DOCUMENT RESUME

ED 447 229 UD 033 847

AUTHOR Lerman, Robert I.; Riegg, Stephanie K.; Aron, Laudan
TITLE Youth in 2010: Trends and Policy Implications.
INSTITUTION Urban Inst., Washington, DC.
SPONS AGENCY Employment and Training Administration (DOL), Washington, DC.
PUB DATE 2000-07-00
NOTE 150p.
CONTRACT F-5532-5-00-80-30
PUB TYPE Reports - Evaluative (142)
EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Delinquency; Demography; *Dropouts; *Economic Factors; Educational Attainment; *Educational Policy; *Futures (of Society); Hispanic Americans; *Public Policy; *Urban Youth

ABSTRACT

For most young people, living standards are increasing, educational opportunities are expanding, and job opportunities in high-level occupations are rising. Other aspects of the economic context have worsened, however, and social problems persist. Marriage rates have plummeted, and child poverty is higher than during the late 1970s. Some of the negatives are becoming less serious, and recent trends give hope for the future of U.S. youth. This report presents a profile of young people today and expected future trends from several perspectives. Separate chapters deal with demography, education, crime, delinquency and at-risk behaviors, health, and employment status. A final chapter discusses selected policy implications drawn from the emerging trends. A look at the education of U. S. youth shows that levels of formal education continue to increase. Only 12% of today's young adults lack a high school degree or equivalent, and well over half have attended college. Hispanic youth still experience high dropout rates, with nearly 40% lacking a high school diploma. The proportion of all graduates receiving a full high school diploma has declined in recent years as more young people obtain a high school equivalency certificate. The bachelor's degree completion rate has inched up modestly in recent years, remaining quite low for Black and Hispanic youth. Youth from low-income families are much less likely to attend college than others, but for highly qualified students, the gap is small. A look at the future shows that the youth population will be more diverse socially, ethnically, and economically. Policies must do more to prevent dropping out of high school and reduce risky behaviors by adolescents and young adults. (Contains 23 tables, 8 figures, and 55 references.) (SLD)

Youth in 2010:
Trends and Policy Implications

Robert I. Lerman
Urban Institute and American University

Stephanie K. Riegg
Urban Institute

Laudan Aron
Urban Institute

The Urban Institute
July 2000

This report was prepared for the U.S. Department of Labor, Employment and Training Administration, under Contract No. F-5532-5-00-80-30. The analysis and opinions are those of the authors and do not represent official positions of DOL nor should they be attributed to the Urban Institute, its Trustees, or its sponsors. The authors thank Demetra Nightingale for constructive comments.

Table of Contents

List of Tables and Figures

Chapter 1

Introduction

Youth growing up today and in the coming decade face an array of challenges and opportunities. Compared to the world of young people in the 1970s and 1980s, the environment is healthier in economic terms but mixed in social terms. For most young people, living standards are increasing, educational opportunities are expanding, and job opportunities in high-level occupations are rising. Yet, other aspects of the economic context have worsened over the last two decades. The majority of young people who never complete a college degree have been falling behind economically even as young college graduates see new options and rising incomes. Moreover, disturbing social trends have persisted into the 1990s. Relative to twenty years ago, young people today are more likely to grow up without at least one biological parent and with fewer or no siblings, in an atmosphere in which crime, teen out-of-wedlock childbearing, and drug use are widespread. Marriage rates have plummeted, and child poverty is higher than during the late 1970s and more concentrated geographically.

Still, as we enter the first decade of the 21st century, some of the negatives are becoming less serious, and recent trends give us hope for the future. Child poverty is declining, youth violence and crime are falling (albeit from very high levels), and the rates of teenage childbearing and single parenthood are leveling off. A continuation of these short-term trends would be welcome, but not sufficient. In order to help all American youth achieve their potential during the next few decades, parents, schools, employers, community groups, charities, and government policymakers and program administrators will have to deal effectively with an array of challenging problems.

Understanding the future of youth in America requires making distinctions. A large share of young people now enjoy and will continue to enjoy very high living standards, a range of quality educational options, exposure to the information revolution spawned by the internet, and extensive opportunities for productive careers. These young people must avoid the ever-present temptations of drug use, early unprotected sexual activity, and involvement in gangs, but they have family and community resources to help. Families must play a large role in encouraging their children not to succumb to at-risk behaviors. Unfortunately, because of fewer siblings and parents working longer hours, the youth of today and tomorrow are growing up with less family interaction than their counterparts did decades ago.[1] Still, we can be optimistic about the futures of a large proportion of young people.

For another segment of the youth population, the prospects look far less promising. A rising share of young people will have grown up with no father present for long periods of their childhood. Many of these children will have natural fathers who never married their mothers and who never took on their legal responsibilities of fatherhood. The increasing rates of incarceration among men have meant many children have a father currently in prison or on parole. A sizable share of children in one-parent families face the additional disadvantage of economic hardship and in many cases live in neighborhoods with concentrated poverty, poor schools, high crime rates, high unemployment, virtually no marriage, and high rates of non-marital childbearing.

A third group—often drawn from young people growing up in families with modest incomes but just barely making ends meet—consists of youth who complete schooling with no more than a high school diploma, yet without attaining solid academic skills and or a meaningful

1 Between 1988 and 1996, close parent-child activity declined. For example, the proportion of mothers eating dinner with their children fell from 62 percent in 1988 to 55 percent in 1995, while the rate for fathers dropped 50

vocational qualification. These young people flounder most in the job market. Many ultimately pick up a useful skill and enter a middle-level job, but others do not. Some of these young people become frustrated in low-level positions when under better circumstances they could have developed solid occupational credentials.

A critical test for American institutions is to find ways of overcoming the problems in families, in communities, in schools, in public programs, and in labor market institutions that will otherwise limit the potential of too many young people today and in the future.

Developing sound policies requires an understanding of the challenges ahead. This report presents a profile of young people today and expected future trends from several perspectives. Separate chapters deal with demography; with education; with crime; delinquency and at-risk behaviors; with health; and with employment status. A final chapter discusses selected policy implications drawn from the emerging trends.

---

percent to 42 percent.

Chapter 2

Demographic Trends

The youth population is on course to rise substantially over the next two decades. What are the dimensions of the increase? Which groups of young people will see the largest growth in population? How is the composition of youth changing with respect to family background, household composition, race and ethnicity, and marital and parental status? These are among the questions we examine in this chapter.

To summarize, the next decades will see important changes in the size and composition of the young adult population:

- Over the next several decades, the absolute number of youth aged 14 to 24 will increase substantially, from 40.1 million in 1995 to 47.6 million in 2020.
- The share of youth living without both biological parents will reach over 50 percent by 2010; among black youth, the figure will have reached over 75 percent.
- The child and youth population will become increasingly diverse racially and ethnically, as Hispanic youth increase to 22 percent of the population and as white non-Hispanic youth decline to 55 percent.
- The rising diversity in the economic backgrounds of youth is the result of the rising income inequality among children in the 1970s and early 1980s.
- The decline in marriage and increase in non-marital birth rates will create a youth population in which a high proportion of young women are caring for children outside marriage, often with little help from the fathers, and a high proportion of young men will have a financial responsibility to support children before they obtain a good-paying job.

Population Trends Among Youth and Children Under Age 18

Tomorrow's youth population depends almost entirely on today's population of children.[1] Currently, more than one in four Americans are under the age of 18. In 1998, there were more than 70 million American children and youth, and this number is projected to increase to 77.6 million by 2020, as shown in Table 2.1. In recent history, the largest increases in the number of children and youth occurred in the mid-1900s. During the 1950s, a decade coinciding with the postwar baby boom, the number of children under age 18 in the U.S. increased by more than one-third, reaching 65 million by 1960. Since that time, increases in the number of children and youth have been much more modest (with an actual decline from 69.8 to 63.7 million children and youth during the 1970s). Between 1990 and 1997, the number of children under 18 increased from 64.2 to 69.5 million, and it is expected to climb to 72.5 million by 2010 and 77.6 million by 2020. Older youth aged 12 to 17 years comprise about a third of all children under age 18. In 1990, there were 20.1 million youth aged 12 to 17. By 1997, this figure rose to 23 million, and by 2010 it is expected to rise to 25 million children.

Despite an overall increase in the number of children and youth in the American population during the last half of the twentieth century (and projected increases in the beginning of the next century), children under age 18 represent a declining share of the overall U.S. population. In 1960, Americans under age 18 accounted for over a third (36 percent) of the total population. By 1997, this figure had declined to 26 percent and it is expected to drop below 25 percent by 2010. By contrast, the share of Americans aged 65 and older will have doubled from eight percent in 1950 to a projected 16 percent by 2020.

[1] The only additional source is immigrant youth.

There are interesting geographic variations in projected changes in the juvenile population. Between 1995 and 2015, California, Hawaii, the District of Columbia, Alaska, and New Mexico will see the largest increases in their juvenile populations (26 to 34 percent increases). One-third of all states will actually experience declines among people under the age of 18. West Virginia, Iowa, Kentucky, Maine, Ohio, and Pennsylvania will have the largest declines, between 14 and 6 percent (Campbell, 1996). By contrast, all states should expect increases in their senior population, most of them very large increases. Only California can expect the increase in its juvenile population to exceed that of its senior population.

The last several decades have seen a dramatic increase in the racial and ethnic diversity of the U.S. child and youth population, and this trend is expected to continue in the coming decades. Table 2.2 shows that since 1980, the share of American children who are white non-Hispanics has dropped from 74 to 64 percent (in 1997) and is expected to continue declining. By 2020, this group is projected to comprise only 55 percent of all children under 18. Until recently, black non-Hispanics were the largest minority racial/ethnic group among children. By 1997, black non-Hispanics and Hispanics each accounted for about 15 percent of the child population and by 2020, 17.2 million Hispanic children will outnumber their 12.2 black non-Hispanic counterparts, with the two groups accounting for 22 and 16 percent of all children under 18, respectively. By 2020, Asian Americans will account for 6 percent of the child population (more than twice their 1990 level) and Native Americans will comprise 1 percent of all children (a level that has remained unchanged since 1980).

