

PSYCHOLOGY—PSYCHIATRY

Low Intelligence May Be Screened Out of New Army

Psychologist Outlines Plan for Giving Practical Tests to All Men Whose Mental Ability Is in Doubt

AMERICA'S new army of rolling tanks and winging airplanes will not be held back by "dumbbell" soldiers who can't understand and promptly carry out their orders, if the Selective Service System follows plans outlined in Atlantic City before the American Psychopathological Association by Dr. F. L. Wells, of Harvard University.

Inadequate mental ability would be screened out of the new army in the same way as flat feet or bad hearts.

That does not mean, Dr. Wells explained, that the less intelligent have no place in the service of the nation.

"It may take Joe Louis to knock out an enemy, but after that a cub scout can tie him," he said. "It is the part of organized defense to see that neither moron nor philosopher need be a 'useless mouth.'"

For mechanized combat units, the men selected could reasonably be restricted to the upper half, intellectually, of the men between 21 and 31 years old. But in an all-out selection for other service of military value in the armed services or among those who manufacture the arms, the upper 95% might be included.

The plan described by Dr. Wells was developed at the Boston Induction Center. There, physicians who are specialists in diseases of the mind examine every selectee to be sure that he has no illness that would make him unfit for military service.

Whenever the psychiatrists had doubts about the mental ability of any man, they sent him to the psychologist for examination.

Fifteen minutes is enough to find out whether the selectee is mentally okay for sending on to the reception center where he will be given the careful interviews and examinations for classification in the army.

This brief 15-minute test is devoted to practical tasks. The selectee will not be required to write long answers to questions or to do a lot of talking. One of the tests worked out for this purpose requires the man to handle such familiar

tools as a hammer, paintbrush, or wrench.

This screening out work should be divided between the local board, the medical advisory boards, and the induction center, but as much as possible should be done before the selectee is sent to the Army.

Women psychologists experienced in the testing of adults may take part in this testing for either the medical advisory boards or the local boards.

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Queer Characters Barred

QUEER personalities should be barred from the Army by the examining physician who specializes in mental conditions, it is recommended in a report from Dr. Abraham Myerson, Boston psychiatrist, sent to the meeting.

Even when such men are not themselves useless to the Army, they should be excluded because of their disorganizing effect on other soldiers, he said.

These are some of the men Dr. Myerson would keep out of Uncle Sam's armed forces:

1. The man who faints at the sight of blood.
2. The sissy.
3. The odd-looking or clownish fellow who would be jeered at by the other men. Such persons draw trouble to themselves and make trouble for others, perhaps entirely innocently.
4. The chronic liar or swindler type. Other men are roused by them to disgust, anger, and even violence.
5. The natural recluse—the man who finds any attempt to get along with other people painful.
6. The abnormally suspicious or paranoid personality. Such men are sullen and hostile. They are trouble makers and potential disciplinary problems.
7. The man subject to extreme ups and downs of elation and depression. When such moods are not extreme or when they are balanced by other valuable traits, such persons do some of the finest work in the world. But the army

can't have men subject to excessive "jags" of being "high" or to suicidal blues.

We can't spread the net too wide, Dr. Myerson warned, or we would exclude the whole Army, for no man is perfect. But men in military life must possess a reasonable capacity for self-control. If they have never had it before induction, they will find little opportunity to develop it later.

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Must Teach Laymen

SCIENTISTS must convey their knowledge to intelligent non-scientist adults if democracy is to survive in this emergency, Prof. Adolf Meyer, well-known psychologist of Johns Hopkins University Hospital, told his colleagues at the meeting of the American Psychopathological Association in Atlantic City.

"We must think what to do to save man in this emergency, not just what we are to do about Hitler, or God help man," Dr. Meyer declared.

Intelligent adults must be the leaders in a true democracy, he said, but these leaders must have respect for the rights and welfare of the less gifted and for themselves.

Universities must have, he said, a true university spirit. Although they must continue research in specialized branches of knowledge, they must also see that all the departments and members of the faculty contribute, in cooperation, to a study of the entire wellbeing of man. This universal interest is implied in a literal meaning of the word university.

Every professor, no matter what his subject, should come out of his specialty or his laboratory and tell all the students and intelligent laymen what his studies have to offer for man's welfare.

