sentenced to prison, most return to criminal activity upon their release, and many fear that these young offenders come out of prisons even more violent. In addition, the unmanageable caseloads of probation officers in many cities makes it impossible to keep track of juveniles adequately. Thus, those teens who turn to crime face little in the way of a deterrent, a situation that has caused many authorities to place a large share of the blame for teen crime on the failure of the juvenile justice system.

Alternative community-based programs for all but the most violent teens have had some success in reducing juvenile crime. These include group homes which offer counseling and education; wilderness programs such as Outward Bound; crisis counseling programs that provide emergency aid to teenagers and their families; and placement in a foster home, when a stable home environment is lacking.

Further Reading
Jerome Kagan

American psychologist who has studied the role of physiology in psychological development.

Jerome Kagan is one of the major developmental biologists of the twentieth century. He has been a pioneer in re-introducing physiology as a determinate of psychological characteristics. The Daniel and Amy Starch Professor of Psychology at Harvard University, Kagan has won numerous awards, including the Hofheimer Prize of the American Psychiatric Association (1963) and the G. Stanley Hall Award of the American Psychological Association (APA) in 1994. He has served on numerous committees of the National Academy of Sciences, as well as the President’s Science Advisory Committee and the Social Science Research Council.

Kagan was born in Newark, New Jersey in 1929, the son of Joseph and Myrtle (Liebermann) Kagan. His father was a businessman. Kagan graduated from Rutgers University in New Jersey in 1950 with a B.S. degree. In 1951 he married Cele Katzman; the couple have one daughter. Kagan earned his master’s degree from Harvard University and his Ph.D. from Yale University in 1954 and spent one year as an instructor in psychology at Ohio State University. Following two years as a psychologist at the U.S. Army Hospital at West Point, Kagan joined the Fels Research Institute in Yellow Springs, Ohio, as a research associate. In 1959, he became chairman of the Department of Psychology there.

Since the late 1920s, scientists at Fels had been studying middle-class children from infancy through adolescence in order to better understand human development. At that time, most psychologists believed that personal characteristics were determined by environmental factors rather than by inheritance. Kagan’s early research at Fels focused on the degree to which individual personality traits carried through from infancy and childhood to adolescence and beyond. On re-examining some of the Fels subjects as adults, Kagan and Howard Moss did not find strong support for the maintenance of behavioral characteristics such as aggression, dominance, competitiveness, and dependence. However, they found that a small group who had been very fearful as toddlers had retained aspects of this “behavioral inhibition” as adults. In 1962, Kagan and Moss published their landmark book Birth to Maturity.

Questions environmental determinism

In 1964, Kagan moved to Harvard University. After spending a year doing fieldwork in a small native Guatemalan village, he began to examine the influence of biological factors on development and developmental variation in children. Kagan discovered that the development of memory skills, the understanding of symbolism, a sense of morality, and self-awareness arise in a particular order during the first two years of life. He concluded that children are very adaptable and that their biology promotes a regular developmental progression even under unfavorable circumstances. In 1984 he published The Nature of the Child, which he revised in 1994. In this book, Kagan argued that biology and environment both were important factors in development, and he questioned the widespread belief that adult personality was determined by childhood experience alone.

Since 1979, Kagan and his coworkers have studied inhibited versus uninhibited temperaments among infants and children, particularly in response to unfamiliar situations. A temperament is a relatively stable, emotional or behavioral trait that first appears during childhood. They found that about 20% of healthy four-month-old infants reacted to stimulation with thrashing and distress. About two-thirds of these infants became inhibited children who exhibited strong physiological responses to stress. He has concluded that there are biological differ-