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# EDITORIAL

## A Major Generation Gap

Children and adolescents in today's world are being shaped by circumstances far different from those that influenced older generations. Most of us lived in a two-parent home and had interactions with parents and other members of a nuclear family. A mother was present in the home. Divorce was rare. Today, most married women are in the work force. Time for relaxed parental interactions with adolescents is minimal. The media—particularly TV—and peers are often more influential on adolescents than their parents. The result is what many experts perceive as a generation in crisis.

David Hamburg, President of the Carnegie Corporation of New York (a foundation), has devoted major financial and intellectual resources to the matter. His efforts have led to important reports and two recently published books that analyze factors impacting the young. The books also describe some of the constructive experiments that have been performed dealing with childhood and adolescent problems. Hamburg himself is author of one book.\* Fred Hechinger, formerly Education Editor of *The New York Times*, prepared the other.† Extensive reviews of both of the books might well have appeared in the current Book Issue of *Science* were they not so recent in appearance.

In his book, Hamburg provides a historical perspective and treats the development of humans from conception through adolescence. He describes the many circumstances that often lead to deleterious consequences at various stages of child development and recommends changes in education. Hechinger devotes his book to the adolescent and presents an analysis that supplements that of Hamburg. In what follows I present a tiny sample of material from the books.

The authors touch only briefly on effects of TV, but the comments have impact. The average 18-year-old has spent a total of 15,000 to 22,000 hours watching TV, compared with 11,000 hours spent in school. Youths will have been exposed to as many as 18,000 televised murders. In their TV viewing, young people are treated to glamorous messages portraying sex, smoking, drinking, and risky behavior. American TV viewers are annually exposed to some 9230 scenes of suggested sex or innuendo, and fully 94% of sex on soap operas involves people not married to each other. The TV messages amplify a tendency for youth to experiment with risk taking. American girls under 18 have proportionately four times as many babies as Swedish or Dutch counterparts. The United States is experiencing an alarming rise in syphilis. Sexually active girls of 10 to 19 have the highest rate of gonorrhea of any age group.

Other results of exposure to TV are also injurious to health. Smoking, alcohol, and junk foods take their toll. A partial answer utilizes potentials of the school. Students are naturally curious about their own bodies and more eager to learn more about themselves than about the earthworm. Instruction can inform adolescents about the importance of proper nutrition and exercise and the effects of substance abuse. An understanding of sexually transmitted diseases can help to prevent irresponsible sexual activity.

Despairing of a lack of success in schools, a large fraction of blacks and Hispanics drop out before they reach high school. To minimize this loss, it is desirable to employ remedial measures in earlier grades. Many experiments have been conducted that demonstrate that improved results can be obtained. A successful project in New Haven is cited by Hamburg. It involved the leadership of Professor James Comer of Yale University and efforts with two schools. Ninety-nine percent of the students were black and almost all were poor. Comer and his colleagues promoted children's development and learning by building supportive bonds between children, parents, and school staff. The program took a team approach to working with children having difficulties. With time, the staff learned how best to deal with the concerns and needs of developing children. Earlier, the students in the two schools had ranked lowest among the city's 33 elementary schools, but with the program, they came to rank third and fourth.

The changing circumstances require new approaches to the nurturing of the young. The books provide stimulus for thought and action.

Philip H. Abelson

\*David A. Hamburg, M.D., *Today's Children: Creating a Future for a Generation in Crisis* (Times Books, Random House, New York, 1992), \$25. †Fred M. Hechinger, *Fateful Choices: Healthy Youth for the 21st Century* (Hill and Wang, New York, 1992), \$18.95; also available as a Carnegie Corporation of New York Report.