Even the professor of Sanskrit or Russian can tell of words and meanings that do not exist in English and which would help men. The Russian language has a word for "stand" which conveys also a sense of development or progress, not a mere lifeless stationary quality. English has no such single word as this or the German "Werden." Even the word "static" in Russian conveys a meaning of consistency in development. Such a conception of life and growth bound up with permanence is needed in America today, Dr. Meyer indicated.

On his retirement, soon, from active duty at Johns Hopkins, Dr. Meyer would like to be free to visit universities to share

what they are doing and what they plan to do to protect and further the interests of men as they must live in this dis-

turbed world with a sense for man-science and culture.

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MEDICINE

Number of White Blood Cells May Predict Length of Life

Strains of Rats With Low Average White Blood Cell Counts Found to Have Shorter Lives Than Others

PREDICTION of the length of a person's life may, in future, be made from a count of the number of white cells in his blood. This possibility (and so far it is only a possibility) appears from a discovery announced by Dr. Carl Reich, of Lenox Hill Hospital, and Dr. W. F. Dunning, of Columbia University. (*Science*, May 2.)

In rats, they discovered, long life goes with a high count of white blood cells, and particularly with a high count of the type of white blood cells called "neutrophile polys." Strains of rats with low average white cell counts had shorter life spans than strains with high white cell counts.

The white blood cells, and especially the neutrophiles, make up an important part of the body's defenses against invading disease germs.

Sex differences associated with length of life were in accord with the findings. The females had a significantly higher white cell count than the males, and females of most of the strains of rats studied had significantly longer life spans.

Whether or not long life in humans is related to or depends on the number of white cells in the blood, and if so, what can be done about predicting length of life from the blood count or lengthening life by artificially increasing the number of white cells, are questions for the future to answer. In humans, according to one authority, men have higher white counts than women, although the average life span is longer for women than for men. This seems to conflict with the findings in the rats but further study may shed light on this.

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PHYSIOLOGY

Gland Extract Added Inches To Height of Dwarfed Boy

THE effect of a gland extract on growth in height was strikingly demonstrated in the case of dwarfed twin brothers reported by Dr. George B. Dorff, Bellevue Hospital, New York City, at the meeting of the Association for the Study of Internal Secretions in Atlantic City.

The gland extract, a sex gland stimulating chemical from the pituitary gland, was given to one of the boys but not to the other. Both were sexually infantile as well as dwarfed. During a period of four and one-half years before the treatment, they grew about seven and one-half inches. Although they were identical twins, developed from the same original egg cell, one of the boys was always about three-fourths of an inch shorter.

When this slightly shorter of the two was given the sex gland stimulating hor-

mone from the pituitary gland, he grew four inches in one year, becoming the taller of the two. The untreated twin brother grew only one and one-fourth inches during the same year.

The crystalline male sex hormone, testosterone propionate, markedly accelerated growth in height and weight of seven out of nine undersized boys and young men, Dr. J. S. L. Browne and Dr. Alan Ross, of Montreal, reported.

Two of the boys grew about three inches in six months when given twice weekly injections of this hormone. Definite signs of the growth-stimulating effect of this synthetic male hormone appeared after two months of treatment in a 24-year-old man whose height before treatment was four feet eight inches.

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Long-Lived Seeds

THE OLD adage, "One year's seeds means seven years' weeds," will have to be revised—upward. One year's seeds can mean sixty years' weeds, in a few species at least. That is the survival time for seeds of curly dock, evening primrose, smooth mullein and night-flowering catchfly in one of botany's classic experiments, reported by Prof. H. T. Darlington of Michigan State College. (*American Journal of Botany*.)

Sixty years ago a former professor of botany at the college, Dr. J. W. Beal, buried twenty pint bottles, each containing a thousand assorted weed seeds mixed in sand. The idea was to dig up one bottle every five years and find out how many seeds were still viable, and what species they represented.

This five-year schedule was kept up until twenty years ago, when it was decided to make the experiment last longer by digging up the bottles at ten-year intervals. Prof. Darlington has been carrying on the project since 1915.

Of the twenty species originally put away, only four germinated in this latest test. Even these four do not represent a perfectly smooth score, for it was thought that the mullein seeds originally put into the bottles were all of the ordinary woolly species. But the smooth mullein is what came up this time, and also ten years ago, though it had not appeared in any of the earlier plantings. And the catchfly plants are something of a mystery, for there is no record of their seeds having been included at all.

Two species that survived up to the fiftieth year, black mustard and water smartweed, failed to germinate this time.