

The old college try falls short

In general, people are quite compliant and their behavior is easily changed by social pressures. Their self-esteem is fragile and their attitudes, which they are often out of touch with, have only a minor effect on their behavior. Also of little importance are personality dispositions, material self-interest, codes of conduct and thinking clouded by irrational emotions.

That, at any rate, is the picture of humanity presented by much published research in social psychology over the past 25 years, says psychologist David O. Sears of the University of California at Los Angeles. "To caricature the point, contemporary social psychology . . . presents the human race as composed of lone, bland, compliant wimps who specialize in paper-and-pencil tests," contends Sears in the September *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY*. The person of strong passions and prejudices who belongs to tightly knit family and ethnic groups and who changes and matures with age gets short shrift in this profile, he asserts.

The problem, according to Sears, is that research has concentrated on college students tested in laboratories for rational, deliberate types of thinking and behavior. In a content analysis of articles in three leading social psychology journals in 1980 and 1985, Sears found that about three-quarters of the reports fit into that mold. Research shows that college students, compared with older adults, have less-formulated attitudes and senses of self, stronger tendencies to comply with authority and more unstable peer relationships, says Sears; these differences are often amplified in the laboratory.

A better approach, he suggests, would be to broaden the college student data base with studies of a variety of adult groups in their natural surroundings.

Bad day at the races for IQ

A high IQ is no guarantee of horse sense. According to two psychologists, the sophisticated reasoning used by experienced handicappers to pick winning horses at the racetrack is not linked to the handicappers' IQs, but rather to their ability to analyze numerous racehorse characteristics. Thus, say Stephen J. Ceci of Cornell University in Ithaca, N.Y., and Jeffrey K. Liker of the University of Michigan in Ann Arbor, IQ tests do not measure the ability to make real-world decisions based on complex, interrelated sets of information.

At a Delaware harness racetrack, the researchers recruited 30 middle-aged and older men who were avid racetrack patrons. They had all purchased the "early form," a list of data on horses that comes out the day before a race, and scored high on a test of racing knowledge. Fourteen men were rated as "experts" based on their ability to predict post-time odds from factual information about horses. All subjects then placed odds on 50 hypothetical races in which combinations of variables, such as drivers, track conditions and horse breeding, were manipulated. Probable winners of each race were established through interviews with a professional odds-setter.

IQ was unrelated to the performance of experts and nonexperts, the researchers report in the September *JOURNAL OF EXPERIMENTAL PSYCHOLOGY: GENERAL*, but experts were found to rely on highly complex strategies to pick a winner. For example, experts used as many as seven variables to predict the speed with which a horse could run the final quarter-mile of a race. In interviews conducted during the handicapping session, 12 of 14 experts described a complex reasoning process like that of the professional odds-maker, whereas five of the nonexperts described similarly complex reasoning.

The results run counter to the view that IQ tests tap a single, underlying intellectual force that permeates all types of thinking, say the researchers. It is more likely, they hold, that some types of intelligence elude the grasp of IQ scores.

Coffee: No more lumps?

Contrary to common belief, caffeine may not be the culprit in fibrocystic breast condition. Two researchers at the Good Samaritan Hospital and Medical Center in Portland, Ore., reviewed 11 recent studies in the September *ARCHIVES OF INTERNAL MEDICINE* and cited faulty research methodology that clouds the association between breast lumpiness and caffeine consumption.

Lack of control groups, lack of random samplings and insufficiently "blind" evaluations of breast lumps in the women studied, the physicians report, result in contradictory findings and weak associations between caffeine and the condition. They conclude that "there is little evidence to support the association" between consuming caffeine and developing non-malignant lumps in the breast.

New probe for the heart

Though commonly used to detect heart disease, an electrocardiogram or ECG misses the signs of disease 39 percent of the time and falsely indicates disease 24 percent of the time, according to Donald Weiner of Boston University. Weiner has developed a new device measuring the heart's electromagnetic activity, called a cardiokymograph or CKG, that he says can reduce those error rates to 8 percent and 12 percent, respectively, when used with an ECG.

Weiner, who tested the device on 327 patients, says the CKG's greater sensitivity can reduce the need for such costly, invasive and risky probes as thallium scans and angiograms, which are often used to follow up problems indicated by an abnormal ECG.

Placed on a patient's chest before and after a stress test on a treadmill, the CKG emits an electromagnetic field that penetrates the chest. Although soft tissue does not affect the field, motion does: When the heart contracts, the motion sends a blip through the magnetic field to the CKG's waveform recorder. Abnormal motion, such as that caused by a blockage in the heart's blood supply, appears as abnormal blips after the stress test.

"The CKG seems to add important diagnostic information to the ECG information," says Weiner.

Infant death and poverty

Infant mortality in the United States is higher than in 16 other developed nations, with 11.5 babies out of 1,000 dying before age 1. A report based on international figures and released last week by the Population Reference Bureau (PRB) in Washington, D.C., ranks the United States in 17th place among nations with the lowest infant mortality rates; Finland, Japan and Sweden led the ranking with rates of less than 7 per 1,000.

Especially in countries with a low infant mortality rate, the statistics reflect the incidence of genetic birth defects leading to death. In the United States, say some researchers, the statistics also provide a social indicator. Says Brian McCarthy of the Centers for Disease Control in Atlanta, "Infant mortality rate is affected by social, medical and environmental policies."

The U.S. statistics show that 19.6 black babies per 1,000 die before age 1, compared with white babies at 10.1 per 1,000. "The real cause is probably poverty," says PRB's Carl Haub. "That's represented in the rates for low-birthweight babies among blacks."

Infant mortality closely correlates to low birthweight — which, Haub says, results from a variety of factors, including poor diet and inadequate medical care. McCarthy blames the disproportionately low socioeconomic status of U.S. blacks for their high infant mortality. In comparison, he says, "whites are five times more likely [than blacks] to fall into the socioeconomic profile of lowest infant mortality rate."