

PSYCHOLOGY

Illiterates More NP Risk

► WHILE CONGRESS wrestled with the problem of draft deferment for college students, Navy-supported research showed a problem at the other end of the educational scale.

This is the relation between illiteracy and neuropsychiatric disorders.

As a group, illiterates are a greater neuropsychiatric risk than literates, Comdr. William A. Hunt, MSC, U. S. N. R., and Comdr. Cecil L. Wittson, MC, U. S. N. R., find. Their study was made of records of over 1,400 illiterate recruits arriving at a naval installation for literacy training during the last war.

"Of every group of 100 illiterates inducted for military service," they report, "about 15 will be given neuropsychiatric discharges before their literacy-training program is completed and three more will be neuropsychiatric casualties by the end of the first year of service.

"It is impossible to unravel the actual cost of this high neuropsychiatric rate to the Government," the two officers state. "The cost is high, but whether or not it is compensated for by the service rendered by the 82 still surviving after one year is an open question."

If the manpower situation becomes so acute that illiterates must again be inducted into the armed forces, Commanders Hunt and Wittson suggest that intensive psychiatric service for both diagnosis and treatment should be provided, as well as training or attempts at training in reading and writing.

Being illiterate, or unable to read and write, is not just a matter of never having gone to school and learned reading and writing, they point out. Illiteracy is often a symptom of some underlying personality difficulty which perhaps made the man unable as a child to learn to read and write.

On the other hand, the handicap of illiteracy may contribute to the development of personality disorders.

Mental deficiency, personality disorder, psychoneurosis, schizophrenia, epilepsy and constitutional psychopathic state were among the diagnoses given illiterates discharged for neuropsychiatric reasons in the group studied.

The research, carried on at Northwestern University, Evanston, Ill., is reported in the U. S. ARMED FORCES MEDICAL JOURNAL (March).

Science News Letter, April 21, 1951

BACTERIOLOGY

Antidote to Ultraviolet, Daylight, Is Cancer Hope

► ORDINARY DAYLIGHT provides an antidote to ultraviolet ray death. That is the case at least for cells such as bacteria and molds and may be true for cells of the human body.

Dr. Albert Kelner, Harvard University bacteriologist, found that recovery of cells given the visible light treatment after usually fatal doses of ultraviolet rays was so complete that he feels there is being studied "the key factor in the mechanism causing death by ultraviolet radiation."

Visible light not only prevents death of the cell but probably also reduces the number of mutations, or permanent changes in heredity, which are also caused by short-wave ultraviolet radiation.

If, as Dr. Kelner's work suggests, the killing and mutation-inducing effects of ultraviolet can be reversed or prevented, perhaps the cancer-inducing effect of short-wave ultraviolet radiation can also be reversed or prevented. The answer to this must come from future research.

Science News Letter, April 21, 1951

● RADIO

Saturday, April 28, 1951, 3:15-3:30 p.m. EST

"Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Walter C. Alvarez, professor of medicine for the Mayo Foundation at the University of Minnesota, and author of the book "How To Live With Your Nerves," will discuss "The Little Strokes."

SCIENCE NEWS LETTER

VOL. 59 APRIL 21, 1951 No. 16

44,700 copies of this issue printed

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N. St., N. W., Washington 6, D. C., NORTH 2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1951, by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS of Science (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C. under the act of March 3, 1879. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925; 39 U. S. Code 283), authorized February 28, 1950. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to periodical literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566 and 360 N. Michigan Ave., Chicago. STAt 2-4822.

SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Edwin G. Conklin, Princeton University; Karl Lark-Horowitz, Purdue University; Kirtley F. Mather, Harvard University. Nominated by the National Academy of Science: Harlow Shapley, Harvard College Observatory; R. A. Millikan, California Institute of Technology; L. A. Maynard, Cornell University. Nominated by the National Research Council: Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution; Rene J. Dubos, Rockefeller Institute for Medical Research. Nominated by the Journalistic Profession: A. H. Kirchofer, Buffalo Evening News; Neil H. Swanson, Baltimore Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. Nominated by the E. W. Scripps Estate: H. L. Smithon, E. W. Scripps Trust; Frank R. Ford, Evansville Press; Charles E. Scripps, Scripps Howard Newspapers.

Officers—President: Harlow Shapley; Vice President and chairman of Executive Committee: Alexander Wetmore; Treasurer: O. W. Riegel; Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Jane Stafford, A. C. Monahan, Marjorie Van de Water, Martha G. Morrow, Ann Ewing, Wadsworth Lively. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. In London: J. G. Feinberg.

Question Box

BIOLOGY

By what means are bees attracted to the flowers of springtime? p. 248.

How can an estimate be made now of next fall's pheasants? p. 246.

CHEMISTRY

Why cannot old storage batteries be rejuvenated? p. 255.

ENTOMOLOGY

What insecticides are recommended if DDT does not eradicate flies? p. 247.

GENERAL SCIENCE

How do Science Fairs aid the nation's lead in science and technology? p. 246.

MEDICINE

What recent method promises to stop influenza virus? p. 248.

Photographs: Cover, William Springfield; p. 243, University of Washington; p. 245, Philadelphia Zoological Garden; p. 247, Westinghouse Research Laboratories; p. 250, Southwest Research Institute.

MILITARY SCIENCE

How does a sniperscope aid spotting of enemy soldiers prowling in the dark? p. 251.

NEUROLOGY

What type of injury is most likely to cause plugging of the brain's blood vessels by fat? p. 242.

NUTRITION

What wild greens will make a vitamin-packed salad? p. 254.

PSYCHOLOGY

What is the relation between illiteracy and neuropsychiatric disorders? p. 244.

What is the best way to change people's habits? p. 249.

ZOOLOGY

Why do black leopards appear black? p. 245.

Why are geese good weeders for a strawberry patch? p. 253.