PSYCHOLOGY

Recovered Patient Re-lives Experience in Sanitarium

For the Sake of Science, Psychologist Returns To Scene of Her Sufferings From Mental Illness

THE STORY of a young woman, recovered from a severe mental illness, who went back to the ward where she had been most violent to re-live her experiences for science was related before the meeting of the American Psychological Association. The psychologist making the report was the same woman who had had this dramatic experience, Dr. Elaine F. Kinder, now at Letchworth Village, Thiells, New York.

On first recovery, Dr. Kinder's only memory of the period was "a hazy recollection of extreme noise and confusion." Gradually, little islands of events stood out in the general fog in which her memory had been lost. Details of what had happened to her seemed to be completely forgotten.

Fifteen months later, because of her professional training and experience, Dr. Kinder decided, for the sake of better understanding of mental illness, to make a strenuous effort to regain her memory of those very painful experiences.

She secured the cooperation of the hospital, and her physician, Dr. J. A. Kindwall, made available to her the notes and records of her case. Reading of these served to "touch off" certain memories, but even then most of the long time remained a confused blank to her. At last she secured permission to go back and spend 24 hours in that same "disturbed ward" where she had been at her worst. She was to sleep in the very same bed.

"The effectiveness of the visit was far beyond all expectation," Dr. Kinder reported. "It started an almost overwhelming flood of extremely vivid memory."

First to return were the intense emotions she had felt during that time. These awoke in her recollection of what she had done and events that had happened.

The sight of a ventilator brought vivid recollection of the feelings and ideas in which that ventilator had played a part. It was only incidentally that she remembered climbing up to reach it. In contrast, nurses remembered clearly the incident of her climbing, but of course had no knowledge of the flight of ideas and emotions which had so much more meaning to the patient.

These factors that give meaning to an incident are basic to recall, Dr. Kinder concluded from her experience.

Science News Letter, September 14, 1940

War Attitudes Explained

EXPLANATION of the long fight in Congress over the selective service legislation may be found in a report to the meeting by Dr. George W. Hartmann, of Teachers College, Columbia University.

On the day that Hitler's army split the Anglo-French forces and reached the Channel port of Abbeville, Dr. Hartmann was giving a final examination in a course in social psychology. The students were college graduates, many of them experienced teachers. He asked them as part of the examination to explain in detail why they were or were not absolute pacifists. Nine were absolutely and unconditionally opposed to war in any form. The other 30 did not hold this view.

The opposition of the two viewpoints Dr. Hartmann found to be clear and impressive. Both pacifist and non-pacifist use religious and Christian sanctions with contradictory results. Pacifists emphasize that maintenance and enlargement of life for themselves and others is the highest value known to man for without it no other values have any meaning. Non-pacifists repeatedly declare that war is for them a lesser evil.

"Like the man about to commit suicide or murder," said Dr. Hartmann, "they maintain that the absence (or presence) of certain conditions makes life unbearable for them—they prefer to suffer extinction rather than adjust to these demands. Apparently the non-pacifist is more severe than the pacifist in the demands he makes upon the world before he will consent to be active in it."

Science News Letter, September 14, 1940

War Increases Stuttering

F WAR comes to America, it will probably produce a great increase in stammering, stuttering and mutism, Dr. Sara

Stinchfield-Hawk, of the University of Southern California, told colleagues in her address as president of the American Speech Correction Association.

Even though American cities may never be bombed, and American soldiers never see actual combat service, Americans will still be liable to the war-caused nervous diseases which produce speech defects, Dr. Stinchfield-Hawk indicated.

"We no longer speak of shell-shock," she said, "but of war-shock, and we find that the majority of nervous patients in our veterans' hospitals were, and still are, those who did not go overseas, were never subjected to bombardment, and never got beyond the officers' or regular training camps."

When fear and anxiety override the power of self-criticism, Dr. Stinchfield-Hawk indicated, the individual may become hysterical and start to stutter, stammer, or suffer from other speech defects.

Science News Letter, September 14, 1940

Psychological Aids to War

NEW, SECRET psychological aids to war will be invented as the result of a mobilization of psychological brains for defense being arranged at the psychological meetings.

One of the first tasks of experts planning to go to Washington will be devising new psychological devices to speed up training in the use of the new tools of war. Modern warfare, leaders explain, with parachute troops, tank units and blitzkriegs, makes new demands upon the human mind and character.

As an example of what can be done, psychologists point to the method of training gun pointers developed for the U. S. Navy during the last World War by Prof. Raymond Dodge, Columbia University psychologist, a device still in use and still kept a military secret.

Defense against the war of nerves will be the problem attacked by one committee of the National Research Council, membership in which is being discussed. This committee on morale will plan how to keep civilian as well as Army nerves steady and spirits up in the face of attack from the propaganda front.

