

PSYCHOLOGY

"PQ" More Important Than "IQ" In Human Contacts

SCHOOL children and their parents have become familiar with the IQ measure of intelligence. Now psychologists are talking about PQ—personality quotient. For getting along with other people, PQ is more important than IQ.

The boy or girl with a high PQ stands pretty well as a leader among his associates, Dr. George K. Bennett, of the Psychological Corporation, told the meeting of the American Psychological Association. But scholarship has little to do with this rating. High PQ's are distributed among the good scholars and dumbbells alike.

Athletic games and sports appear to have their part in building the personality, or at least those taking part in them do have high PQ's, Dr. Bennett indicated.

Baseball, football, tennis and swimming are characteristic activities of the boys scoring high in PQ. Ice skating, tennis, swimming, and pingpong are the popular games of high PQ girls.

Some other games do not distinguish those with high PQ from those with low PQ. Pool and chess are no more popular with one type of boy than the other; bridge or other card games are popular with both types of girl.

Hobbies are just as popular among those weak in personality, Dr. Bennett said, possibly because they serve as an escape from mixing with other boys and girls.

The particular personality traits measured in Dr. Bennett's experiment are initiative, self-reliance, economic self-reliance, and adjustment to the opposite sex.

Science News Letter, September 25, 1937

CONSERVATION

Game Refuges No Help To Cyclic Game Species

REFUGES appear to be of no particular value for those species of game birds and mammals that increase and diminish in number according to that well-known but little understood phenomenon, the game cycle. Such would seem to be the meaning of results obtained by F. C. Edminster of Cornell University, in studies on two game areas in New York.

One of the areas was a regularly established game refuge, the other a pub-

lic shooting area. During winter weather, in three successive years, 1935, 1936, and 1937, Mr. Edminster tramped both areas, counting evidences of the presence of three sample game species, ruffed grouse, cottontail rabbit, and gray squirrel. He counted grouse actually seen, but found it easier to reckon up the tracks of the other two than to find the animals themselves.

In all three cases he found no evidence of more game life on the refuge than on the shooting area. In fact, several of his counts gave the shooting area a decidedly larger population. Between the 1935 and 1936 counts, the gray squirrels hit the downgoing side of their population cycle. The numbers dropped steeply, and almost equally on the two areas; 90.9 per cent. decline on the refuge, as against 91.0 per cent on the shooting area.

Mr. Edminster, reporting his results in the newly established *Journal of Wildlife Management*, concludes that "refuges are of no value in maintaining population of cyclic species such as the ruffed grouse, cottontail rabbit, and gray squirrel; fluctuations continue regardless of the protected or unprotected status of the coverts."

He sees some possible value in refuges, however, in case there is abnormally high hunting pressure on the species, as may happen in the neighborhood of large cities.

Science News Letter, September 25, 1937

HOROLOGY

Automatic Clocks To Add To Time Signal Service

TWO automatic crystal-controlled clocks are being built by the U. S. Naval Observatory for addition to its time-signal broadcasting service, Capt. J. F. Hellweg, Superintendent of the Observatory, reports in his synopsis of work for the fiscal year 1937.

Used to send out at frequent intervals time signals for mariners and scientists who find them indispensable, the clocks are intended for the naval stations at Mare Island, Calif., and Honolulu. Twenty time signals are sent each day from the Naval radio station at Arlington, Va., and five are broadcast from Mare Island. The signals sent out from other stations are automatically recorded at the Naval Observatory and are constantly checked for accuracy. Slight errors may mean serious irregularities in computations of scientific data.

Science News Letter, September 25, 1937

IN SCIENCE

GENERAL SCIENCE

Rockefeller Foundation Has Spent Large Fund In China

OVER a third of a million dollars to promote rural reconstruction in China was appropriated by the Rockefeller Foundation in 1936, the Foundation's report for that year, just published, shows. This appropriation was part of a relatively new Foundation activity known as the China program which was started in December, 1934. The program included "aid toward the creation of practical techniques in administration, education, agriculture, economics, health and medicine." The program was carried on in cooperation with responsible agencies.

Of the total \$11,300,000 given away by the Foundation during 1936, about one third went for projects in countries outside the United States. Over two million dollars was given to the International Health Division and more than one and one-half million dollars was given for medical projects. Of this latter sum, nearly three-fourths was devoted to problems of mental disease.

Science News Letter, September 25, 1937

ICHTHYOLOGY

Flying Fish, Like Airplanes, Prefer Taking Off Into Wind

FLYING fish, like airplanes, prefer to take off into the wind rather than with it, studies by Dr. Carl L. Hubbs of the University of Michigan have shown. In many observations by himself and his associates, flying fish of several species have been seen to take off almost always to windward when the wind was abeam of the ship that disturbed them. With either a head or a stern wind, the fish would take off to both port and starboard.

The observations confirmed the opinion long held by scientists that flying fish do not really fly, but hold their long plane-like fins rigid and glide through the air like sailplanes. The longest glides observed lasted about a quarter of a minute.

