

### Elementary 'psychological accounting'

Imagine you are going to a play where admission is \$10 per ticket. As you enter the theater you discover you have lost a \$10 bill. Would you still pay \$10 for a ticket to the play?

Now imagine you go to the play after having paid the \$10 admission fee, but as you enter the theater you discover that the ticket is lost. The seat was unmarked and the ticket cannot be recovered. Would you pay \$10 for another ticket?

In 1981, psychologists Amos Tversky of Stanford University and Daniel Kahneman of the University of British Columbia in Vancouver posed these questions to adult subjects and found that a new ticket is more likely to be purchased when money is lost rather than when an original ticket is lost. They theorized that the purchase of a new ticket is charged to a "psychological account." If a previous ticket is lost, the total cost of admission is \$20, enough to dissuade a majority of people from buying a second ticket. The loss of money, however, is not specifically linked to the ticket price and has less effect on the decision.

Now, it appears that elementary-school children engage in a similar decision-making process by grade 6, according to a report in the December 1986 *PERCEPTUAL AND MOTOR SKILLS*. Helene J. Krouse of Boston College School of Nursing presented four age-appropriate problems regarding money to 90 youngsters, 30 each from grades 1, 3 and 6. For instance, children were given \$2 and told to pretend that they were going to buy a \$1 ice cream cone. If they lost a dollar at the store, would they buy ice cream with the other? Or, if they bought the cone and then dropped it on the ground, would they use the second dollar to buy another ice cream cone?

Most sixth graders answered yes to the first question and no to the second; children in the other two grades did not show this decision-making pattern.

A long-term study of children from grades 1 through 6 would help to illuminate the factors contributing to the development of "psychological accounting," says Krouse.

### AIDS: Treating it, fearing it

Despite rendering good care to patients with AIDS, many nurses at a large hospital just north of New York City report considerable emotional concerns and fears about their work with these patients. In fact, according to psychiatrist Michael Blumenfield and his colleagues of Westchester County Medical Center in Valhalla, N.Y., in some situations, handpicked personnel may need to be assigned to special units for AIDS patients, since some nurses might refuse to treat them on a regular basis (the respondents in this study were not required to work with AIDS victims on a regular basis). In addition, they say that continuing medical education about AIDS should be provided to hospital staff members.

Blumenfield and his co-workers obtained responses to a 10-question survey from 191 nurses at the Westchester County hospital in January 1984. More than 200 AIDS patients have been treated there between 1981 and 1985. One-half of the nurses believed that AIDS can be transmitted to hospital personnel because of contact with patients despite precautions, report the investigators in the January *GENERAL HOSPITAL PSYCHIATRY*. Furthermore, 85 percent believed that pregnant nurses should not care for AIDS patients, and 39 percent indicated that they would ask for a transfer if they had to care for AIDS patients on a regular basis. One-half of the nurses also said they were more frightened caring for an AIDS patient than for a patient with infectious hepatitis, a more contagious but less serious disease.

It is not clear if these results apply to all nurses who treat AIDS patients, say the researchers, but the reported emotional concerns are important in light of the increasing number of individuals with AIDS seen in general hospitals.

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Joanne Silberner reports from Monterey, Calif., at the American Heart Association's Science Writers Forum

### Lowering pressure as a fountain of youth?

High blood pressure hastens the rate at which blood vessels age, says Aram V. Chobanian of Boston University. His studies on rats indicate that lowering blood pressure can significantly slow vessel aging, both in rats with high blood pressure and in rats with normal pressures.

Blood vessel walls of young rats that are genetically hypertensive or have chemically induced hypertension show the same structural features as vessels from aged rats, Chobanian and his colleagues have found. In two sets of experiments, they used drugs to keep pressure down from infancy in rats that otherwise would have had high pressure or high-normal pressure. In both groups "the vessels stayed almost like young vessels," says Chobanian.

But the blood pressure lowering has to start early. When the researchers delayed drug treatment until genetically hypertensive rats were about a quarter of the way through their life cycles, the blood vessels still deteriorated.

While these data indicate that lowering normal blood pressure in rats slows the vessel aging process, they are not strong enough to suggest that people with normal blood pressure start taking pressure-lowering drugs as a ticket to eternal life. "You may prevent vascular aging—and I don't know whether you can—but you can introduce some other problems that could be a little more severe," he says. Among the drugs' possible side effects: lethargy, fatigue and sexual dysfunction.

### A fish (oil) story?

While epidemiologic research suggests that diets high in fish oil protect against heart disease, researchers have not yet determined how best to incorporate the substance into a Western diet, says Garret A. FitzGerald of Vanderbilt University in Nashville. Until that time, he says, eating more fish is fine but taking fish oil supplements may not be such a good idea.

The original studies linking fish oil consumption to a lower risk of heart disease were done more than a decade ago by Danish researchers, who found that Eskimos had a far lower incidence of heart disease than Danes, but that the Eskimos' risk went up if they moved to Denmark. On the basis of their knowledge of metabolic pathways involving the conversion of fats to substances that either harm or help the cardiovascular system, the Danes concluded that a particular type of oil in the Eskimo diet could be the protective factor. They sent samples of Eskimo food, including seal meat and fish, back to Denmark for analysis. By determining how much oil was in the samples, they were able to estimate the amount in the average Eskimo diet. But, says FitzGerald, they had neglected to freeze the samples before shipping. Years later, they repeated the study but froze the samples for shipping and came up with an average fish oil consumption about three times their original estimates.

Companies marketing fish oil have based the amount of active ingredients in their capsules on the original study, FitzGerald says. Even if the epidemiologic evidence were strong enough to recommend fish oil supplementation—and FitzGerald says that on its own, it isn't—he estimates that according to the later study, people would have to swallow an average of 50 capsules a day. This, says FitzGerald, "defies logic and the gastrointestinal properties of most volunteers."

While advances are being made in understanding the active ingredients in fish oil (SN: 5/11/85, p.295; 10/19/85, p.252), the value of supplements in preventing cardiovascular disease has not yet been proved. There have been at least two cases of people on the capsules suffering a precipitous decline in the level of platelets, a blood component involved in clotting. This side effect, says FitzGerald, "is rare but disturbing."

"If there is a beneficial effect, then it's likely to be a modest one compared to risk factors we're familiar with," he says.

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