

PSYCHOLOGY

Weigh Job Satisfaction

The many factors that make for "job satisfaction" need further study. Psychologists have been challenged to find a good way to measure job satisfaction.

► TENS OF THOUSANDS of dollars are being spent by industry and business on surveys of "job satisfaction" of employees but it is doubtful whether any ten experts would agree on a specific definition of "satisfaction."

There is no good way to measure it at present, but psychologists were challenged to solve this problem as they have solved the problem of measuring aptitudes and interests.

Dr. Edward K. Strong Jr. of Stanford University issued this challenge to colleagues in the Walter Van Dyke Bingham Memorial Lecture at the University of Minnesota. The lecture is one of a series established in 1954 on "Discovery of the Talented."

Satisfaction is defined as "fulfillment of a need or desire, a pleasant feeling or contentment, a relatively quiescent condition," thus emphasizing arrival at a goal, Dr. Strong said.

But satisfaction occurs not merely when the goal is reached but also long before. "Anticipation of one's date next Friday night is often much more exciting than the actuality."

It is not possible, Dr. Strong pointed out, to measure satisfaction or dissatisfaction with past events with any accuracy, and even if they could be measured, it would be of little value.

Suppose, for example, a violent argument arises in the machine shop over how

a job should be done. The man who wins feels satisfied, the other dissatisfied. If, then, the incident is forgotten the next day and there is no bad feeling on either side, then there is no existing satisfaction or dissatisfaction and no point in trying to measure it. If, however, the loser is still disgruntled, then this may have a bearing on his overall satisfaction-dissatisfaction.

In connection with satisfaction with a goal not yet attained, it is the difference between today's satisfactions and those expected in the future that is important rather than either, or both, in themselves.

A man's satisfaction depends not only on what he wants and whether he has it now, but also on his idea of his chances of getting it in the future.

With many goals, there is a cycle from dissatisfaction to satisfaction, repeated over and over. A man may be dissatisfied with his salary, have anticipated satisfaction when the grapevine reports there will be raises, satisfaction when the increase is received, then little thought on the subject, gradually changing again to dissatisfaction.

The Bingham Lecture series honors the late Dr. Walter Van Dyke Bingham, a psychologist who pioneered in the recognition and measurement of various kinds of talent, particularly in the scientific and technical fields. It was established by Dr. Bingham's widow, Millicent Todd Bingham.

Science News Letter, May 31, 1958

PUBLIC HEALTH

Asian Flu Here in 1889

► A WAVE of Asian influenza swept the United States almost 70 years ago.

This finding might result in an all-purpose vaccine that will eliminate future epidemics of the disease, Dr. Fred M. Davenport of the University of Michigan Medical Center, Ann Arbor, Mich., told the Federation of American Societies for Experimental Biology meeting in Philadelphia.

According to Dr. Davenport, the number of influenza viruses that attack man is not infinite, but limited to four families in number. They fall under Class A and are:

1. Swine-like influenza virus prevalent during the epidemic of 1918.
2. Type A, found during 1925-1943.
3. Type A Prime prevalent from 1947-1957.
4. Asian influenza now attacking man.

Anyone who had suffered an attack of influenza caused by any virus of the four families would have identifiable antibodies in their blood streams. Tests of 80-year-old patients at the University of Michigan Hospital made last fall showed Asian influenza antibodies were present.

Finding the Asian influenza antibodies in these elderly patients has led Dr. Davenport to conclude that they suffered the influenza attack during an outbreak in 1889-1890. Further, it is evidence that a complete cycle has occurred.

Similar reports of Asian influenza antibodies in older persons attributable to an 1889-1890 epidemic have been made by scientists in The Netherlands and India.

If the cycle theory of influenza is valid, scientists may be able to perfect a multiple vaccine effective against all four families and "effective at all times."

Science News Letter, May 31, 1958

PSYCHOLOGY

Find Out What Tattooed Man Is Really Like

► A MAN'S DECISION to be tattooed has nothing to do with whether or not he is a sailor, his educational level, or his being drunk at the time.

This was learned when a team of doctors

at the University of Oklahoma School of Medicine, Oklahoma City, attempted to find out what the tattooed man is really like. They wanted to know whether the average doctor's picture of him as an ex-sailor who was tattooed while drunk, or the virile character played up in cigarette advertisements is nearer to the truth.

After individual interviews of 138 men at the Oklahoma City Veterans' Administration Hospital, of whom 65 had one or more tattoos, the doctors decided that the usual idea of the tattooed man is not necessarily borne out by the facts.

However, the tattooed man does differ from other men in a number of ways. He is more likely to have been divorced and the son of divorced parents. He is more of a rebel, has more trouble with authority, is more likely to have been in jail. Tests indicate that he has a greater tendency to have a psychopathic personality and scores as more masculine.

The tattooed man is no more likely to be on the psychiatric ward than elsewhere in the hospital.

Drs. Joe Yamamoto, William Seeman and Boyd K. Lester, all of the Oklahoma School of Medicine, made the study.

Science News Letter, May 31, 1958

BIOCHEMISTRY

Cell Nucleus May Control Synthesis of Protein

► THE NUCLEUS of living cells may indirectly control protein synthesis, research at the University of California at Los Angeles has suggested.

Studies by Dr. David Prescott support the hypothesis the nucleus may impart genetic information on protein synthesis to the cell cytoplasm, where the synthesis occurs, through a molecular messenger—RNA or ribonucleic acid.

When the nucleus is removed from the cell, the cell may live for some time. But it stops growing, presumably because protein synthesis is stopped in the absence of RNA from the nucleus, Dr. Prescott said.

The UCLA investigator said there was some RNA synthesized in the enucleated cell. But it is a different type of RNA, apparently only an energy source stored in the cytoplasm and probably not specifically involved in protein synthesis.

Such basic information is important in an understanding of how the normal cell works, he pointed out.

"Until we can define the processes of normal cell growth, we cannot hope to understand abnormal growth such as that manifested in cancer."

The RNA role in protein synthesis was traced by means of radioactive building blocks of RNA.

Amoebae were placed on slides and covered with sensitive film. Radioactivity, which becomes incorporated in the RNA, exposed the film, in effect producing X-ray-like photos, or autoradiographs, of the cell nucleus initially and later of the "hot" RNA which the nucleus had sent to the cytoplasm.

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