Action for defense was taken recently by psychologists of four national scientific societies, including the American Psychological Association. Representatives are being selected by the psychological organizations to go to Washington and serve on a joint committee with the National Research Council to advise the Army, Navy, the National Defense

Advisory Commission and other government agencies.

Army officers may call on this committee of experts to develop new methods for training green recruits in the techniques of mechanized warfare.

Science News Letter, September 14, 1940

Poll Follows Campaign

THE VOTE-changing effect of speeches by Willkie, Wallace, and other campaigners will be measured by periodic interviews of the same sample of 600 people, to be conducted by Dr. Paul F. Lazarsfeld, of Princeton University.

Details of this novel sort of political poll were explained by Dr. Lazarsfeld before the joint meeting of the American Psychological Association and the Society for the Psychological Study of Social Issues.

Questions will be asked of these 600 people about their opinions and expectations of the candidates and issues. Whenever anyone indicates that he has changed views since the last interview, an attempt will be made to find out just what brought about the change of heart.

Training methods have been specially developed for eliciting these reasons for change. In order to make sure that the interviews themselves are not the cause of a change, comparison will be made with the views of another set of "samples" consisting of persons who will be interviewed only once.

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Radicals Are Young

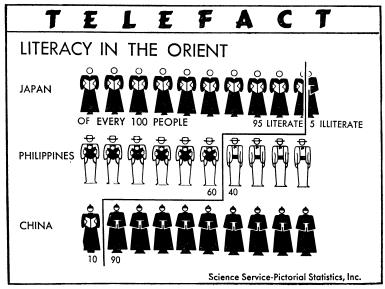
THE TYPICAL radical was pictured for members of the American Psychological Association by the report of Dr. Goodwin Watson, of Teachers College, Columbia University. This composite portrait was made up by Dr. Watson's study of those unemployed applicants at the Adjustment Service in New York who expressed themselves as holding radical views.

The radical, he found, is probably

• RADIO

Dr. O. H. Perry Pepper, of the University of Pennsylvania Hospital, will talk on Medical Problems of Old Age, as guest speaker on "Adventures in Science" with Watson Davis, director of Science Service, over the coast to coast network of the Columbia Broadcasting System, Thursday, Sept. 19, 4:00 p.m., EDST, 3:00 EST, 2:00 CST, 1:00 MST, 12:00 PST.

Listen in on your local station. Listen in each Thursday.



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young and without dependents. He is likely to be the native-born child of foreign-born parents. He is superior in intelligence and education. He is more likely to be in artistic or professional work than he is to be in business. He is most likely to be non-religious or Jewish; least likely to be a Catholic.

Men are not any more likely to be radical than women. Length of unemployment has nothing to do with radicalism. Radicals are no more likely to be unhappy than are conservative persons.

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Anger Bad for Ulcers

F YOU have a stomach ulcer don't get mad.

For such a patient, anger will bring on severe pain, increased acidity in the stomach and even bleeding, Drs. Bela Mittelmann and Harold G. Wolff, of New York Hospital and Cornell University told the Association.

Stomach ulcer patients and those with nervous indigestion, these investigators found, have their symptoms occur in connection with threats to their success or to their need for esteem, devotion at home, and "mothering." Typical cases were a man whose wife humiliated him, one whose mother had told him to leave home, and another about whom the neighborhood was gossiping. Such conditions lead to resentment and anxiety.

Even a discussion about their emotionally charged affairs would bring on effects that could be measured in the laboratory by means of a tube to the stomach, swallowed balloons, and devices for recording breathing and finger-tip temperature.

Symptoms were most marked during the sleep that followed the occasion for the patient's anger.

When the patient is continuously worried or has protracted though less violent anger, he suffers from a prolonged increase in the stomach acidity.

For the peptic ulcer sufferer, all this pain, hyperacidity and tension could be reduced by anything that would give him relief from the stress at home or at work and by a little more feeling of security.

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Brain Waves and Tantrums

WHEN a child lies or steals or has temper tantrums, it may be because his brain works slowly, Dr. Donald B. Lindsley, of Bradley Home and Brown University, reported. The slowness is in the working of the brain cells; the child is not necessarily slow-witted.

This clue to one of the reasons why children become problems was revealed when Dr. Lindsley and Dr. Katherine K. Cutts compared the brain waves of problem children with those of normal, well-behaved youngsters and with normal adults.

From the brains of a large proportion of the problem children, these investigators were able to pick up very slow electric waves, occurring only about two to five to the second. Such slow waves can be picked up from the brains of normal children, but they occur in only a few individuals. Normal adult college students have them only very rarely.

Other abnormalities of the brain waves were found when the problem children were made to take long deep breaths. This "overbreathing" has been observed to start fits in certain epileptics. In more

than half of the problem children, it induced slow brain waves. This peculiar effect of overbreathing occurred in only 21% of the normal children and 6% of the normal adults.