The share of children and youth who are foreign-born has also been increasing over the past several decades, as indicated in Table 2.3. In 1970, 1.2 percent of all Americans under 20 were foreign-born, compared to 3.7 percent by 1990. There are large differences, however, in

the share of children who are foreign-born when examined separately by race/ethnicity. In 1990, for example, over one-third of all Asian and Pacific Islander children and youth were foreign-born and close to 16 percent of Hispanic children were foreign born, while fewer than 2.5 percent of all other children were foreign-born. Between 1970 and 1990, the proportion of immigrants among 15-19 year-olds jumped from 1.8 percent to 6.5 percent.

The share of children living in two-parent families has been falling steadily over the past several decades. As shown in Table 2.4, in 1970, 85 percent of all children lived in two-parent families, but by 1997, only 68 percent of children lived with two parents and only 58 percent lived with both natural parents.[2] This change parallels increases in the share of children living with their mother only (from 11 percent in 1970 to 23 percent in 1998) and with their father only (from 1 percent in 1970 to over 4 percent in 1998).[3] In 1998, about 3 percent of children lived with neither parent. More than half of the latter group were living with one or more grandparents. Especially disturbing is the rise from in the proportion of children living with a never-married parent, from less than 1 percent in 1970 to 11 percent today. Given these living arrangements of today's children, an increasing share (over 50 percent) of the young adults of 2010 will have spent time in one-parent families and many will have lacked close involvement with a natural parent for many years. Cohabiting couple households with children have increased substantially since the early 1970s, expanding from 200,000 in 1978 to 1.5 million in 1998.

---

[2] Note that the majority of (but not all) children living in a two-parent family live with both biological parents. Data from the 1993 Survey of Income and Program Participation (SIPP) indicate that 84 percent of children in married couple families live with both biological parents (Child Trends, 1999).

[3] The source of this estimate, the Current Population Survey, is thought to overestimate the number of father-only families by identifying cohabiting biological parent couples as father-only. The 1993 SIPP data suggest that just over 2 percent of all children live in father-only families (Child Trends, 1999).

Declines in the share of children living with two parents have affected children of all races and ethnicities, but have been greatest among black children. Between 1970 and 1998, the share of black children living in two-parent families dropped from 58 percent to 36 percent—a 40 percent reduction. The proportion of white children living in two-parent families had declined from 89 percent in 1970 to 74 percent in 1998; for Hispanic children, the 1998 proportion in two-parent families was 64 percent, down from 76 percent in 1980.

The large increase in the share of children living with only one parent also has important implications for children s economic well-being now and in the future. By 1998, 18.3 percent, or 12.8 million children, lived in families with incomes below the official poverty line. This number is 25 percent higher than in 1979 but 15 percent lower than in 1993 (Dalaker, 1999). Since poverty rates differ dramatically between one-parent families (about 45 percent) and two-parent families (about 7 percent), it is not surprising that poverty rates have increased as children shift from two-parent to one-parent families. Indeed, one analyst (Sawhill, 1999) has attributed all of the increase in child poverty from 1979 to 1998 to the rising share of children in one-parent families. Additionally, evidence from a variety of studies (McLanahan and Sandefur, 1994) suggests that growing up in a one-parent or stepparent family reduces the odds that a young person will complete high school and form an intact family in the future.

Although the decline in two-parent families is leveling off, the proportion of young people not living with both biological parents will continue to rise in the foreseeable future. Moreover, increasing numbers of young adults will have experienced poverty in conjunction with the absence of a parent. The incidence of this problem is highest for African-American youth, but rising for all groups. Unless offset by other factors, this trend leads us to expect to

observe worsening educational and labor market outcomes for many young adults and a rising disparity of outcomes between youth who come from traditional families and other youth.

Some demographic trends work in the opposite direction and may improve the future prospects of young people. The higher levels of educational attainment of parents should help today's children do better in school and in careers. Another significant trend is the declining number of children per family. Between 1970 and 1998, the mean number of children per family with children declined from 2.33 to 1.78 in mother-headed families and from 2.30 to 1.90 in married-couple families (U.S. Census Bureau, 1999a). Of all families with children, the proportion with three or more children declined from 38 percent in 1970 to 20 percent in 1997. As a result, while over 60 percent of children lived in families with three or more children under 18 in 1970, only about 38 percent did so in 1997. Smaller families should allow parents to focus more on each child, but children may lose the advantages of companionship by having fewer siblings.

Young Adults: Living Arrangements, Marriage, and Parenthood

Most young adults continue to live with at least one parent through their early 20s. As of 1998, 58 percent of 18-24 year-old men and 48 percent of women lived at home or temporarily in a college dormitory.[4] The proportion falls significantly as young people reach their late 20s and early 30s, but 15 percent of 25-34 year-old men and 8 percent of women were still living with a parent in 1998. Living at home is not a new phenomenon for young adults. The rates are stable at least going back to the early 1980s.

[4] The data for this paragraph come from U.S. Census Bureau (1999a): Table AD-1 Young Adults Living at Home: 1960 to Present.

The decline in marriage among young adults is one of the most notable trends affecting parenthood, employment stability, education, and at-risk behavior. As of March 1998, only three percent of 18-19 year-olds and 19 percent of 20-24 year-olds were married and living with their spouse.[5] Marriage rates do pick up with age, but less than half (47 percent) of 25-29 year-olds were married with a spouse present. The percentage of 25-29 year-old blacks who were married was only 30 percent. A few decades ago, youth were much more likely to be married. Among men, 44 percent of 20-24 year-olds and 78 percent of 25-29 year-old were married in 1970; the married proportions for 1998 were down to 14 percent of 20-24 year-olds and 44 percent of 25-29 year-olds. The marriage rates among women in their 20s were about 35 percentage points higher in 1970 than in 1998. The extraordinary drop in marriage among young adults may be both a cause and an effect of trends in parenthood, employment, education, at-risk behavior, and social norms. Today, cohabitation is more widely accepted and much more prevalent than in past generations. Estimates prepared by Bumpass and Sweet (1989) indicate that about 35 percent of the cohort born in the early 1960s will live with someone of the opposite sex as a partner before age 25; this figure is over four times the 8 percent rate experienced by the birth cohort of the early 1940s. Between the late 1980s and early 1990s, the proportion of 25-29 year-olds cohabiting jumped from 7 percent to 13 percent (Waite, 1995). The lower marriage rates and higher cohabitation rates indicate that young people are postponing marriage until later in life or avoiding marriage altogether. It is unclear how this trend will influence long-term stability; while divorce is less common among couples who get married later in life, divorce is more common among those who marry after cohabiting.

[5] The figures for 1998 data in this paragraph come from U.S. Bureau of the Census (1999): Unpublished Tables—Marital Status and Living Arrangements March 1998 (update) and 1971.

Despite declines in marriage among teenagers, birth rates (marital and non-marital) among 15-19 year-olds increased steadily between 1980 and 1991 from 53 per 1,000 to 62 per thousand; among 18-19 year-olds, birth rates rose from 82 to 95 per 1,000 females. But, on a more positive note, since 1991, teen birth rates have declined to their 1980 level.[6] Still, five percent of all babies born in 1996 were born to unmarried juvenile mothers under age 18.

The decline in teen birth rates was particularly significant for non-Hispanic, black women. Between 1991 and 1997, the number of births per 1,000 black 15-19 year-olds fell from 119 in 1991 to 91 in 1997. Among non-Hispanic whites, the birth rate fell from 43 per 1,000 in 1991 to 36 in 1997. Similar reductions took place among 15-17 year-olds. The birth rate among black 15-17 year-old women peaked at 84 in 1991 and has since dropped to 63 in 1997. This rate is still three times the rate among non-Hispanic whites (19 per 1,000), but it is exceeded by the rate of 66 per 1,000 among Hispanics (Snyder and Sickmund, 1999, p. 9).

With an increasing share of young women not married in their 20s and a rise in the rate of sexual activity, it is not surprising that non-marital childbearing has increased substantially among young women. Since married couples tend to exhibit greater employment stability and higher household income than either cohabiting couples or single parents (Bauman, 1999), the non-marital birth rate reveals much about the quality of life of young parents and their children.

The overall non-marital birth rate increased from 15 to 44 births per 1,000 women between 1960 and 1995. By 1997, the birth rate stood at 65 per 1,000 among unmarried 18-19 year-olds and 71 among unmarried 20-24 year-olds. As of 1996, over three-quarters of all teen

---

[6] Data on abortions available through the Centers for Disease Control (CDC) suggest that the abortion rate among teenagers declined during the 1990s. Thus, recent declines in teenage childbearing do not appear to be driven by increasing rates of abortion (Child Trends, 1999).

births were non-marital (Child Trends, 1999). Between 1970 and 1997, the non-marital share of births among women ages 18 and 19 more than tripled (Snyder and Sickmund 1999, p. 9). As of 1997, nearly half (47 percent) of births to 20-24 year-olds were to unmarried women.

Given the low marriage rates and high non-marital birth rates, a significant share of women are unmarried mothers by their early 20s and a significant share of men are unwed fathers by their mid-20s. These patterns complicate efforts to help young people become self-sufficient. More young women have the responsibility to raise a child without the father present, thereby increasing their reliance on welfare, on help from other family members, and on state-sponsored child care. More young men must face child support obligations, which can reduce their take-home pay or push them into the underground economy in order to escape the mandated deductions from paychecks. Some young men become fathers without acknowledging their paternity. Such a move could ultimately backfire if the state eventually establishes paternity and requires payment of the accumulated arrearages. In such cases, unless the young men have high-paying jobs, they may become discouraged from working in the mainstream labor market.

