

PSYCHOLOGY

Views, Influence Linked

► A PERSON'S ATTITUDES toward such questions as birth control, the death penalty or religion can help reveal what chances he takes and how much he influences others.

Dr. Yeshayahu Rim of Technion-Israel Institute of Technology, Haifa, Israel, classified 58 persons as radical, conservative, tough-minded or tender-minded in their social views. These persons, who ranged in age from 19 to 47, solved a series of problems to measure just what risks they would take in given situations.

They were asked to find answers to these problems as a group. After group discussion, they put down their final answer to each problem.

Radicals were those believing that going to church on Sunday is old-fashioned and private property should be abolished. Conservatives were those believing that religious education is a must and that birth control be made illegal. Those believing in, among other things, the death penalty and easier divorce laws were classed as tough-minded. Return to religion, abolishing the death penalty and making birth control illegal were classed as views of the tender-minded.

Those rated as radicals and tender-minded had initial decisions nearest the group decision. Consequently they are most likely to influence other group members, Dr. Rim found.

The radicals and tender-minded, however, were those most easily swayed by the group.

Persons holding extreme views, either conservative or radical, were more cautious when making initial decisions than those with intermediate beliefs, Dr. Rim pointed out. Unlike the radicals, the conservatives retained their earlier views even after group discussion.

The tough-minded took the most chances when they made their first decisions on the risk problems, but after discussing the problems with the group, they became cautious.

Dr. Rim's conclusions support other recent studies which indicated that group decisions are often more risky than those of the individual. He reported his findings in *Human Relations*, 17:259, 1964.

• Science News Letter, 86:198 Sept. 26, 1964

PSYCHOLOGY

Brain Aroused by Silence

► RESEARCH HAS INDICATED why sudden silence in a noisy environment awakens us and why we sometimes may look at something without seeing it.

These two different but related phenomena may be the work of a part of the brain that acts at times like a vigilant sentinel and at others like an overzealous secretary.

Known as the reticular formation, this sentinel-secretary appears to monitor all incoming information in wakefulness and sleep, arousing the brain when a change in information may demand immediate attention.

Experiments at the University of California, Los Angeles, have documented how such events in the brain take place.

Conducting the research were Drs. Manfred Haider, Paul Spong, Norman M. Weinberger and Donald B. Lindsley of the departments of psychology and physiology.

Cats were conditioned to sleep through a continuous noise. It was found that three-second interruptions of the noise awakened and aroused the cats. This could be seen in changes in their brain waves which are characteristic of arousal.

A three-second burst of the same noise was used in a quiet atmosphere. Brain wave changes, signaling arousal, were virtually identical with those produced by the sudden silence in the noisy environment.

When we are awake, doing a routine task over an extended period, the zealous secretary may take over so that it begins to screen out routine, repetitive sensory information.

This was demonstrated in another experiment. People were asked to press a key in response to dim flashes interspersed among more numerous brighter flashes which required no response. This problem lasted 80 to 100 minutes.

Brain waves showed a relaxation of vigilance. As the people became less efficient

PSYCHIATRY

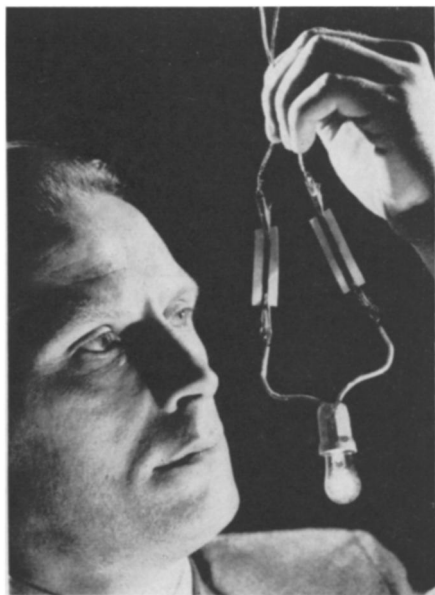
More Work, Less Play Helps Mental Patients

► THE BEST PRESCRIPTION for mental patients is "more work, less play," says a psychiatric research.

"Even short-term work therapy acts as a 'bridge' by which patients may return to the community as contributing members of society, with an increased feeling of 'belonging,'" says Dr. Alvin F. Poussaint of the Neuropsychiatric Institute of the University of California at Los Angeles.

Although occupational therapy is an important part of most short-term community hospitals it is still "play" and might not provide the status and sense of identity that actual work may. Most work programs in state hospitals are for long-term patients, he said.

• Science News Letter, 86:198 Sept. 26, 1964



General Electric

PLASTIC CONDUCTS ELECTRICITY—New polymers through which electricity can flow are the thin black strips "painted" on ordinary white plastic insulators. They are demonstrated by Dr. John H. Lupinski, GE Research Laboratory scientist, as they conduct current to light a small bulb.

in responding to the dim flashes, their brain also became less aware of the bright flashes.

Thus man's attention span is perhaps largely regulated by the reticular formation.

When a stimulating assignment is encountered, it is the reticular formation that arouses interest and screens our routine sensory information to permit concentration on the assignment.

But if the task becomes routine and attention wanders, the same source, the reticular formation, is also to blame.

• Science News Letter, 86:198 Sept. 26, 1964

EDUCATION

Conniving Students Win Higher College Grades

► COLLEGE STUDENTS who use "conniving, manipulating strategies" on their professors receive better grades than students of comparable ability who do not, a psychologist told the American Psychological Association meeting in Los Angeles.

Dr. Jerome E. Singer of Pennsylvania State University said three separate studies indicated that this conniving attitude is more apt to occur in males than females. Male students who had older brothers and sisters were found to have the best ability for manipulative strategies, he said.

The three studies, made on college freshmen, surveyed grades, entrance examination scores and scores on a test of Machiavellianism—a test designed to measure attitudes of cynicism and machination. Machiavelli, a 16th century Florentine, wrote "The Prince," urging that a ruler use any means, however unscrupulous, to maintain power over his subjects.

"The results imply that the poor college professor is a rather put-upon creature, hoodwinked by . . . students as he goes about his academic and personal responsibilities," Dr. Singer said.

• Science News Letter, 86:198 Sept. 26, 1964