

PSYCHOLOGY

Dull Babies Made Normal by Feeble-Minded Girls' Care

Increase of as Much as 40 Points in IQ Reported For Orphanage Children Transferred to Loving Care

A FANTASTIC experiment of taking 13 mentally retarded babies away from an orphanage and putting them into wards with feeble-minded young women, to make them normal, was revealed as a success by Dr. Harold M. Skeels, psychologist of the Iowa Board of Control of State Institutions, and Dr. Harold B. Dye, Superintendent of the Institution for Feeble-Minded Children of Glenwood, Iowa.

The fortunate 13, who seemed fated to spend life in institutions, have made such mental strides that seven are now adopted as normal children, and all but one of the 13 are now rated normal in intelligence, the experimenters reported to the American Association on Mental Deficiency.

Drs. Skeels and Dye attribute the rise in intelligence quotient, which in some cases was over 40 points, to the following advantages which the small children enjoyed as house guests of matrons and feeble-minded young women: a wealth of play materials, space and supervision for play, varied experiences, and much love and affection.

The psychologist and physician reported that the orphanage from which these children came has made "radical changes" in care of pre-school children, because, while the dull 13 improved, 12 other children in the orphanage, mostly rated normal, were found to be drifting back toward feeble-mindedness. The condition, which implies a warning to orphan asylums, was ascribed to overcrowded cottages in which the children received medical and physical care, but

were "mentally emaciated" for want of adult affection and stimulation.

A close bond of love and affection between a child and one or two adults appears to be very important for a child's development, the experimenters concluded. They emphasized that the backward children who blossomed in the

care of matrons and feeble-minded foster-mothers might have improved even more, if given better facilities.

The experiment began, they explained, as the result of "startling preliminary findings" when two children rated as pathetic imbeciles, were transferred to a school for feeble-minded and chanced to be placed in adult care where they began to develop amazingly and became normal. Mothers of both these children were mentally deficient.

Drs. Skeels and Dye described the experiment as a psychological prescription. They called the result an "added challenge" in educating feeble-minded children whose backwardness is functional and not caused by brain defects or organic disease.

Science News Letter, May 13, 1939

PSYCHOLOGY

The Animosity of Wasps Is Inherited From Queens

IF YOU lived on a farm when you were small, you probably were an interested spectator at the familiar battles between warlike wasps at the attic window or under the roof of the shed.

If you were brave enough and curious enough to put a worker wasp on the nest of a different species, you discovered that a vicious battle to the death was likely to ensue.

The worker wasp will tolerate or even fraternize with a strange worker of the same species, but is as antagonistic to foreign species as are some of the human species of Central Europe.

These wasp battles have been put on a scientific footing by Dr. Phil Rau, of Kirkwood, Missouri, who has watched them in orphan colonies in his laboratory and also has watched the wild insects in sheds and old buildings.

"Animosity" in wasps at least is instinctive and runs in the family, Dr. Rau said in a report to the *Journal of Comparative Psychology*. Although you may have thought so all along, it has not been nearly so clear to scientists, because of the fact that the worker wasps who do the fighting for the colony never can hand on any traits to the next wasp generation. The workers never have young—that is reserved for the queen.

Observing the queen at battle is a difficult task. But the queen, when she is unable to delegate the battle to work-

ers, is quite capable of putting up a vigorous fight on her own behalf. She is unfriendly to all alien queens, although she is not necessarily friendly to all queens of her own species.

Workers come by their belligerency honestly, Dr. Rau concludes, by inheritance from their queen mother. From her they also inherit their ability to make nests, make pulp, hunt caterpillars, and the many other complicated instinctive activities of wasp life. The queen does all these things herself in the early days of colony founding.

The workers do not learn to be belligerent by imitation of the queen mother, for Dr. Rau's fighting workers in his laboratory were orphans, raised from the larval state in window frames where they never saw their original colony.

Science News Letter, May 13, 1939

Color blindness is rated about ten times as prevalent in men as in women.

Books

SCIENCE NEWS LETTER will obtain for you any American book or magazine in print. Send check or money order to cover regular retail price (\$5 if price is unknown, change to be remitted) and we will pay postage in the United States. When publications are free, send 10c for handling.

Address Book Department

SCIENCE NEWS LETTER

2101 Constitution Ave. Washington, D. C.

RADIO

Dr. Vincenzo Petruccio, national consultant on archaeological research projects, Works Progress Administration, will be the guest scientist on "Adventures in Science" with Watson Davis, director of Science Service over the coast to coast network of the Columbia Broadcasting System, Monday, May 22, 5:45 EDST, 4:45 EST, 3:45 CST, 2:45 MST, 1:45 PST. Listen in on your local station. Listen in each Monday.