Conclusions

In the coming years, the youth population will experience continued overall growth and moderate changes in demographic and household composition. Racial and ethnic composition will shift as Hispanics comprise a larger share of the youth population and the proportion of whites drops. A decline in marriage rates and an increase in non-marital birth rates means that more children will grow up in single-parent households. This trend raises concerns about increased child poverty and other negative life outcomes for children, in addition to concerns about the young parents themselves. If this trend continues, a higher proportion of unmarried

young women will be caring for children, perhaps instead of continuing their education. In addition, a higher proportion of young men will find that they have to pay child support before they have even secured their own livelihood. On the other hand, some trends in family patterns may have a positive impact on young adults in the future. The teen birth rate is declining among all racial and ethnic groups, and especially among blacks. Moreover, families are choosing to have fewer children, permitting more attention and more financial resources per child.

Chapter 3

Education

The future of young people depends critically on their educational and vocational qualifications. Over the past few decades, the educational attainment of the U.S. population has expanded significantly as rising shares of young people have attended and completed college and post-graduate education. But future increases in educational attainment are less certain. Hispanic youth—a group with the lowest educational attainment—are increasing as a share of the youth population. The costs of a college education have been rising in real terms more rapidly than incomes. National tests show few gains in the academic skills of youth since the mid-1970s. At the same time, the demand for educated workers continues to increase, as indicated by the substantial wage advantage for college-educated over high school-educated workers and by the increasing share of managerial and professional occupations.

This chapter examines three key trends: 1) changes in the numbers of students attending the nation's schools; 2) changes in the educational attainment of young people; and 3) changes in academic achievement of youth. Based on these trends, we project that future levels of education will increase slowly among young people entering adulthood.

The highlights of this chapter are as follows:

- Levels of formal education have been and continue to increase; only 12 percent of today's young adults lack a high school degree or equivalent, and well over half have attended college.
- Hispanic youth still experience high dropout rates; nearly 40 percent lack a high school diploma.
- The proportion of all high school graduates receiving a full high school diploma has declined in recent years as more young people obtain a GED.

- The BA completion rate is high by international standards but has only inched up modestly in recent years and remains quite low for black and Hispanic young people.
- Youth from low-income families are much less likely to attend college than other youth, but among the highly qualified students, there is only a small attendance gap between youth from low-income families and other youth.
- The evidence on academic competencies indicates little improvement for the majority of young people in the critical subjects of reading and writing. The poor outcomes are disturbing and create uncertainty as to whether our educational system will be producing as many well-qualified young workers as the economy demands.

Who Are Schools Serving?

Demographic trends largely drive school enrollments, as well as the racial and ethnic composition of students at all levels. With a near 100 percent enrollment rate in grades K-10, enrollments for these grades closely mirror demographics. For youth above this compulsory education level, however, enrollment rates play a larger role in determining the number and composition of students in secondary and post-secondary education. Students at these higher levels of education face many options for future education. They may choose between public and private institutions; historically black colleges and universities; and two-year, four-year, and vocational colleges—or they can decide not to continue their formal education at all.

Over the past decade, total enrollment in all levels of education—from kindergarten to graduate school—increased from 60.2 million in 1990 to 67.3 million in 1998. Enrollment levels are expected to continue rising in the coming years, to a record 70.4 million by 2008, as shown in Table 3.1. This growth coincides with the growth in the absolute size of the youth population, as described in Chapter 2.

Elementary and Secondary Schools

Much of the aggregate growth in total enrollment over the last decade occurred in the elementary grades (K-8) as the population of children under age 12 increased disproportionately. Between 1985 and 1998, elementary school enrollment grew at a much faster rate than either secondary or post-secondary enrollments, at 22 percent—from 31.2 million in 1985 to a record 38.1 million in 1998 (Table 3.1). This increase coincided with the growth in the population of children ages 6-11, from 20.8 million in 1980 to 24.3 today (Table 2.1). This rapid growth is expected to slow in the coming years, with elementary school enrollments stabilizing at 38.1 million by the year 2008, as these students move on to high school.

Enrollments in grades 9-12 declined 8 percent from 1985 to 1990, but then increased 17 percent from 1990 to 1998, for a net increase of 7 percent, as indicated in Table 3.1. Unlike elementary school enrollments, however, secondary school enrollments are expected to continue growing, reaching 16.2 million by 2008 as the population of 12-17 year-olds rises from 23 to 25 million.

Trends in the racial and ethnic composition of the student population partly reflect the rising share of children who are immigrants, Hispanic-American, or Asian-American. Table 3.2 shows that between 1986 and 1996, the proportion of public elementary and secondary students who are Hispanic-American or Asian-American increased from 12.7 percent to 17.8 percent. In California, the proportion of students who are non-Hispanic whites declined from 53.7 to 39.5 percent (U.S. Department of Education, 1999b). The Hispanic student population is highly concentrated geographically, especially in

California and Texas and nine other states where Hispanics comprise more than 10 percent of the student population.

The mix of students also varies substantially across metropolitan areas and educational levels. As of October 1998, African-American and Hispanic-American students made up over half (52.4 percent) of the nation's central city enrollment of public high school students and 56 percent of the public elementary school students. In non-metropolitan areas and in metropolitan areas outside central cities, Hispanic and black students together accounted for only 19 percent and 24 percent, respectively, of these same students. Overall, Hispanic and black students represent about 30 percent of public secondary school enrollments.

Post-Secondary Schools

Table 3.1 indicates that enrollments in higher education increased by 20 percent between 1985 and 1998, from 12.2 million to 14.6 million, despite a decline between 1992 and 1995. By 2008, total college enrollment is expected to reach a record 16.1 million—an increase of 10 percent from 1998. Undergraduate enrollments will also rise from 12.8 million to 14.3 million between 1999 and 2009, an increase of 11 percent (U.S. Department of Education, 1999a). These increases reflect more than a demographic change. They indicate an increase in the proportion of students going on to higher education—a topic addressed in the following section.

Public college and university enrollments are expected to increase at a faster rate than private college enrollments in the coming years, though the trend was just the opposite in the last decade. From 1990 to 2000, enrollment at public institutions

increased 7.4 percent while enrollments at private colleges and universities increased 9.7 percent. Between 2000 and 2008, however, enrollments in public institutions are expected to continue their upward trend, growing by 7.7 percent, while the rate of growth will decline for private institutions to 6.0 percent by 2008. Despite these predicted changes, the proportion of students attending public versus private institutions will remain constant with 78 percent of students at public colleges and universities and 22 percent at private—the same ratio we see today.

College enrollment rates have increased sharply among white, black and Hispanic 18-24 year-olds. Note in Table 3.3 that the share of white youth enrolled in higher education remained between 27 and 30 percent from 1970 through the mid-1980s but then jumped to about 40 percent in the late 1990s. Black youth experienced similar growth trends—college enrollment rates have reached nearly 30 percent in the late 1990s, up from the 20 percent levels that were common from the mid-1970s through the mid-1980s. The change in enrollment rates among Hispanics has been more modest, rising from about 16 or 17 percent in the 1980s to 22 percent in 1997.

Overall, the minority share of college students increased substantially over the past twenty years. The percentage of college students who are black, Hispanic, Asian, or native American rose from 17 percent in the 1976-77 academic year to 26 percent in 1995-96; Asian and Pacific Islanders made up 6 percent of college students in 1995-96, triple the 2 percent level of 1975-76. The proportion of Hispanic students nearly doubled—from 4.7 percent to 8.5 percent of college enrollments—while the proportion of black students rose modestly from 10.1 to 11.1 percent. Together, Hispanic and black youth make up a smaller proportion of college enrollments than elementary and

secondary enrollments—only about 20 percent of enrollments in higher education, compared to 30 percent in public secondary schools (U.S. Department of Education, 1999b: Table 8-1).

Enrollments in the 103 historically black colleges and universities identified by the Department of Education remained stable from 1976 to 1987 but increased dramatically—by 22 percent—between 1987 and 1992, as Table 3.4 shows. In the fall of 1994, enrollments in these institutions totaled 280,000, up from 257,000 in 1990. Moreover, as of 1994, black students accounted for 82 percent of all enrollments at these schools,[1] while whites accounted for 13 percent, Hispanics for 2 percent, and Asians and Pacific Islanders 1 percent (U.S. Department of Education, 1996).

Overall enrollment trends reveal only a modest shift in the proportion of college students attending two-year versus four-year schools. In 1976, 35 percent of college enrollments were in two-year programs; by 1997, the proportion in two-year colleges had risen to 38 percent (tabulated from U.S. Department of Education, 2000a, Table 176). Of the 9.3 million recent high school graduates in 1998, only 28 percent were attending two-year colleges, while 66 percent were attending four-year colleges (U.S. Bureau of Labor Statistics, 1999). Many of the students attending two-year programs are not recent high school graduates. Nearly half of two-year college students were older than 24 years old (tabulated from U.S. Department of Education, 2000a: Table 179).

Higher proportions of four-year college students are white than their counterparts at two-year colleges—74 percent versus 67 percent. Relative to other groups, Hispanic youth are more likely to attend two-year than four-year colleges; they comprise only 6

[1] In 1997, approximately 14 percent of all black students chose to attend historically black colleges and universities (U.S. Department of Education, 1999a).

percent of four-year college students, but 16 percent of two-year students. In contrast, Asian and Pacific Islanders represented 7 percent of four-year students, but only 4 percent of two-year students. Blacks accounted for 12 percent of both four-year and two-year enrollments.

Women have raised their share of college enrollments substantially over the last three decades. In 1970, only 41 percent of college and university students were women. By 1996, the proportion had increased to 55 percent (U.S. Department of Education, 2000a). All of the current gender imbalance is at four-year colleges. The proportion of women in two-year colleges was virtually 50 percent.

What Education Levels are Young People Attaining?

High School Completion

Rising educational attainment in the U.S. has marked much of the 20th century. Table 3.5 indicates that in 1940, over three in five Americans in their late 20s had not completed high school. Today, only 12 percent of 25-29 year-olds are without a high school diploma or GED. Overall, the high school completion rate rose from 40 percent in 1940 to 88 percent in 1998, and nearly all of the growth took place prior to 1975. As of 1975, the completion rate stood at 83 percent, only 5 points below the 1998 figure.

