

PSYCHOLOGY

Veterans Think Preparedness Of Little Value For Peace

United Action to Keep Profits Out of War Believed More Likely to Avert Conflict, Psychologists Are Told

MEN WHO have actually seen fighting service have little faith in preparedness as a means for keeping America out of war. Taking the profits out of war would be more effective, they think, a public survey conducted in Ohio and Georgia, and reported at the meeting of the American Psychological Association, revealed.

War is blamed, popularly, on four causes—economic rivalries, national imperialism, munitions makers, and political leaders desiring power, it was discovered by Dr. Ross Stagner, of the University of Akron, psychologist who conducted the survey.

Little Agreement

But people are less agreed on methods to keep us out of future war. Only two proposals—taking the profits out of war, and the united action of workers, farmers and consumers by strikes, boycotts or similar measures—were endorsed by more than half of those interviewed.

Pacifists and militarists may agree about the causes of war, although there is a slight leaning on the part of militarists toward blaming overpopulation, fighting instincts and love of adventure. But on the possible preventives they widely diverge.

Militarists would keep America out of war by complete military preparedness. They would rely on neutrality laws. Pacifists would first have united action in strikes and boycotts. Next they would take the profits out of war and resort to the League of Nations, socialism, appeal of the churches, business recovery, and diplomatic agreements.

The preparedness group has much more unanimity than has the other more pacifistic groups. "Perhaps," commented Dr. Stagner, "this explains their effective lobbying."

Men with fighting experience are somewhat more cautious in naming the causes of war than those who have not. But 82 per cent. would rely on abolishing war profits as a means of prevention as against only 29 per cent. who think preparedness would be effective and only

4 per cent. who endorse national isolation.

Labor and business are at opposite poles in the measures they would advocate for preventing wars. Labor would abolish war profits, and rely on neutrality legislation, socialism, and an isolation policy. Business thinks business recovery would do the trick and wants preparedness.

If you are thinking of preparing anti-war propaganda, Dr. Stagner recommends two slogans that his study revealed would really be effective. They are:

"Take the profits out of war."
"United Action."

Protection of America's mental health from the depredations of psychological quacks and professionally unqualified persons who set themselves up as psychological counselors was the purpose behind a series of committee meetings which marked the start of the psychologists' meeting.

This action, designed to set off sharply the professional psychologist from the untrained charlatan, was taken at the meeting of the American Association of Applied Psychologists held in connection with the annual gathering of five national associations of scientists in the field of psychology.

How to Qualify?

One suggestion was that applied or practicing psychologists should spend a full year as internes in an institution just as the medical doctor internes in a hospital. Some psychologists favor this program, which has just been tentatively adopted by Columbia University. Others think that the student for this profession should devote the year to scientific research and should qualify for the Ph.D.

The high scores obtained by some subjects in tests of telepathic card matching can be duplicated by the strictly chance method of matching one deck of cards against another, Dr. Clarence Leuba, of Antioch College, told the meeting.

The secret is in selecting the right "subjects."

The subjects were imaginary in Dr. Leuba's experiments: he merely credited the first ten runs through a deck of E. S. P. cards to one "subject," the next ten to another, and so on.

When the cards turned up from the two decks were of the same suit, a hit was scored. When they differed, it was counted a failure.

If a "subject" scored above the chance expectation for his first ten runs, he was given a second session, that is, another set of runs were credited to "him"; if again successful, he was given a third session. When his "telepathic ability" fell off he was then dropped from the experiment.

In this way 87 "subjects" made a total of 67,050 matchings (2,682 runs through the deck of 25 cards).

Mechanized "Telepathy"

The average for the whole experiment was only 5.03 hits per run, which is practically the same as the one-out-of-five score you would expect in a deck with five suits, such as this had.

But Dr. Leuba found certain "telepathic subjects" in this way. There were seven "subjects" who averaged between six and eight hits per run for from 200 to 1,000 trials. The results demonstrated the error of selecting subjects in this way for this type of experiment, Dr. Leuba warned.

"Our results are an experimental verification, in this particular field, of the general mathematical principle that anti-chance values are meaningless unless calculated with reference to all the data of all the subjects in all the investigations," he concluded.

A radio audience trying to guess the color or object selected by the announcer in a test of "telepathy," and a student trying to guess the answers in a "yes-no" or "true-false" type of examination, are likely to have some success because audience, announcer, student, and professor are all governed in their selections by certain definite psychological laws. Tests demonstrating this were reported to the meeting by Dr. L. D. Goodfellow of Northwestern University.

