

PSYCHOLOGY

Tests Pick Mental Patients Who Will Respond to Insulin

Simple Psychological Measure of Abstract Thinking Proves More Accurate Than Other Methods of Prognosis

SIMPLE psychological tests that will enable physicians to pick out in advance from their mental patients many of the tragic few who cannot respond to the new insulin shock treatment have been found at the New York State Psychiatric Institute.

This announcement, which may in future spare patients and their families unnecessary expense and discomfort as well as the tragedy of hopes raised in vain, was made by Dr. M. Marjorie Bolles, George P. Rosen, and Dr. Carney Landis. (*Psychiatric Quarterly*, October)

Although the tests do not permit perfect prediction of success or failure with the insulin treatment, they do make it possible for the physician to estimate a patient's chances with a very fair degree of accuracy. They are much more accurate than any method of prognosis previously used.

The discoverer of the insulin shock treatment for schizophrenia, Dr. Manfred Sakel, had observed that fairly young persons who had not been ill long would have the best chance for recovery with the new treatment. Experience has shown, however, that both young and old recover and both young and old fail to respond.

In the new experiment here, a man 27 years old who had been mentally deranged for thirteen years, but who made high scores on the tests, got well after the violent shock of the insulin treatment. Yet a young girl of 16 years who had been ill only two years, but who made lower scores, remained unimproved. Unimproved also were two young women who had been ill only one month.

Tests an Index

In general, those patients whose scores on the tests were relatively low did not improve under the treatment; those who did better on the tests than others in the group, showed the most improvement.

The tests used are very easily administered and simply require the patient to sort out certain objects placed before him. Dr. Bolles, working with Dr. K. Goldstein, had previously found that schizophrenic patients differ from nor-

mal individuals in their ability to do such sorting. The disease appears to impair a person's ability to form a new concept or to think abstractly in a way required for sorting or organizing facts or objects.

The schizophrenic cannot readily observe the general category to which several articles belong and finds it difficult to shift his thinking from one aspect of a situation to another. The extent of this impairment in abstract thinking has now been found to be related to the chances the patient has for recovery under the insulin treatment.

So far the tests have been given to only 19 patients who later received the insulin treatment. This number is too small, the investigators warn, to permit wide generalization. The results do, however, "indicate that careful psychological testing before and after insulin is scientifically valuable and may contribute information of prognostic significance."

An investigation of a larger number of cases is now being made.

Science News Letter, November 5, 1938

RADIO

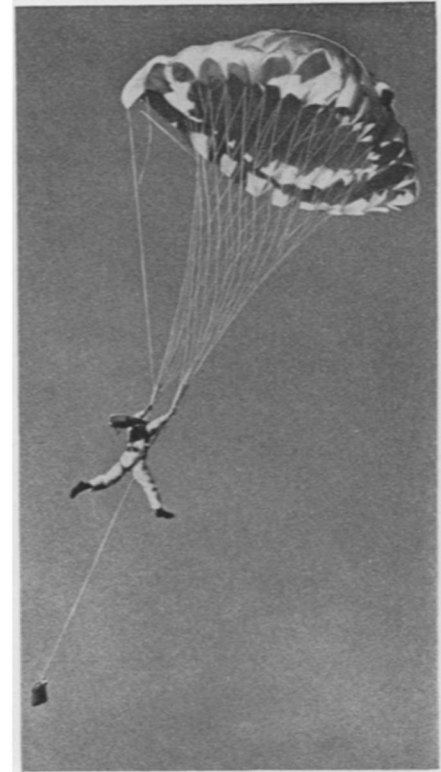
New Ignition Cable Cuts Radio Interference

AN IGNITION cable that cuts the drain on an automobile battery in starting the car by 30 per cent., lowers idling speed, gives higher top speed, longer life for spark plugs and less radio interference has been developed by Dr. Melville A. Peters of the National Bureau of Standards.

The new cable, on the Navy's secret list for three years and used on Naval aircraft, uses seven strands of stainless steel wire instead of many strands of copper wire. Dr. Peters' formula for the new cable was developed mathematically; in technical parlance, it owes its improved features to "low capacitance." It is now available for general auto and aviation use.

Science News Letter, November 5, 1938

The first metal used in electric lamp filaments was platinum.



NO FORGETTING

Kim Scribner, jumper, does not have to remember to pull his ripcord as he drops through space. The parachute opens automatically. By pulling on "steering shrouds" he can also open and close the flaps at the sides of the chute, enabling him to maneuver more easily.