Among black young adults, the increase in educational attainment has been especially dramatic, with high school graduation rates rising from only 12 percent in 1940 to 58 percent in 1970 and then to 81 percent in 1981. Since the early 1980s, however, the proportion of black 25-29 year-olds with a high school degree or equivalent appears to have moved up to a peak of 87 percent in 1997. Comparable data on Hispanic

young adults show increases in high school graduation, rising from 53 percent in 1975 to 61 percent in 1997. The share of Hispanic young adults lacking a high school degree or equivalent is nearly 40 percent, far higher than the 8 percent rate among whites and the 13 percent rate among blacks (U.S. Department of Health and Human Services, 1999: 422).

One caveat about the growth in high school completion is the increasing tendency to substitute a GED for a full high school diploma. Over the last decade, the proportion of actual high school diploma recipients has declined among young adults. Between 1990 and 1997, the percentage of all 18-24 year-olds with a high school diploma declined from 81 to 77 percent.[2] The racial and ethnic differences are especially pronounced when one restricts high school graduates to include only those who earned a diploma. Among 18-24 year-olds, 45 percent of Hispanics, 28 percent of black non-Hispanics, and 19 percent of white non-Hispanics had not obtained a high school diploma.

The reason the total high school completion rate remained constant is that the share of the cohort earning a GED nearly doubled from 5 to 9 percent (U.S. Department of Health and Human Services, 1999: 423). The absolute number of people taking the GED to earn their high school equivalency diploma reached 733,000 in 1996—the highest number of test-takers ever, as shown in Table 3.5.

The event dropout rate, defined as the proportion of students enrolled in grades 10 through 12 one year earlier who were not enrolled and had not graduated in the year the data were reported, has fluctuated between 4 and 6 percent over the last twenty-five years. Since event dropout rates include students who drop out but may ultimately obtain

GEDs, the stagnant overall dropout rates are consistent with a modest rise in the share of 18-24 year-olds with a GED or high school diploma, especially among minorities. While the actual number of high school dropouts has leveled off at around 3.8 million since 1990, almost one in four out-of-school 16-24 year-olds was a high school dropout (Table 3.6).

Among Hispanics, the event dropout rate has been consistently double the overall rate, indicating that these youth are twice as likely to drop out of high school than their non-Hispanic counterparts (Child Trends, 1999). High teen pregnancy rates and language barriers among Hispanics are likely explanations for this disproportionate outcome. Eighty percent of foreign-born Hispanic youth between the ages of 16 and 24 reported speaking English "not well" or "not at all." Moreover, 44 percent of this same group had dropped out, compared to 29 percent of all Hispanic youth, while the dropout rates for whites and blacks of this age group were 7 percent and 13 percent, respectively (Snyder and Sickmund, 1999).

College Attendance and Completion

College attendance has increased rapidly in recent years. Between 1974 and 1988, the proportion of 25-29 year-olds with some college rose only from 48 percent to 50 percent. But, over the next decade, the proportion jumped to 65 percent. Thus, as of 1998, almost two-thirds of 25-29 year-olds had completed at least some college (Table 3.7).

---

[2] Trend data on the share of youth with a GED instead of a high school diploma are problematic, since the Census Bureau did not ask about GEDs until the early 1990s and then altered the questions about educational attainment in 1993 and 1994. However, the 1997 data are probably accurate.

The growth in the share of young people completing a college degree is equally dramatic. In 1940, only 6 percent of 25-29 year-olds had earned a BA degree. By March 1997, the proportion had more than quadrupled, reaching 28 percent of all 25-29 year-olds. The 1960 to 1975 period accounts for much of the increase. In this 15-year period, the proportion completing a BA degree jumped from 11 to 22 percent. Since 1975, the BA completion rate has moved up more gradually. As of 1996, the proportion of the 25-34 year-old population who had completed a BA was higher than the comparable proportion in Europe and Japan and double the rate in Germany and France (Teichler, 1999: 256).

College attendance rates rise with income, especially among the least qualified students. In the early 1970s, nearly 50 percent of middle-income high school graduates—but only 30 percent of low-income graduates—attended college. However, over the last 20 years, a significant narrowing of college attendance rates by income class has taken place. By 1997, nearly 60 percent of both middle- and low-income graduates went on to college, nearly closing the gap. At the same time, the proportion of graduates from high-income families rose from about 63 to 81 percent. A large part of the gap in college attendance by income class is the result of differences in academic preparation. Only 14 percent of high-income graduates were unqualified or marginally qualified for college, as compared to 48 percent of low-income graduates. Moreover, over 90 percent of low-income qualified graduates who applied for college were accepted at four-year institutions and 83 percent enrolled, a rate identical to enrollment rates among middle-income graduates and 9 points below rates for high-income graduates. However, about 38 percent of qualified, low-income graduates took no steps toward applying for a four-

year school; only 9 percent of qualified, high-income graduates did not apply for college (Choy, 1999: 9).

College attendance has become common for black and Hispanic young adults, but completing a BA degree is still an unusual accomplishment. The proportion of black 25-29 year-olds with at least some college rose from 31 percent in 1979 to nearly 50 percent in 1998; for Hispanics, the increase in college attendance was modest, rising from 25 to 31 percent in the 1979-1998 period.

The percentage of young minorities completing a BA degree has remained low, but blacks have attained significant increases. As indicated in Table 3.7, between 1950 and 1975, the proportion of black 25-29 year-olds who had completed a BA increased fourfold, from 2.5 to over 10 percent. In 1975, Hispanics completing the BA represented about 9 percent of their cohort. By 1997, the BA completion percentages had increased modestly to 14 percent among blacks and 11 percent among Hispanics.

What are Students Learning?

The types of programs that schools offer and the skills they teach have a strong impact on the future success of their students. A report released in the early 1980s, *A Nation at Risk*, emphasized the low academic competencies of American youth and urged students and schools to emphasize strong academic programs over vocational programs. The evidence from the 1982 to 1992 period indicates a 16 percentage point drop in the proportion of high school seniors in a vocational program (from 27 percent to 11 percent) but only a 6 percentage point increase in the proportion in college prep or academic programs (from 38 percent to 43 percent). The proportion in the general track increased

from 35 percent to 45 percent over the period. Black and Hispanic seniors experienced the largest declines in vocational programs, falling from 32 and 38 percent, respectively, in 1982 to 15 and 17 percent in 1992. But in both cases, the declines in vocational enrollments were much larger than the increases in academic programs. Whether the shift away from vocational programs will weaken or strengthen the future labor force is unclear (U.S. Department of Education, 1996).

The decline in vocational concentration looks less severe as judged by the proportion of high school graduates with three or more related vocational courses. Between 1982 and 1994, graduates with a vocational concentration declined from 34 to 25 percent of all graduates, while graduates with only a college preparatory concentration rose from 8 to 32 percent (Levesque et al., 2000).[3]

Academic courses became more dominant over the period. As of 1994, the graduates had amassed an average of 17.6 credits in academic courses, up from 14.3 among 1982 graduates (Levesque et al., 2000). High school seniors today are much more likely than their counterparts in the early 1980s to take the appropriate number of units in academic subjects to be considered for college admission, typically including four years of English and three years each of math, science, and social studies. Between 1982 and 1996, the proportion of high school graduates earning enough credits in these subjects jumped from 12 to 50 percent (The Condition of Education, 1999).

Performance on Academic Tests

Academic competency is increasingly important for success in the job market. Even among high school dropouts, wages go up with academic skills. Thus, the future

prospects of youth depend partly on their ability to read, write, and compute as well as master such generic job-relevant skills as scheduling, managing resources, and working in teams. While only limited data are available to assess trends in this broad array of competencies, the National Assessment of Educational Progress (NAEP) does provide measures of the level and distribution of academic skills of 4th, 8th, and 12th graders. What do trends in these test scores suggest about the competencies of upcoming cohorts of labor force entrants?

Overall, the NAEP findings reveal no progress in reading and writing, but modest gains in math and science. Reading scores have remained virtually constant since 1975. But higher math and science scores suggest increasing competencies, especially among Hispanic 8th and 12th graders. Writing assessments are complex. One analysis reports that writing levels worsened slightly over the 1984 through 1996 period for 11th graders and showed no significant trend for 4th and 8th graders (Campbell, Voelkl, and Donahue, 1997). Another study indicates modest improvement between 1984 and 1996 among 8th and 12th graders. Still, according to the latest assessment, undertaken in 1998, only 22 percent of high school seniors wrote at or above the proficient level and 16 percent wrote below the basic level. On the basis of these NAEP data, we can conclude that the academic capabilities of young people have not worsened and that minorities have achieved meaningful though uneven improvements. The steady or slightly improving levels of academic skills are quite disappointing given the increasing share of high school graduates taking more core academic subjects, the rising demand for skill in the U.S. job market, and the substantial increases in education outlays per student. On the other hand,

[3] Some students graduate with both a college preparatory and a vocational concentration.

scores did not fall despite changes in the mix of students toward a more diverse and economically disadvantaged population.

While the NAEP measures only a limited number of job-relevant skills, the capabilities tested do matter in the job market. Nevertheless, the NAEP results do not indicate whether the skills youth bring to the labor market will significantly exceed those of prior cohorts. The reason is that the NAEP tests take place before young people complete their education. Thus, if today's 17 year-olds are only slightly more capable than 17 year-olds two decades ago, tomorrow's 21 year-olds may still have significant skill advantages over 21 year-olds from a prior cohort because of the growing number of youth who obtain at least some post-secondary education.

