behavioral sciences

PSYCHOLOGY

Delaying gratification

Given a choice of receiving a small gift immediately or a larger one three weeks later, black ninth-grade students were less likely to delay reward than whites, reports Dr. Bonnie Strickland of Emory University in Atlanta. Her work, with graduate students Adrian Zytkoskee and James Watson, will be published in an upcoming issue of DEVELOPMENTAL PSYCHOLOGY.

The researchers also found that the black students tended to locate the most powerful influences on their future in external sources, rather than within themselves. The two factors are connected, says Dr. Strickland, because belief in external control would mean that the student would have to trust the man who made the offer more. The offers were made by Zytkoskee and Watson, who are both white.

Thus the propensity to delay gratification has two aspects—the ability to do so, and trust in the man who makes the offer.

The trust factor may be highly important, says Dr. Strickland. Further experiments, still going on, indicate that black students are much more likely to delay gratification of an offer made by a black experimenter than one made by a white.

TESTING

Chauvinism and surgery

"A father and son were in an auto wreck. The father was killed and the son was rushed to a hospital for emergency surgery. The attending surgeon looked at the boy and said, 'I can't operate; that's my son.'

This story, told at the recent American Political Science Association convention in Los Angeles, puzzled many persons who were asked to explain how such a sequence of events could occur naturally—including, reports the Sept. 28 Behavior Today, the two candidates for APSA presidency, Drs. Hans Morgenthau and Heinz Eulau.

A highly informal survey by SCIENCE News also revealed that, without the hint that the story was constructed by the APSA Women's Caucus, few persons would realize that the surgeon was the boy's mother. Equally tarred by the brush of male chauvinism were men and women, liberals and conservatives alike.

PERSONALITY

Achievement and body type

Fat people are supposedly happy, thin ones nervous. Athletes are aggressive. Most people agree that physical shape and personality are related in some way, but it has been difficult to pin down these gut feelings in a systematic way.

The classic work in this area was laid down by William Sheldon, who divided body types into ectomorphs, mesomorphs and endomorphs—the extreme examples of thin, muscular and fat persons. But his attempts to relate the types to personality were generally unsuccessful.

New experiments with more rigorous controls and better-defined variables have now shown some specific relationships, report Drs. Juan B. Cortes of Georgetown University and Florence M. Gatti of Harvard in the October Psychology Today.

They found a significant relationship between body type and one of the most reliable measurements of personality factors, the need or drive for achievement. In testing 100 delinquent and 100 nondelinquent boys in their late teens, they found that the need for achievement was significantly stronger among mesomorphs than among the other types, while ectomorphs were significantly lower in need for achievement.

They also found that in self-description tests of groups of college students and felons, distinct temperament characteristics were related to body types. Endomorphs tended to be socializing, mesomorphs aggressive and ectomorphs withdrawn.

MARIJUANA

Inconsistent performance

Past marijuana research indicates that there is no significant impairment of subjects' performance in simple tasks under moderate highs. Recent research, however, indicates that when subjects participate in tasks that require complex discriminations, performance is significantly impaired.

Dr. Lincoln Clark of the University of Utah says that marijuana affects mental processes which involve rapid decision-making and short-term memory. A dosa of 0.03 cubic centimeters per pound of THC (the intoxicating ingredient of marijuana) was orally administered to 18 subjects of above average I.Q. Subjects then participated in a reaction-time experiment involving a choice of possible actions. While the subjects sometimes performed at the efficiency level established under control conditions, there was a marked inconsistency in their performance.

Dr. Clark reports in the September GENERAL PSYCHIATRY that subjects' ability to make time estimations was also disrupted. They continually overestimated their experience of time. They also showed poor comprehension on reading tests when compared with their normal reading ability.

ARCHAEOLOGY

Discovery of Phoenician city

Although ruins of Phoenician colonies throughout the Mediterranean are familiar to archaeologists, none of the Phoenician homeland cities have been unearthed. Dr. James Pritchard of the University of Pennsylvania reports that he has discovered this missing element in the archaeological picture of the eastern Mediterranean.

Sarepta, an Iron Age city (1200 to 600 B.C.), which stood between Tyre and Sidon on the coast of South Lebanon, was unearthed. The city will provide a large body of evidence to aid in understanding the origins of the Phoenician culture. As seafaring people, the Phoenicians traded throughout the Mediterranean, and undoubtedly the alphabet is only one of many major Phoenician contributions to the West.

The excavation holds household wares such as bowls, storage jars, broken plates, oil lamps and tools of bronze and iron. Clay ovens and grinding stones of black basalt imply that bread was part of the Phoenician diet.

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