The
SCIENCE
REVIEW
of
1933

—will be featured in the next issue of SCIENCE NEWS LETTER

THIS ANNUAL summary of the outstanding achievements in all fields of science is being prepared more exhaustively this year than ever before. It is indispensable to a proper understanding of the thrilling scientific advance of 1933.

PSYCHOLOGY

Superior Rhythm of Negro Children Checked By Test

ANYONE who has ever watched a group of piccaninnies dancing to the strains of a street organ knows they have rhythm. That this is a racial trait and that the negro's rhythmic sense is really superior to the white man's seem now to have been corroborated by a scientific study.

The speed with which colored and white children learned to respond to the rhythmic four-four beat of a tom-tom drum was measured by Dorothy M. Muzzey of the Southern Illinois State Teachers College.

She found, as she had rather expected, that the negro children showed a superior sense of rhythm and learned the rhythm pattern faster than the white children. This and other interesting findings in the study, which was completed at the State University of Iowa, have been reported to the American Physical Education Association.

Fifty white and fifty colored children in the elementary grades from the second through the sixth were studied. The white children had a decided advantage over the colored in having had more training, both at school and outside, in music and rhythm.

For the study, the children were told to follow the rhythm of the tom-tom as closely as possible, tapping with one foot on a pedal in exact time with the sound of the drum. The rhythm of the drum and the children's responses were both recorded by a specially constructed machine and the records later studied.

"The interest of both white and colored children was very good throughout the experiment," reported Miss Muzzey. "The difference in the total reaction to the rhythm pattern of white and colored children was marked. During the experiment the white children stood quite still, moving only the foot on the pedal. They made no motor response other than the required steps.

"The colored children, on the contrary, had a definite tendency to sway forward and backward to the rhythm of the pattern. At times the entire body swayed; at other times only the head moved. One child used the toe of his left foot to syncopate, while with his right foot he followed the beat of the tom-tom. Another child, acting the part of an imaginary drum major, used a small stick to keep time to the rhythm of the pattern."

Children in the higher grades showed a greater sense of rhythm and learned the pattern more quickly, the superiority progressing with each higher grade. In all the grades the colored children learned more quickly than the white children, but after attaining a certain degree of proficiency at responding to the pattern, progressed no further.

The white children, although learning more slowly, continued to improve in rhythmic response over a longer period, gradually gaining on the degree of proficiency of the colored children.

Miss Muzzey considers the more rapid initial learning of the colored race as being probably a reflection of greater interest in rhythmic activities, while the higher variability observed in the negro children may have been due to emotional instability.

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PHYSICS—AGRICULTURE

Ultraviolet Rays Detect Value of Farmers' Seed

THE UNCANNY power of ultraviolet rays, to detect what is hidden from ordinary eyes, is now turned on the farmer's seed. Tests at Queens University, Belfast, show that ultraviolet light reveals differences in the grade of seed that are not shown up in ordinary light. The experiments were conducted by P. A. Lineham and S. P. Mercer.

Rye-grass seed used in the tests were found to be fluorescent when inferior in grade. The type which is superior for farming uses was found to be non-fluorescent. The two kinds of seed are usually mixed or hybridized in stocks of rye grass in planting for pasture.

The same test has also been applied to distinguish varieties of wheat and barley and to find the relative vitality of seed potatoes.

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More than fifty uses for corncobs, once waste material, have been found.

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