Conclusions

Educational trends offer a mixed picture for the future qualifications of youth. Certainly, the level of schooling completed and the recent gains in attainment by young people are impressive. Only 12 percent lack a high school degree or equivalent, over half have attended college, and 28 percent have completed BA degrees by their late 20s. The U.S. rate of college completion is considerably higher than the rate in other major industrial countries. Young people have certainly responded to the increasing economic rewards from college.[4]

Progress in school completion is especially notable among African-American youth. As of 1998, nearly half of black young people had attended college and 88 percent had a high school degree or equivalent. Hispanic youth are the one group

[4] Between 1980 and 1997, the ratio of college graduate earnings to the earnings of high school graduates increased from 1.19 to 1.50 among men and from 1.52 to 1.91 among women.

experiencing high dropout rates and low rates of high school completion. Nearly 40 percent of Hispanic 25-29 year-olds lack a high school diploma or equivalent.

Projecting educational trends is difficult, but the evidence suggests that schooling levels will continue to rise modestly. The percentage of high school completers going directly to college is increasing and reached 67 percent by 1997. Most of the increase is among graduates entering four-year colleges. If the same share of attendees actually graduate, college graduation rates will rise beyond current levels. In any event, the future youth population will be increasingly populated with workers having some college experience and course work.

Unfortunately, the rapid and widespread increases in educational attainment have not been matched by increasing levels of academic skills among 17 year-olds. While available trend data do not capture the improvement in skills that young people may achieve in college, the weak scores from the National Assessment of Educational Progress are a serious concern.

At this point, policymakers face genuine uncertainty about the preparation of future young workers. The key question is whether the higher educational attainment and increased involvement of high school seniors in academic courses better capture the capabilities of young people than do the NAEP tests. It is certainly clear that a large share of recent high school graduates must raise their skills if they wish to do well in today's knowledge-based economy. No doubt many will achieve solid skills through their college experience, but others will remain poorly prepared for a large array of jobs and careers.

Chapter 4

Crime and Delinquency

Crime and delinquency are too often part of growing up in the U.S. The highest incidence of violent crime takes place when offenders are between the ages of 17 and 24. Arrest rates peak at age 18 at a level more than double the rates of individuals in their mid-20s or older. In 1997, violent crime arrests per person were 67 percent higher among 18 year-olds than among 25-30 year-olds. Especially troubling is the long-term growth in violence among juveniles (12-17 year-olds). Between 1980 and 1996, when the juvenile population was declining, juvenile arrests grew by 32 percent and juvenile delinquency cases increased by 57 percent.

Still, notwithstanding the extensive media coverage of recent youth violence, the upward trend in juvenile crime of the late 1980s and early 1990s has finally been reversed. Rates of violent crime arrests jumped from about 80,000 in 1987 to about 150,000 in 1994 but have declined substantially since then to about 125,000. Between 1994 and 1998, juvenile violent crime—which includes murder, forcible rape, robbery, and aggravated assault—fell by 30 percent, reaching its lowest level since 1987 (Sickmund and Snyder, 1999: 62).

Future trends in crime and delinquency are difficult to determine. The number of young people will increase and the increase will be largest among groups of youth with the highest crime rates—children from low-income, single parent families,[1] youth from areas of highly concentrated poverty, and youth from minority populations. On the other hand, improvements in

1 Harper and McLanahan (1998) report that boys whose fathers were absent from the household had double the odds of being incarcerated, even holding constant for such other factors such as race, income, parent's education, and urban residence.

community policing, higher arrest and incarceration rates, a decline in turf wars over the drug trade, and reduced levels of youth unemployment suggest that youth crime rates may continue to decline.

While projecting the future is difficult, we can place it in context by examining current patterns and recent trends in crime and violence among juveniles and young adults. One problem in relating crime trends to other trends among youth is the sharp distinction made in the criminal justice system between the under-18 and over-18 populations. Arrested individuals are usually referred to juvenile courts if they are under age 18 and to adult courts if they are over age 18. As a result, information on trends usually comes separately for juveniles and adults. Special tabulations are required to examine patterns among all young people, say 16-24 year-olds.

This chapter begins with a review of data issues, then describes recent trends in juvenile arrests, reports new information on gangs and on self-reported criminal activity, presents information on incarceration, and concludes by discussing implications for the future.

Some key points are as follows:

- Juvenile crime is declining. Between 1994 and 1998, juvenile violent crime dropped by 30 percent.
- Over 40 percent of juvenile arrests in 1997 were for larceny-theft, simple assault, drug abuse violations, and disorderly conduct.
- Violent crimes such as aggravated assault, robbery, forcible rape, and murder accounted for just 5 percent of juvenile arrests.
- Gang membership is on the rise among whites and females and is becoming more common in suburban and rural areas.
- Delinquent behavior is not related to employment status. Employed and unemployed youth are equally likely to engage in risky behavior—though alcohol and tobacco use are more common among employed youth. At the same time, about half of youth who

become incarcerated report that 75 percent or more of their income in the prior year came from crime (Freeman, 1996).

- The rate of incarceration has increased for all groups, but is eight times higher for young blacks than for other cohorts and for high school dropouts. In 1993, 12 percent of all male high school dropouts were incarcerated, and an astounding 34 percent of black male dropouts experienced jail or prison (Freeman, 1996).

- A single youth dropping out of high school and turning to a life of crime and drug abuse may cost society as much as $2.3 million.

Criminal Justice Data on Juveniles and Young Adults

The data on juvenile justice should be interpreted with caution. Many offenders are never arrested, and some of the arrested youth are not referred to juvenile courts and therefore are not reflected in official law enforcement or court data. Furthermore, when official statistics suggest that arrest rates for certain offenses have changed significantly over time, it is not clear if this reflects real changes in criminal behavior or changes in how these behaviors are identified and handled. Arrest rates for juvenile drug abuse violations, for example, have increased dramatically in the past few years, but self-reported data suggest that illicit drug use is lower than in the mid-1980s. Thus, the higher arrest rates for drug-related offenses may simply reflect society's growing intolerance for illegal drug use and a greater willingness to punish juvenile offenders.

Arrest information comes from the FBI's Uniform Crime Reporting (UCR) data. These data reflect the number of crimes reported (not the number committed) and the number of arrests made (not the number of persons arrested), and are classified for the most serious offense for which a person was arrested (a single arrest may involve multiple offenses). Two types of UCR-based arrest measures are used to assess the extent to which juveniles contribute to national

crime. The first is the number of persons arrested under age 18 as a proportion of all arrests made in a given year (and for a given crime). A second and equally important measure is the number of crimes that were cleared by the arrest of someone under age 18 as a proportion of all cleared crimes. A crime is "cleared" when someone is charged with the crime or if the person thought to have committed the crime cannot be arrested (e.g., because he/she has died). The two measures are different reflections of the relationship between the number of offenses charged and the number of people arrested for these offenses. Thus, if a one person is responsible for 10 burglaries, the arrest of that individual results in 10 burglaries being cleared. On the other hand, if three people rob a single liquor store, then the arrest of those three people results in only one crime being cleared.

The arrest percentage is offender-based, while the clearance measure is offense-based. Table 4.1 shows both measures for juveniles for a variety of crimes. Interestingly, there are some large differences in the two measures. For example, 30 percent of all robbery arrests in 1997 were arrests of juveniles, but these arrests accounted for only 17 percent of all robberies cleared. The reason for this difference is that juvenile offenders are more likely than their adult counterparts to commit crimes in groups.

Arrest data are better measures of the share of juveniles entering the criminal justice system (although a single individual can be arrested more than once in a given year), while clearance data are better for assessing the share of crimes (known to law enforcement) committed by juveniles. Both measures are thought to overestimate juvenile involvement in crime: arrest measures overestimate juvenile crime because juveniles are more likely to commit crimes in groups, while clearance rates may also overstate juvenile crime because it appears that juveniles

are more likely than adults to be arrested for the crimes they commit.

Recent Trends in Juvenile Crime and Arrests

In 1997, law enforcement agencies across the country made 2.8 million arrests of persons under 18. Larceny-theft, simple assault, drug abuse violations, and disorderly conduct were the most serious crimes in over 40 percent of these arrests. Violent crimes such as aggravated assault, robbery, forcible rape, or murder accounted for 5 percent of juvenile arrests. In addition, in 1997 approximately one out of every five arrests made by law enforcement officials involved a juvenile, as shown in Table 4.2. A greater share of all female arrests than male arrests involved a juvenile (23 versus 18 percent). Crimes for which the share of arrests involving juveniles was larger among females than males included liquor law violations and simple assaults. Juveniles represented a greater share of male arrests than female arrests for arson, vandalism, murder, and drug abuse. A higher share of all white arrests than black arrests involved a juvenile (20 versus 16 percent). This was also true of arrests for the following specific crimes: burglary, weapons law violations, vandalism, larceny-theft, and liquor law violations. Among juvenile arrests alone, however, blacks accounted for than half of the arrests for gambling (89 percent), murder (58 percent), and robbery (55 percent). Females accounted for more than half of all juvenile arrests for running away from home (58 percent) and prostitution (56 percent).

The juvenile arrest rate was relatively constant from the early 1970s through 1988. In 1989, it rose to its highest level since the 1960s and continued to rise until peaking in 1994. Between 1988 and 1994 the rate increased by an alarming 62 percent, but this was followed by several years of rapid decline. By 1997, the rate was at its lowest level for the 1990s and was 7 percent higher than the 1989 rate. Still, the juvenile rate is 25 percent above the 1988 rate.

Indeed, juveniles accounted for nearly half the increase in arrests for murders between 1980 and 1994. The remaining half resulted from increased murder arrests of 18-23 year-olds.

Although juvenile arrest rates are five times higher among males than females, increases in the female rate have outpaced those of the male rate. Thus, in 1981 the female rate was 12 percent of the male rate, but by 1997 the female rate had risen to 20 percent of the male rate. Arrest trends among very young offenders have generally tracked those of their older counterparts.