Science News Letter, September 25, 1937

E FIELDS

ARCHAEOLOGY

2,000 Bones Mark Site Of Ancient American Feast

TWO THOUSAND knife-marked bones, remnants of ancient feasting in the northern lake region of Minnesota, have been discovered at a camp ground of America's earliest people.

Prof. A. E. Jenks of the University of Minnesota announced the find. (*Science*, Sept. 10) That the scene reveals very old inhabitants is indicated by identifying a kind of bison, long extinct on this continent, among the bones of bear, elk, caribou and other big game animals in the kitchen refuse. The feasters also left knives and other tools of bone and stone.

The kitchen dump, abandoned thousands of years ago, is buried three to nine feet under a bog of grasses and marsh weeds, in Itaska State Park. Prof. Jenks has been excavating the site in cooperation with the State Conservation Commission and the Federal Government.

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GENETICS

Worth of Sires Proved By Daughters' Records

BULLS are given milk- and cream-ratings in a new publication of the U. S. Department of Agriculture.

Not that the records were directly established. Modern agriculture has done a lot of very remarkable things, but as yet milk production remains a monopoly of the feminine members of the herd. Nevertheless the honors accorded to bulls in dairy breeds are based strictly on yield records.

The trick is done by studying the yields of daughters of the sires in question, comparing them with the yields of their own mothers made under similar conditions, and crediting the gain, if any, to the influence of "pa's folks." Thus if ten daughters of a given sire gave a milk-yield record of 10,000 pounds for the test period, while their mothers have a comparable record of 9,000 pounds, the thousand-pound difference is chalked up to the credit of the sire. This process is called "proving."

A proved sire with a good record as shown by his daughters' production performance is naturally in demand for the improvement of other herds of milch cows. But to some bulls come only posthumous honors: in the Agriculture Department's list many animals are recorded as having died before the proof period (which may require several years) could be completed. But many of them leave sons, which are sought after as suitably aristocratic alliances by owners of blooded dairy herds.

A list of this kind is as important to the dairy industry as the Almanach de Gotha is in European social circles. And of a great deal more significance as regards the health and actual worth in the world of the individuals registered.

Science News Letter, September 25, 1937

PUBLIC HEALTH

Cholera Knows No Racial Or Military Barriers

CHOLERA knows no military or racial barriers, as the Japanese troops in the Shanghai area are apparently now learning to their cost. Hygienic measures are the only barriers that can check its advance.

These measures are simple enough to apply under ordinary conditions. Boil all drinking water and cook all food thoroughly. Be careful that the boiled water, in the interval between boiling and drinking, is kept in clean containers untouched by flies, hands or anything else that might have cholera germs on it. The same applies to food.

In the melee of fighting around Shanghai it has probably been impossible for Japanese military authorities to enforce these measures for their troops. There is no need to suggest that the Chinese have resorted to "germ warfare" to explain the present cholera outbreak among the Japanese soldiers. An outbreak of the disease among the civilian Chinese and foreign population was reported from Shanghai at the end of August. Strictest supervision of food and water would be necessary, under such conditions, to prevent the spread of the disease across the lines into the Japanese army.

Cholera is caused by a microscopic organism, looking like a curved rod and called a vibrio. It is a highly fatal disease, common to the East, spread by contamination of food and water with excreta of cholera patients.

Anti-cholera vaccine gives protection against the disease for a short time.

Science News Letter, September 25, 1937

CARTOGRAPHY

Weather Bureau Chief Urges Standards For Maps

STANDARDIZED maps for showing the world's weather were urged before an international meteorological meeting at Salzburg, Austria, by Dr. W. R. Gregg, chief of the U. S. Weather Bureau. Dr. Gregg is president of the Commission on Projections for Meteorological Maps.

In his address, Dr. Gregg pointed to an analogy between map projections and standard time zoning. Along only one meridian of longitude in any particular time zone do solar time and standard time agree. Elsewhere, time is falsified. But the practical benefits more than offset the disadvantages of such falsification.

Similarly, any projection of the spherical surface of the earth on a flat map is correct along only one parallel of latitude. Everywhere else on the map there is spatial distortion. But the practical benefits offset the disadvantages.

Dr. Gregg and his colleagues of the commission recommend that the thirtieth and sixtieth parallels of latitude be adopted by all nations as projection bases for their weather maps. Standard reduction scales were also recommended.

Accompanying Dr. Gregg, as the other American delegate to the meeting, was Ivan R. Tannehill, chief of the marine division of the U. S. Weather Bureau. The two men also will represent the Weather Bureau at meetings of the commissions on climatology, agricultural meteorology, and synoptic weather.

Science News Letter, September 25, 1937

PHYSIOLOGY

Catalepsy In Cats Results From Heavy Water

CATS were given cataleptic fits when small quantities of heavy water (containing double-weight hydrogen atoms) were injected into their spinal cavities, Drs. Julian B. Herrman and Henry G. Barbour report. (*Science*, Sept. 10) Similar results were obtained in rats by removing a patch of skull under anesthesia, and putting the heavy water directly on the brain.

An animal or man in a cataleptic attack frequently takes rigid postures or even seems to be dead. The animals in the Yale experiments, however, all recovered fully.

Science News Letter, September 25, 1937