria Fight

> THE FIGHT to rid the world of malaria must be speeded to keep ahead of the resistance to DDT developing in malariacarrying mosquitoes, Dr. Fred Soper, director of the Pan American Sanitary Bureau, Washington, said on his return from a world tour.

"DDT resistance of the anopheline mosquitoes is one of the things forcing our hands," he stated, referring to the World Health Organization's program, started in

1955, for malaria eradication.

The malaria mosquitoes are rapidly developing resistance to other insecticides, he added. WHO malaria fighters do not know how long governments will be able to carry on malaria control, much less eradication, with present insecticides.

Agricultural use of insecticides to control plant crop pests is adding to the difficulty of the malaria fighters.

Wiping out malaria, Dr. Soper said, is vitally important to the health and the economic and social development of the

Before the discovery of DDT, health authorities could be satisfied to control malaria, that is, to keep cases to a minimum in cities and towns, where there were large human and small mosquito populations.

Since the discovery of DDT, however, it has become economically feasible to control malaria in rural areas by using a residual spray in each house.

The WHO malaria eradication program will cost hundreds of millions of dollars. International funds will be needed in addition to those of individual governments.

Hawaii, Japan and the United States have no malaria problem, Dr. Soper reported. Russia claims to have none. Singapore claims no active transmission of malaria exists.

The Philippines have started a nation-

wide anti-malaria program.

Thailand is now making progress in its fight on malaria and is looking beyond its own frontiers to collaboration with its neighbors. Technical personnel have been loaned to Vietnam for malaria fighting. This is a step toward regional programs, important so that as each country gets malaria cleaned up, it will not be reinfected by its neighbors.

India, Dr. Soper found, is making a tremendous effort to handle her tremendous malaria problem. She is doing about 50% now of what is needed to rid the country of this disease.

Elimination of malaria in some regions was credited by Dr. Soper as one of five factors responsible for the "nose dive" of tuberculosis throughout the world. A population weakened by malaria is ready prey to TB and other diseases, he explained.

The other four factors Dr. Soper credited for world-wide reduction in tuberculosis deaths in the past few years are:

Lack of war.

Improved nutrition.

Improved working conditions.

Great improvement in tuberculosis treatment, starting with streptomycin and going on to PAS and isoniazid.

Science News Letter, March 3, 1956

INVENTION

Animal Collar Repels Fleas

➤ TO KEEP FLEAS away from your dogs, Howard J. Peo of Irondequoit, N. Y., invented a flea-repelling animal collar that is disposable. The invention has cotton webbing impregnated with talcum powder and a flea killer. It was awarded patent No. 2,734,483.

Science News Letter, March 3, 1956