Similar patterns are found in the proportion of violent crimes cleared by the arrests of juveniles. In 1990, 11 percent of all violent crimes cleared by law enforcement were cleared through the arrest of a juvenile. This is the same percentage as in 1980. During the 1980s, this figure dropped slightly and then rose. It continued to rise in the early 1990s, reaching a peak of 14 percent in 1994. In 1997, the figure declined to 12 percent (i.e., one in eight violent crimes was cleared by the arrest of a juvenile offender), a rate only one percentage point above the 1980 level.

Data from the National Crime Victimization Survey (NCVS) confirm that serious violent crime by juveniles did indeed increase in the early 1990s but then returned to more traditional levels by 1995. NCVS data are collected by the Bureau of Justice Statistics and provide a nationally representative picture of people age 12 and older who were the victims of a serious violent crime (rape/sexual assault, robbery, and aggravated assault). The survey, which excludes murder and crimes committed against children under age 12, has provided basic data on national crime trends since 1973.

According to NCVS data, serious violence by juveniles (serious violent victimizations with at least one juvenile offender under age 18) dropped by one-third between 1993 and 1997, while the comparable reduction for victimizations involving adult offenders was only 25 percent. The reduction in victimizations by juveniles was larger than reductions in adult crime for all three types of offenses covered by the NCVS: robberies (37 versus 22 percent), aggravated assault (30 versus 25 percent), and violent sexual assault (45 versus 37 percent). Still, as of 1997, juveniles under age 18 participated in 27 percent of all serious violent offenses (3 million in all), including 30 percent of robberies, 27 percent of aggravated assaults, and 14 percent of violent sexual assaults (Snyder and Sickmund, 1999: 62). Interestingly, 1997 NCVS data reveal that only 42 percent of violent crimes committed by juveniles were ever reported to a law enforcement agency (these include 51 percent of sexual assaults, 40 percent of robberies, and 42 percent of aggravated assaults by juveniles). The Office of Juvenile Justice and Delinquency Prevention reports that this undercount has not changed appreciably during the last 20 years.

Involvement in Gangs

What is the extent of gang activity? To find out, the Office of Juvenile Justice and Delinquency Prevention decided to conduct the National Youth Gang Survey. The survey, first conducted in 1996 to cover 1995 gang activity, collects data from over 2,500 law enforcement agencies across the country.

According to this survey, there were 31,000 gangs in about 4,800 U.S. cities and towns in 1995. The gangs included 846,000 gang members, about half of whom were under the age of 18. These estimates are higher than those available from previous studies, but it is not clear if this reflects an actual growth in gang activity across the country, better surveying, or other reasons. It

should also be noted that there are few commonly accepted criteria for identifying or defining gangs and gang members, but most definitions share elements such as a self-formed group that meets regularly, a common involvement in crime, communication through symbols, and control of a particular areas or enterprise. Gang statistics do not always distinguish between active core members, fringe members, and "wannabes." Furthermore, because lists of gang members are rarely purged of the names of people who are no longer active, law enforcement agencies may overestimate the numbers and ages of gang members. Some local communities may deny or minimize their gang-related problems, while others may exaggerate them in an effort to attract gang-related program funds. All of these factors should lead one to treat gang statistics with caution.

The 1996 survey found that gang problems are not limited to large cities, but affect communities of all types and sizes including rural areas. The majority (57 percent) of police and sheriffs' departments in suburban communities report having active gangs in 1995; the shares reporting gangs in smaller cities and rural areas are also significant, at 34 and 25 percent, respectively. Law enforcement agencies in various jurisdictions also describe gang problems emerging at different points in time. Gang-related problems appear to have first arisen in large cities around 1989, then in suburban areas (1990), small cities (1992), and rural areas (1993). Most of this spread, however, is not due to the physical migration of gangs from large cities to less populated areas. Rather, gang problems in most places are likely to be seen as home grown.

Of the estimated 846,000 gang members in 1995, 90 percent were male and 10 percent female. The largest racial/ethnic group was Hispanics (44 percent), followed by blacks (35 percent), whites (14 percent), Asians (5 percent), and others (2 percent). The largest age range

was 18 to 24 year-olds (37 percent), followed by 15 to 17 year olds (34 percent), youth under age 15 (16 percent), and adults age 25 or older (13 percent). Compared to a limited number of earlier studies, these findings suggest that gang membership is on the rise among white youth. This may be due to the increase in gang activity outside the largest cities, where whites comprise more than 30 percent of all gang members. These data also point to an increase in gang membership among females. One 1992 study found that only 6 percent of gang members were women. It is also interesting to note that the demographic profile of gang members differs markedly depending on whether one relies on the reports of law enforcement agencies (as with the above results) or self-reports from youth surveys. The latter tend to reveal much higher proportions of females and white males.

While crimes identified as gang-related by law enforcement agencies are overwhelmingly violent (a 1992 study found that more than half of gang-related crimes involved homicide and other violent crimes), the 1996 National Youth Gang Survey revealed that youth gangs are also responsible for many non-violent crimes, such as larceny, burglary, and auto theft. Large city and suburban gangs were more likely than those in other areas to be involved with aggravated assault and robbery, while burglary was more common among gangs in suburban and rural communities (Snyder and Sickmund, 1999: 77-79).

Youths' Self-Reports of Delinquency

What share of young people commit crimes or delinquent acts? One recent measure of this phenomenon comes from the first wave of the 1997 National Longitudinal Survey of Youth (NLSY97), a nationally representative sample of 9,000 youth age 12 to 16 at the end of 1996.

The NLSY97 provides a great deal of self-reported information on young people's involvement in gangs and other deviant or delinquent behaviors, as indicated in Table 4.3.

According to the NLSY97, over a quarter of youth (28 percent) have purposely destroyed property (37 percent of male youth) and 8 percent have stolen property worth more than $50. Seven percent have sold drugs, and 18 percent have committed an assault—a figure that rises to 23 percent when one considers males only. Finally, while 8 percent of youth report ever having been arrested, a large share of these, 40 percent, report having been arrested two or more times. Among male youth, whites were less likely to have been arrested than black or Hispanic males. Eleven percent of youth have run away from home, and this figure rises to 17 percent among 16 year-olds.

The NLSY96 also allow one to assess how early in life various delinquent behaviors begin. If one assumes that rates of age-specific behaviors remain fairly stable over the span of a few years, then one can estimate what share of 16 year-olds engaging in various delinquent activities had done so by age 12. Table 4.4 shows these comparisons and reveals that some behaviors are likely to occur for the first time early in a youth's life while others appear later. Thus, 79 percent of all 16 year-olds who reported purposely destroying property had done so by age 12. Other behaviors likely to occur early in life are committing an assault (63 percent of 16 year olds who reported engaging in this behavior had done so by age 12), carrying a handgun (60 percent), and joining a gang (52 percent). Behaviors less likely to occur early in a youth's life include getting arrested (only 21 percent of 16 year-olds who had been arrested had been arrested by age 12), using marijuana (15 percent), selling hard drugs (11 percent), and selling any drugs (10 percent) (Snyder and Sickmund, 1999: 61).

Interestingly, there are few differences in the levels of delinquent activity by youth's employment status (Table 4.5). The few exceptions to this are that compared to their unemployed peers, employed youth are more likely to have consumed alcohol and smoked cigarettes in the past month, and among 15 year-olds, employed youth are more likely to have carried a handgun in the past year.

It also interesting to consider whether or not various delinquent behaviors occur together. Compared to youth who have never used marijuana, those who have were more likely to have sold marijuana (24 percent versus less than 1 percent), carried a handgun (21 versus 7 percent), and been in a gang (14 percent versus 2 percent). Youth who revealed that they had ever sold marijuana were more likely than other youth to have sold hard drugs such as cocaine, LSD, or heroin (40 percent versus 1 percent), carried a handgun (35 percent versus 8 percent), and been in a gang (24 percent versus 8 percent). Youth who had used marijuana in the past 30 days were more likely than other youth to have consumed alcohol (78 percent versus 14 percent) or carried a handgun (12 percent versus 2 percent) during the previous month. Youth who had carried a handgun in the last 12 months were more likely than other youth to have been in a gang (15 percent versus 1 percent) (Snyder and Sickmund 1999: 59).

Incarceration Rates of Young People

Overall incarceration rates have more than doubled since 1983, rising from 179 per 100,000 to 445 per 100,000 in 1997.[2] While crime rates peak at age 18, the rate of incarceration reaches its high for the 25-34 year-old population at a rate almost triple the rate among 18 year-olds. Among white 18-19 year-olds, just over one person per 1,000 was incarcerated in 1996.

2 The numbers and the analysis in this section draw heavily from Freeman and Rodgers, 1999.

The rate reaches about 4.5 per 1,000 for the 25-29 age group and remains at that level through the 30-39 year-old group. The incarceration rate is eight times higher among African-Americans. By ages 18-19, about 1.3 of every 100 black youths were in jail or prison. The rate peaks at 4.13 per 100 among 25-29 year-olds. With incarceration primarily a male phenomenon, an extraordinary 8 percent of 25-29 year-old African-American males and about 6 percent of 20-24 year-olds were in prison in 1996.

These are startling numbers. On one hand, the rise in incarceration rates appear to have played a significant role in reducing crime. On the other hand, high incarceration rates affect the subsequent employment and earnings of young men and thereby weaken the income base of low-income, minority communities. Since the tendency to incarcerate those convicted of crimes is likely to continue and since adult criminals tend to begin their involvement in crime at young ages, only by diverting large numbers of young people from involvement in crime will the U.S. reduce the troubling high rates of incarceration of young men.

Costs to Society of Youth Delinquency and Crime

The costs to society of juvenile delinquency and crime are difficult to estimate but are clearly very high. One study conducted in 1998 by Mark Cohen of Vanderbilt University suggests that the costs of a single youth dropping of high school and turning to a life of crime and drug abuse may be as high as $1.7 to $2.3 million (Table 4.6). This figure includes crime costs over 10 years (4 as a juvenile) of $1.3 to $1.5 million, $150,000 to $300,000 in costs associated with drug use, and $243,000 to $388,000 in costs associated with dropping out of high school. While somewhat speculative, these figures illustrate the importance and potential cost

effectiveness of intervening with high-risk youth before they turn to a life of delinquency and crime (Snyder and Sickmund, 1999: 82).