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MEDICINI

Traces Invasion Route of Infantile Paralysis Virus

Can Travel Only Along Axis Cylinders of Gray Nerve Fibers, Ending in Nose, Tongue, and Stomach Lining

WHEN infantile paralysis invades a human body, success or failure of the virus blitzkrieg hangs on all-important "ifs." A view of how the disease conquers, gained by anatomical study, was reported to the American Congress of Physical Therapy by Dr. John A. Toomey of Cleveland City Hospital.

To produce the disease, the virus must contact gray-fibered nerves which have naked axis cylinders, into which the virus can be absorbed and thus find transportation to its goal—the central nervous system. Gray fibers which the virus can reach for entry would include nerves in the nasal passages and about taste buds of the tongue, and networks of nerves in the stomach tract.

The disease will strike with more force, Dr. Toomey explained, if the absorption of the virus is rapid, if transmission through the body is quick and easy, if the strain of the virus is virulent, if the nerves are not in healthy condition, or if other factors favor the invading virus. If the distance between the virus' point of attack and the central nervous system is too great, the virus may fail, because it may be absorbed, excreted, or destroyed long before reaching the spinal cord, he stated.

Dr. Toomey was a pioneer advocate of the theory that infantile paralysis can enter the body by being swallowed with water. Received skeptically at first, this idea is now commanding respect.

Science News Letter, September 14, 1940

Diathermy Wavelengths

DIATHERMY apparatus used by physicians in giving heat treatments by means of short-wave radio emanations will have their own frequency bands to prevent interference with other radio services, if plans outlined by E. K. Jett, chief engineer of the Federal Communi-

cations Commission, to the Congress are carried out.

Transmissions from electro-medical apparatus have actually been received across the continent and even across oceans, Mr. Jett reported in explaining the interference difficulties caused by diathermy machines. When diathermy interference began to be serious, a number of years ago, the disturbances were at first attributed to stations operated by persons under the jurisdiction of foreign governments. The signals were traced to diathermy machines operated in medical centers and offices of private physicians. One machine was hitched to a telegraph key and signals tapped out in International Morse Code were easily read in Washington, D. C., and Great Lakes, Ill. From 10% to 82% of the channels in use for long distance communication were interfered with at times.

Diathermy apparatus affects radio reception because the machines are essentially radio transmitters, Mr. Jett explained. The radiation that causes interference is not essential for therapeutic purposes and steps are being taken to prevent such radiation. Mr. Jett emphasized that the F.C.C. recognizes the importance of electro-medical apparatus to the medical profession and he assured those present that the government will cooperate fully so that both services may continue without mutual annovance.

At Inter-American Radio Conferences it was agreed that the various American nations should consider limiting diathermy apparatus to two frequencies in harmonic relation above 12 megacycles which will not interfere with existing radio assignments.

Mr. Jett told the medical men interested in the problem that a conference to bring together all the interested parties will be called in the near future.

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Study Weather Effects

F YOUR temper and nerves get more edgy when a storm is approaching, it is probably because the water balance in tissues of your body actually is disturbed due to falling barometric pressure outside.

Advancing this likelihood, Dr. C. A. Mills of the University of Cincinnati College of Medicine advocated that scientists should closely investigate body changes thus involved when stormy weather brews.

Suicides are more apt to occur when a storm center approaches, Mr. Mills stated. Domestic troubles flare up most readily. It is harder to think clearly. Even animals become more inclined to fight, and less reliable.

"With declining outside pressure," he explained, "tissues take up water and swell, much as does a sponge, while with rising pressure they give up water and shrink."

In girth measurements of his own leg just below the knee, he observed changes of half an inch or more with major weather changes, and some people changed several pounds in weight.

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Frostbite Warning

WITH winter around the corner, frostbite hazards and treatment were called to the attention of the Congress by Dr. Frank V. Theis of Chicago.

"Individuals with wet clothing, shoes, or gloves are particularly susceptible to the effect of cold weather," he warned.

Temperatures do not have to dive below freezing to cause frostbite, Dr. Theis explained, citing a golf player and a tunnel worker who suffered gangrene of the toes from exposure to wind and wetness in above-freezing weather. This type of frostbite is termed trench foot.

Dr. Theis urged that unless the exposure to cold has been long and extreme physicians who diagnose frostbite should make sure that the patient is not actually a sufferer from some pre-existing circulatory disease. Hardening of the arteries either the diabetic or the senile form, is frequently overlooked, he has found, and the patient receives unsatisfactory treatment for his case of "frostbite."

Application of heat to an acutely frostbitten hand or foot is particularly injurious, Dr. Theis emphasized. Often, he said, it leads to rapid mummification of the tissues.

Science News Letter, September 14, 1940