

PSYCHOLOGY

Desk-Pounding Useless

A boss who habitually shouts at employees for mistakes defeats his own purpose by making the worker eventually immune to his complaints—By Walter Wingo

► **THE BOSS** who habitually pounds his desk and shouts at employees for their goofs unwittingly is encouraging still more mistakes by his workers, a human factors expert has concluded.

The boss, instead, should be objective and look for underlying reasons for human errors in his office or factory, suggested Dr. Alan D. Swain, an associate professor in psychology at the University of New Mexico, Albuquerque.

Dr. Swain, who is also a member of the reliability department of Sandia Corporation, Albuquerque, presented his views at the three-day National Symposium on Reliability and Quality Control in Washington, D. C.

He said human factors specialists often hear the remarks, "If they would just train people properly . . ." or "If people would do what they are supposed to do, there wouldn't be any problems."

"Wishful thinking will not change the law of probability," Dr. Swain commented. "The desire to blame production workers, inspectors and equipment users for all errors, makes it difficult to view systematically the problem of human errors and how to reduce them.

"When we think about changing people, we often are attacking symptoms rather than causes."

He said attempts to retrain, cajole or frighten workers into better performances usually get only relatively minor and short-lasting results.

Only when motivation or training for the job are very poor, he said, can these efforts produce major improvements in workmanship and therefore decreases in production errors.

Continued harping by bosses eventually touches off "a basic psychological mechanism" in workers, he said, making them as unconscious of the boss' complaints as they are of the feel of clothing on their bodies.

"Blame and castigation for human errors in a production system or in an operational use situation only obscure a systematic approach to reducing errors," Dr. Swain added.

He urged bosses to have less concern about who makes errors and more interest in what the probability is that the same errors will pop up again.

In dull, repetitious jobs, he said, more errors occur if the worker is required to make judgments or rely on his memory, especially his short-term memory.

One explanation for this is that a dull task can be acceptable to persons of average or lower intelligence as long as it does not interfere with their daydreaming about matters not related to the job.

"The moral is simple," Dr. Swain said. "In a thinking job we have a right to expect judgment and memory; but we are not realistic to expect these qualities on a dull, dreary job. We must design for man as we know him."

• Science News Letter, 85:36 Jan. 18, 1964

SURGERY

Brain Surgery for Pain

► **HOPE FOR RELIEVING** unbearable pain in seriously ill patients through brain surgery was reported following an autopsy on a man who had never felt pain.

Dr. Kenneth R. Magee of the University of Michigan Medical Center, Ann Arbor, said further research still is needed to prove his growing belief that an abnormal change, or lesion, in the frontal lobes of the brain causes insensitivity to pain.

Dr. Magee suspects the lesion is similar to that found in the brain of a 58-year-old insurance salesman who died apparently from a heart attack. In life, the man felt no pain when stuck with pins, cut, burned, thumped or squeezed.

Frontal lobotomy operations on mental patients have become unpopular because they destroy a large part of the brain with further deterioration in personality.

But if indifference to pain could be brought about by surgery that did not significantly alter the personality, Dr. Magee believes "the way would be paved for

reproduction of the lesion by stereotactic and other surgical methods, and the problem of chronic intractable pain could conceivably be solved."

The first complete autopsy of the nervous system on an individual who felt no pain was done in 1960, but no abnormality was found in structures that are related to transmission of painful impulses.

Dr. Magee, however, said that although he considered his findings negative also, he did find a decreased number of myelinated fibers (sheaths that surround nerves) in tissues thought to connect the frontal lobes.

The danger of feeling no pain is well known. Such individuals can suffer mutilating injuries because they sense no danger warnings felt by persons who suffer painful sensations.

Dr. Magee's findings on congenital indifference to pain were reported in the Archives of Neurology, 9:635, 1963.

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