Conclusions

Soaring juvenile crime rates in the late 1980s and early 1990s led some observers to predict the appearance of a new breed of American youth: superpredators. These fears were further exacerbated by the realization that the number of youth will increase over the coming decades. Fortunately, there is hope for a long-term reduction in youth crime. Juvenile crime rates remain high, but they have declined sharply in the last few years. In judging the extent of youth crime, one must look beyond juvenile crime rates and the juvenile justice system. Youth crime takes place at the highest rates between the ages of 17 and 23.

The recent decline in youth crime rates has not led to reductions in incarceration. Indeed, incarceration rates are up substantially since 1990, contributing to the reduction in crime rates and reflecting an improved ability to solve crimes. But a tragic side effect is that an extremely high percentage of minority males will have been in prison by their late 20s. Since involvement in criminal activity typically begins in the teenage years, it is critical for the country to do more to prevent youth involvement with crime. Progress in reducing poverty, narrowing the racial gaps in income, and increasing the presence and involvement of fathers in the lives of their children all depend on the nation's ability to divert young people from criminal activity.

Chapter 5
Health

Children and youth today are generally healthier than in previous generations. Advances in technology and medicine have led to several improvements in the health of American children and youth, including:

- Steady declines over the last several decades in the infant mortality rate and child and adolescent death rates.
- Reductions in the number of child and young adult deaths due to accidents and homicide and certain health conditions such as cancer and congenital abnormalities (U.S. Census Bureau, 1999b, 1994, 1989).
- Lower rates of sexually transmitted diseases such as syphilis and gonorrhea.
- Declines in some risky behaviors among high schoolers, including early sexual activity, fighting, and carrying weapons (Lindberg et al., 2000).

Unfortunately, these advances have been offset by other factors affecting the health of American youth.[1] Specifically:

- The number of adolescent deaths from homicide, suicide, and HIV infection have increased since the early 1980s.
- Rates of teen pregnancy, sexually transmitted diseases, and drug use are much higher than those found in other developed countries.
- Some high-risk behaviors, including smoking, illegal drug use, and binge drinking, have increased over the late 1990s after falling to lows in the early 1990s.
- While the share of students engaging in any of 10 risk behaviors declined between 1991 and 1997, the incidence of multiple risk behavior remained constant (Lindberg et al., 2000).

[1] The data in this chapter are largely drawn from two recent comprehensive reviews of the status of American youth; see U.S. Department of Health and Human Services (1999) and National Research Council and Institute of Medicine (1999). Also, we draw on the analyses of a range of youth risk behaviors in Gruber (forthcoming).

As this list makes clear, the major threats to the health and well-being of American youth are behavioral, and therefore largely preventable, in nature. Indeed, the U.S. Centers for Disease Control and Prevention has found that six groups of behaviors are responsible for 70 percent of adolescent mortality and morbidity: unintentional and intentional injuries, drug and alcohol abuse, sexually transmitted diseases and unplanned pregnancies, tobacco-related diseases, illnesses resulting from too little physical activity, and poor health resulting from inadequate diets (National Research Council and Institute of Medicine, 1999). The field of adolescent health has changed dramatically in the last two decades. As health care professionals better understand the unique health-related needs of teenagers and youth, many are abandoning traditional approaches based on the assessment, diagnosis, and treatment of diseases in favor of models that promote healthy behaviors. These developments may well translate into improved health outcomes for American youth in the first decades of the next century.

The health of youth over the next decades depends partly on the health of children today. Therefore, the chapter begins with a discussion of trends in the health of children. The second part of the chapter considers recent trends in adolescent health and in activities that imperil the future health of young people.

Infant Mortality

The infant mortality rate has declined dramatically over the past four decades, as shown in Table 5.1. Between 1960 and 1996, the rate dropped from 26.0 to 7.2 deaths per thousand live births. There was an especially steep decline in the rate of neonatal deaths (in the first 27 days of life)—from 18.7 deaths to 4.7 per thousand live births. Infant mortality in the postneonatal period (from 28 days to less than one year of life) declined more gradually between 1960 and

1996—from 7.3 to 2.5 infant deaths per thousand live births. The leading causes of death for infants under one year of age are congenital anomalies, disorders relating to a short gestation period and low birth weight, and sudden infant death syndrome (SIDS). In 1995, SIDS dropped from the second to third leading cause of infant mortality and accounted for nearly one-third of the total drop in infant mortality that year. The number of deaths due to SIDS is expected to continue falling in the future.

Despite these declines, the U.S. infant mortality rate is high compared to other industrialized nations. In 1993, Japan reported 4.4 infant deaths per thousand live births, Germany 5.8, the United Kingdom 6.2, and France 6.8, while the U.S. was at 8.4.

Low Birth Weight

Babies born at low birth weight (defined as less than 2,500 grams or 5 lbs. 8 oz.) face high risks of adverse health conditions and death. These infants account for four-fifths of all neonatal deaths and are 23 times more likely to die in their first year of life than heavier infants. Those born at a low birth weight are also much more likely to suffer disadvantages later in life, not only in health-related areas, but in other life outcomes as well. Conley and Bennett (2000) find that by age 19 those born at low birth weight are 34 to 74 percent less likely to have graduated from high school than their normal-weight siblings. And "late" graduation means that these students are also less likely to go on to college—a disadvantage that continues well into adulthood. Thus, reducing the incidence of low birth weight in one year can have positive consequences for youth outcomes in the long run.

Since 1970, the percentage of infants born at low birth weight has remained relatively constant. Table 5.2 shows that 7.9 percent of infants were born at low birth weight in 1970. The

rate dipped slightly in the 1980s, but has increased by 0.4 percentage points through the 1990s, reaching 7.4 percent in 1996. These low-birth-weight infants account for nearly two-thirds of neonatal deaths and are 21 times more likely to die during their first year of life than are heavier infants.

Low birth weights are consistently more common among black infants than among other races and Hispanics. The proportion of low birth-weight infants among whites, American Indians/Alaska Natives, Asians/Pacific Islanders, and Hispanics have remained within one percentage point of each other—usually close to 6 or 7 percent over the last 20 years. By contrast, the percentage of low-birth-weight black infants is almost double that of other groups. Black infants faced a 13 percent chance of being born underweight in 1996.

Table 5.2 and Figure 5.1 break down the percentage of low-birth-weight infants born to women of different ages. For most age groups, rates of low-weight births have stayed within 1.5 percentage points of the 1970 rates. But women under the age of 15 are the exception to this rule. While they have by far the highest percentage of low-weight births of any age group, the rate of low-weight births to women of this age group actually improved between 1970 and 1995. Between 1970 and 1985 the percentage of low-weight births to this youngest cohort decreased considerably—from 16.6 percent to 12.9 percent. But between 1985 and 1994, the figure increased to 13.7 percent. Preliminary data for 1996, however, show that this percentage has fallen to a new low of 12.7 percent.

Child and Youth Death Rates

Death rates for children and youth age 1 to 19 have decreased substantially between 1960 and 1996 (Table 5.3). The most dramatic declines in death rates occurred among children under

age 15, with decreases of 65 percent among children ages 1 to 4, 60 percent among children ages 5 to 9, and 45 percent among children 10 to 14. The 1990s have seen slower declines in death rates for these age groups than past decades. Death rates among youth age 15 to 19 have decreased by only 14 percent since 1960, with substantial fluctuations in the past few decades. For all groups, however, death rates have hit an all-time low.

Males displayed higher death rates across all age groups, with the most pronounced difference between the sexes occurring in the oldest cohort, youth age 15 to 19. The death rate for males in this age group was 112 per 100,000, compared to only 44.2 for females. This large disparity is largely due to gender differences in injury-related deaths.

Table 5.3 also indicates that death rates varied considerably between whites and blacks since at least 1970. Death rates were substantially higher for blacks for all age groups below age 15. By 1996, the death rate for black children aged 10 to 14, was 58 percent higher than the death rate for white children of the same age, 68 percent higher for black children age 5 to 9, and twice as high for children age 1 to 4.

The differences between death rates for black and white adolescents followed slightly different patterns since 1970. While the death rate for blacks age 15 to 19 was higher than that of whites in 1970, by 1980, the trend had temporarily reversed, with the death rate for black youth dropping below the death rate for whites of the same age. But between 1985 and 1994, black death rates increased dramatically, from 85.2 to 145.0 per 100,000, while white death rates remained relatively stable. This increase was likely due to increases in black male homicide rates over that period. Today, death rates for black youth seem to be on the decline again. In 1996, the death rate for black youth ages 15 to 19 was down to 120.1 per 100,000.

Overall Health Status

One way to determine the health trends of children is to ask parents whether their own children are in very good or excellent health. While this figure may not capture the absolute health status of children, since parents may raise their expectations about the meaning of very good or excellent health, the numbers are still worth reporting. On the basis of parental reports, the health status of children was remarkably constant between 1984 and 1996. Parents reported that about 80 percent of children were in very good or excellent health over the entire period. Differences by poverty status were more pronounced than racial differences. The gap between white and black children was 11 percentage points (81 percent of white children but 70 percent of black children in very good or excellent health), but was 19 points between the non-poor and poor.

Chronic Health Conditions

Chronic health conditions as defined in the National Health Interview Survey are conditions that either (a) were first noticed three months or more before the interview, or (b) belong to a group of conditions (including heart diseases, diabetes, and others) that are considered chronic regardless of when they began. Table 5.4 lists these various conditions and the incidence per 1,000 children.

Between 1984 and 1996, there were few clear patterns in the rate of chronic conditions among children and youth. The two exceptions, however, are asthma and chronic sinusitis. The prevalence of these two conditions increased dramatically over the period in question. In 1984 the incidence of asthma was 43 per 1,000 children under 18, but the rate grew to 62 per 1,000 by

1996, a 44 percent increase. Similarly, the rate of sinusitis increased by 36 percent, rising from 47 to 64 cases of chronic sinusitis per 1,000 children between 1984 and 1996.

