

# behavioral sciences

## Growing out of sex roles

"Boys are girl destroyers, dog's best friends, hardnosed tough creatures, tree climbers, bone breakers, athletes all around, man helpers, lizard collectors, earth diggers, crab fish catchers. . . ." This is the response of a nine-year-old boy who was asked by Nancy Larrick and Eve Marrian of Lehigh University in Bethlehem, Pa., to express his feelings about his sex role. The researchers asked school children across the country the same question and with more than 2,500 responses they report that the traditional male chauvinist attitude is common among young boys. Many young girls, they found, also celebrate traditional activities, but some are disgruntled by restrictions they see in their roles. A ten-year-old girl wrote, "Girls are 2th (sic) class citizens with a capital 2." Among the young boys questioned, none wished for sex reversal, though several girls indicated that they did.

By the time young people reach their teens, however, they begin to reflect the social pressure of sex roles. Responses from older children indicate that "boys in particular . . . found their sex roles confining and expressed a desire to be allowed to be gentle and sensitive. . . . Both sexes joined in expressing loneliness, a fear of a world full of war and a need to express their own individually."

## Mental/dental disorders

The gnashing of teeth has always been known as a sign of stress and tension. Dentists are now finding that stress and teeth gnashing can lead to oral disorders. Recent evidence, for instance, indicates that trench mouth—previously regarded as infectious—may actually be a reaction to stress suffered by entire groups, rather than poor sanitation or the sharing of facilities.

Charles I. Cohen, a New York periodontist, says that different ways of reacting to stress may result in different psychosomatic results. One patient, he says, may contact gastric ulcers while another gets bleeding gums. He has found, for instance, that 50 percent of his patients suffering from periodontitis had psychiatric histories and seemed to fall into definite personality types. Cohen says, "it is not the least surprising that the mouth be a prime site for manifestation of psychosomatic disorders. The mouth is the organ of the infant's first awareness, its satisfactions, frustrations and hostilities. It remains so for life as we eat, kiss, smoke, chew, bite, smile, grimace, snarl and speak."

## Justice is not blind to beauty

Defense lawyers would do well to make their clients look as attractive as possible. Jurors don't wear blindfolds. Richard A. Kulka and Joan B. Kessler of the University of Michigan conducted a study which indicates that physical attractiveness "appears to have a significant input on juror decisions."

Students were asked to act as jurors in mock automobile negligence trials. As they listened to tapes of the trials, photographs of a defendant and plaintiff were shown. Some jurors saw an attractive defendant and an unattractive plaintiff. For the same case, others saw an unattractive defendant and an attractive plaintiff. Only 17 percent of the jurors issued a favorable verdict to the unattractive plaintiff. By contrast, 49 percent favored an attractive plaintiff. Average damages awarded to the attractive plaintiff was \$10,000. Unattractive plaintiffs were awarded only an average of \$5,600.

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# biomedical sciences

## Conscious control over high blood pressure

Deaths from heart attacks are proportional to blood pressure increases. There are many drugs to lower blood pressure, but they carry serious risks, like deafness, glaucoma, suicidal depression. So it would be great if patients could lower their blood pressure by means other than drugs.

In 1969 a team of investigators noted that yoga exercises could help reduce high blood pressure. So C. H. Patel, a physician in Croydon, England, decided to try yoga and biofeedback measurement on 20 of his hypertensive patients.

The patients came to see Patel three times a week for three months. They lay on a couch with legs apart, arms by the side, hands still, fingers flexed. A relaxometer, hooked up to them, transmitted their sympathetic nerve activity into radio signals. Sympathetic nerves are believed to be intermediary triggers of high blood pressure. If the radio signals increased in pitch, they indicated that patients were excited. If the signals decreased in pitch, they indicated the patients were relaxing. As the patients practiced yoga exercises to relax themselves physically and mentally, they also made a conscious attempt to reduce the pitch of the signals emanating from their bodies.

At the end of the study, five patients could stop taking antihypertensive drugs altogether, seven were able to reduce drug use 33 to 60 percent. Blood pressure control was better in four other patients, while four patients did not respond. "The results," Patel concludes in the Nov. 10 LANCET, "promise a useful new approach to the treatment of hypertension."

## New cold drug

The number and diversity of cold viruses virtually preclude the control of colds by conventional vaccines. So probably the only hope for an effective cold treatment lies in the development of broad-acting viral drugs.

A drug that strikes 25 different cold viruses in human lung cells is reported in the Nov. 16 NATURE by R. A. Bucknall and his colleagues at Imperial Chemical Industries in England. A derivative of the organic compound guanidine, the drug does not destroy cold viruses nor keep them from entering host cells. Rather it progressively inhibits the viruses' synthesis of more viruses in the infected cells.

## Valkyries: Onward and upward

The superiority of men over women in sports is due more "to social or cultural restrictions imposed on women, rather than to true biological differences in performance potential between the two sexes," J. H. Wilmore of the University of California at Davis declared this week at the American Medical Association's 15th National Conference on the Medical Aspects of Sports.

The female's physical capacities are not as inferior as some believe, Wilmore said. The strength of the lower extremities, when related to lean body weight, is slightly greater in the female. Endurance capacity in the highly trained female distance runner approximates values obtained in the highly trained male distance runner, when the values are expressed relative to lean body weight.

And as women are encouraged more to participate in sports, their true potential also becomes more evident. In the 1924 Olympic games the winning time for men in the 400-meter freestyle was 16 percent faster than for women. In 1972, the world records for the two sexes differed by only 7.3 percent.

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