If a person is making choices between two objects he naturally follows a symmetrical pattern in his choices, Dr. Goodfellow found. If the guesser believes, however, that chance has determined the order he is trying to match, he makes an effort to follow a haphazard order and so avoids the symmetrical pattern. Since the experimenter or instructor does the same thing, the chances of the two patterns coinciding are increased.

PUBLIC HEALTH

Rabies Control Possible If Public Demands it

RABIES, or hydrophobia as it used to be called, is one of those diseases which can be controlled or even eradicated. Apparently few persons realize this fact, however, because in spite of the panic and hysteria that arise in any community at the first cry of "mad dog," public opinion does not demand enforcement of control measures.

Rabies does not exist in Canada or in Great Britain.

"That it is not controlled or eradicated in the United States is uncomplimentary," declared Dr. C. R. Schlottbauer, veterinary scientist in the division of experimental surgery of the Mayo Clinic.

Measures which Dr. Schlottbauer and other scientists know will control the disease and prevent it in humans are: compulsory licensing and vaccination, impounding and destruction of all stray dogs, quarantine of all dogs during the presence of the disease in a community and of all dogs brought in at any time.

Rabies is a highly fatal inflammation of the brain or of the brain and spinal cord. It is caused by a germ which has the characteristics of a virus. The virus is present in the saliva of infected animals. You can get rabies from a dog without being bitten if the infected saliva gets into a wound such as a scratch or bruise.

The common impression that rabid dogs become furious or vicious and foam at the mouth is not entirely correct. The irritable period is usually short and the ensuing mental depression is the symptom most often noted. Vicious dogs may even become more friendly and quiet, friendly ones hard to manage. Rabid dogs will rarely and probably never willfully go out of their way to bite. If not entirely unconscious of their actions, they appear afraid of man and other animals. In the late stages of rabies, dogs may unconsciously bite anything that crosses their path.

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● Earth Trembles

Information collected by Science Service from seismological observatories and relayed to the Jesuit Seismological Association resulted in the location of the following preliminary epicenter:

Thursday, Sept. 1, 5:48.5 p. m., E.S.T.

Near the coast of Salvador, Central America.
Latitude 13.3 degrees north, longitude 89.5 degrees west.

For stations cooperating with Science Service in reporting earthquakes recorded on their seismographs see SNL August 13.



MEASURING THE BREATH OF DEATH

Inventor Fichlen takes his carbon monoxide measuring device into a garage for a practical demonstration.

CHEMISTRY

Carbon Monoxide Detector Developed by Engineer

A MECHANICALLY simple, inexpensive method of estimating the carbon monoxide content of the atmosphere and thus of detecting harmful amounts of this dangerous "automobile exhaust" gas has been developed by J. B. Fichlen, chemical engineer of The Travelers Insurance Company.

Depending upon the conversion of carbon monoxide into carbon dioxide, a gas whose quantity can readily be measured, the device can be built by anyone who desires to do so, Mr. Fichlen states.

An ordinary bicycle pump forces air through a filter which removes carbon dioxide and hydrocarbon gases from the air. This air then passes over an ordinary cigarette lighter coil, which further oxidizes the carbon monoxide to the measurable gas, carbon dioxide. The product is then bubbled through an alkali solution. The carbon dioxide neutralizes the alkali, causing an indicator, phenolphthalein, to lose its reddish color. The number of strokes of the bicycle pump necessary to force enough atmosphere through the system to make the phenolphthalein's color disappear en-

tirely measures the amount of carbon monoxide present in the air. If the capacity of the bicycle pump is known, the concentration of the dangerous CO, as chemists label the gas, can be determined and checked with known facts as to what constitutes a dangerous concentration.

The company announces its intention of giving out specifications for construction of the device to any interested party. Carbon monoxide, which is found in the exhaust from gasoline engines and results from incomplete combustion of the fuel, is one of the most insidious gases known. Not only is it quickly lethal when it passes a certain concentration, but it is odorless and tasteless and hence not readily detectable. Non-lethal amounts of the gas are believed also to have harmful effects in slowing the reactions and alertness of people exposed to it. This has been blamed for many accidents in the past.

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There is one automobile to 55 persons in Germany, compared to one to every five persons in the United States.