AERONAUTICS

Self-Opening Parachute Is New Safety Invention

See Front Cover

NO PULLING of ripcord is necessary on a new parachute invented by Richard H. Hart of New Orleans. A pocket does the trick. As the jumper falls, the parachute pack swings up over his head and the air rushing past him catches in the pocket, bellows it out, pulls the ripcord automatically to open the parachute.

The parachute also has flaps on each side which make it much more maneuverable than the ordinary type.

The photograph on the cover of this week's SCIENCE NEWS LETTER is especially posed to show how the new parachute would look as the jumper lands. Wearing it is Kim Scribner.

Science News Letter, November 5, 1938

China has five times as many people as South America.

ARCHAEOLOGY

Cancel Plans for Unearthing Cities in the Holy Land

Only Oriental Institute Plans to Go On With Program; One Expedition Head Has Been Killed in Disorders

CIVIL war in Palestine has caused cancellation of plans for Holy Land excavation this year by leading American and European archaeologists, Science Service has learned.

Only the University of Chicago's Oriental Institute, among the larger American archaeological institutions, is sticking by its program. The Institute still hopes to dig beside the palace and gate of Megiddo, the Biblical Armageddon.

Although a pitched battle was reported recently at this traditional site of many battles, Dr. John A. Wilson, the Institute's director, said in Chicago, its Megiddo staff is now preparing publications but expects to return to Palestine before the end of the year.

French, German and British scientists, as well as Americans, are all affected by the turmoil in the small country which has so increasingly yielded its buried evidence of the Biblical era. At the Johns

Hopkins University in Baltimore, Dr. W. F. Albright, Vice President of the American Schools of Oriental Research, summed up a toll list of important expeditions abandoned or deferred:

The British, he says, are not expected at Lachish, where lately they found important writings on potsherds—actual contemporary evidence for the period of Jeremiah. The director of the Lachish expedition, J. L. Starkey, was killed by armed Arabs in ambush, as he rode from Lachish to Jerusalem, last January. Another director was named, but work has been deferred.

In far southern Palestine, where another British expedition led by H. Dunscombe Colt has unearthed churches containing the first documents on papyrus ever found in Palestine, there will be no continuation of the excavations this autumn.

A German expedition which arrived

in Palestine in September expecting to dig at Shechem was unable to start because of armed bands in the district. The archaeologists returned to Germany.

French scientists who have been exploring Ai, which means in Hebrew "the ruin," have been learning more about Joshua's campaigns in that region; but the French have interrupted their digging until times are more favorable.

From Dr. Eliezar L. Sukenik of the Hebrew University in Jerusalem comes word that Jewish archaeological expeditions have suffered as a result of riots. An expedition of Jewish scientists, including members of the Hebrew University, has been making valuable discoveries in Jewish catacombs in Galilee, near Sheikh Abreik, he states. But the uncertain conditions seriously hamper the work.

The American School of Oriental Research in Jerusalem is not even sure whether it can carry out the regular year's work with its students, many of whom take part in excavations in the surrounding country. Prof. Millar Burrows of Yale, President of the several American Schools of Oriental Research, says that plans are going ahead, however, as usual. The director of the school in Jerusalem, Dr. Nelson Glueck, recently reported to Prof. Burrows:

"I guess it is somewhat dangerous in Palestine, but I see no reason to get panicky about it. I can guarantee the members of the school all the archaeological experience they can stand in Transjordan. I hope to continue the excavations at Tell el-Kheleifeh in the spring at the latest and perhaps for a short season in November and December."

Prof. Burrows points out that Dr. Glueck's excavations and important archaeological surveys are across the River Jordan, where the situation is different from that in Western Palestine. Tell el-Kheleifeh, where Dr. Glueck hopes to dig, is the site of King Solomon's seaport at the head of the Red Sea, where last season Dr. Glueck unearthed Solomon's copper smelting and refining plant, and other ruins of the historic port.

Regarding Palestine's archaeological prospects, Prof. Burrows says:

"Certainly there will be at most a great deal less work than there would be under peaceful conditions. When travel is unsafe and it is as difficult, as it is now, to get labor and supplies, very few organizations can be expected to carry on active work."

Science News Letter, November 5, 1938



READY FOR USE

Here the self-opening parachute is packed on Kim Scribner's back ready for the jump.