One particularly problematic trend is the rise in share of overweight children. Between the late 1960s and the early 1990s, the proportion of 12-17 year-olds who were overweight jumped from 5 percent to 11 percent. The highest rate is among black female children, 16 percent of whom were overweight in the 1988-94 period.

Abuse and Neglect

Child abuse or neglect is often a precursor of serious problems among youth and young adults. The National Research Council defines four categories of child maltreatment: physical abuse, sexual abuse, emotional maltreatment, and neglect. The first three of these categories are commonly grouped together under the label of "abuse," though there are no universally accepted definitions of any of these terms. As Table 5.5 reveals, child abuse victimization rose sharply from 1990 through 1994, but has since declined by 6 percent. In 1997, about 965,000 children were victims of maltreatment in the U.S. This number is based on the total number of incidents that were substantiated or indicated by child welfare authorities in 48 states, and therefore may understate the actual number of victims. Due to the number of states and territories reporting abuse and neglect each year, we cannot directly compare the absolute numbers across years.[2] However, we can see that in 1990 the proportions of abuse and neglect victims were almost evenly split, but by 1995 slightly more cases, 57 percent, were neglect.

Black children accounted for a disproportionately high share of maltreatment victims relative to their share of the population. These children represent only 16 percent of all children

[2] Another data source, the third National Incidence Study of Child Abuse and Neglect, reports that as many as 2.8 million children may have been maltreated in 1993 (U.S. Department of Health and Human Services, 1999: 174).

under age 18, and 27 percent of all victims of child abuse and neglect. In contrast, white children comprise 79 percent of the child population, and account for 55 percent of child maltreatment victims in 1995.

Risky Behaviors by Teenagers

Dramatic shifts over time have taken place in the extent to which teenagers engage in risky activities, such as smoking, binge drinking, illegal drug use, early sexual activity, and carrying weapons. Available data suggest that after peaking in the mid-1970s, engagement in several risky activities declined through the early 1990s, but has increased over the 1990s. Others, especially early sexual activity and carrying weapons, have declined during the 1990s. The mixed picture extends to the proportion of youth engaging in any and many risky behaviors. Over the 1990s, the share of 9th through 12th graders involved in any of 10 risky behaviors declined from 80 percent to 75 percent. At the same time, the percent engaging in five or more risky actions remained constant at about 16 percent.[3] Moreover, most risk-taking is concentrated among young people taking several risks. Of the 12 percent of high school students who smoked, 85 percent engaged in at least one other risky behavior.

The next sections present information on trends on youth engaging in specific risky actions.[4]

Cigarette Smoking

---

[3] These conclusions come from Lindberg, et al. (2000), who examined the following ten risky behaviors: regular alcohol use, regular tobacco use, other illegal drug use, weapon carrying, suicide attempts, regular binge drinking, marijuana use, fighting, suicide thoughts, and risky sexual activity.

[4] For theoretical perspectives on why youth engage in risky behaviors at higher rates than adults, see O'Donoghue and Rabin (forthcoming).

The Centers for Disease Control and Prevention have reported that one in five deaths in the U.S. is related to tobacco use. Smoking is the single most preventable cause of death, and it ranks as a critical adolescent health issue because many Americans who begin smoking as teenagers will continue to do so as adults. Youth who smoke cigarettes are also much more likely than other youth to use other drugs and drink alcohol heavily.

Currently, an estimated 3 million children under age 18 smoke, and data from two school-based national surveys suggest that smoking among youth has increased in recent years. According to the Monitoring the Future Study, the share of 12th graders who reported smoking cigarettes daily decreased from 26.9 percent in 1975 to 17.2 percent in 1992. By 1997, however, the percentage had jumped backed to 24.6 percent; in 1998, the rate declined slightly to 22.4 percent. Data for younger children in the 8th and 10th grades are only available for 1991 onwards, but these too show increased smoking among these age groups. Among 8th graders, for example, the proportion of smokers increased from 7.2 percent in 1991 to 10.4 percent in 1996 but dropped to 9 percent in 1997 and 1998. Among 10th graders, there was an increase from 12 percent to about 18 percent in 1997, but then a decline to 16 percent in 1998. Findings from the Youth Risk Behavior Surveillance Study confirm rates of smoking among young people that are higher in the late 1990s than in the early 1990s.[5]

Not surprisingly, rates of youth smoking increase with age. This is evident from the figures just reported for different grade levels. There are also large differences smoking rates by race/ethnicity. White non-Hispanic youth are consistently more likely than other youth to smoke, while black non-Hispanic youth are consistently least likely to smoke. Indeed, whites are twice as likely as black and Hispanic youth to have smoked within the previous month and four

[5] Gruber and Zinman (forthcoming) attribute nearly one-quarter of the rise in teen smoking in the 1990s to the decline in real cigarette prices.

times as likely as black youth to be frequent smokers (smoking on 20 or more of the previous 30 days). Moreover, the smoking rate for 12th grade whites has risen dramatically from about 20 percent in 1992 to 28 percent in 1998 and shows no sign of declining. With the exception of black youth, there are few gender differences in smoking by youth. Among black youth in grades 9 through 12, males are more likely to smoke. This difference first arose in 1995 when rates of current smoking among black males jumped to 28 percent from 16 percent in 1993.

Alcohol Consumption

Alcohol consumption by adolescents is linked to a number of other problems such as car accidents, academic and work problems, and breaking the law. Despite the ban in all states of the sale of alcohol to those under age 21, youth drinking is common. About half of all 12th graders reported having a drink in the last 30 days in 1998. Still, drinking by American youth is less common than among adolescents in other high-income countries (Cook and Moore, forthcoming).

Of most concern is binge drinking (having five or more consecutive drinks within the previous two weeks) by youth, a behavior associated with high levels of illicit drug use and other problematic outcomes. According to the Monitoring the Future Study, binge drinking among 12th graders declined from a peak of 41.2 percent in 1980 to 27.5 percent in 1993. Since that year, the share of seniors who report binge drinking gradually increased to 31.3 percent, a rate still well below the 1980 peak. Regular drinking (defined as drinking alcohol on more than two occasions in the prior 30 days) is also quite common among 12th graders: about half did so in 1980, compared to 30.6 percent in 1996.

Drinking alcohol, both binge drinking and regular drinking, increases with the age of youth. In 1997, 14.5 percent of 8th graders said they binge drink, compared to 25.1 percent of 10th graders and 31.3 percent of 12th graders. Interestingly, this figures jumps dramatically between the 8th and 10th grades rather than in the last years of high school. For regular drinking, the figures for 1996 are 11.6, 20.3, and 30.6 percent of 8th, 10th, and 12th graders, respectively. In general, male youth are more likely to consume alcohol than their female counterparts. This is true for youth of all ages and for both binge and regular drinking. Among 1997 12th graders, for example, 37.9 percent of boys and 24.4 percent of girls report binge drinking. The corresponding figures for regular drinking in 1996 are 35.5 percent of boys and 25.3 percent of girls. Binge drinking is quite prevalent among young Hispanic students (among 8th graders, 20.7 percent of Hispanics binge drink, compared to 15.1 percent of whites and 9.8 percent of blacks). By the 12th grade, whites outpace Hispanic seniors (36.4 percent to 28.1 percent), while black seniors have a relatively low 12 percent rate of binge drinking. Blacks report the lowest levels of binge drinking among all ages and in all years in which these data have been collected.

Illicit Drug Use

The use of illicit drugs by young people is a major concern. Studies have linked the early use of marijuana to other dangerous behaviors, including crime, dropping out of school, driving under the influence, and destruction of property (Pacula et al., forthcoming). In addition, use of marijuana and other illegal substances generates health problems and leads many to addiction and dependency.

As in the case of cigarette smoking, illicit drug use reached a peak around 1980, fell steadily through the early 1990s, then increased over the late 1990s, but to well below the 1980

levels. In 1997, over one-quarter (26.2 percent) of American high school seniors reported using some type of illicit drug within the past month. Among 10th graders the share was also high (23.0 percent), and among 8th graders, 12.9 percent had used drugs. The share of 12th graders reporting marijuana use within the last month declined steadily from a high of 33.7 percent in 1980 to 11.9 percent in 1992. This figure has increased every year since then, reaching 24.4 percent in 1997. Marijuana use by younger students has also increased since the early 1990s: for 8th graders, the share went up from 3.2 percent in 1991 to 10.2 percent in 1997, and among 10th graders, the corresponding figures were 8.7 and 20.5 percent, respectively. Marijuana has long been the most commonly used drug among 10th and 12th graders, but in recent years its use by 8th graders has surpassed those of other drugs. Many observers attribute increases in marijuana use by teenagers to declines in the perceived harmfulness of marijuana use. This has been found among students of all grade levels between 1991 and 1996.

Unfortunately, there have also been increases in the use of drugs other than marijuana since 1991. Increases in the use of cocaine and hallucinogens have also been documented among all grade levels. Cocaine is the drug with the lowest prevalence in all grade levels but 2.4 percent of all 1998 12th graders report having used cocaine in the past month. Hallucinogens are not used by many 8th graders (1.4 percent in 1998), but their use increases with grade level (3.8 percent of 12th graders have used them in the past month). Inhalants, by contrast, are the most frequently used by 8th graders (4.8 percent of this group reported past-month use in 1998, compared to 2.9 percent of 10th graders and 2.3 percent of 12th graders).

As with cigarette and alcohol use, illicit drug use by American youth generally increases with age. As the results above earlier show, inhalants are the only drugs used by a greater share of 8th graders than 10th or 12th graders. While male students are more likely than their female

counterparts to use illicit drugs, gender differences are largest for marijuana and at the highest grade level. Among 8th graders in 1998, the share of boys using marijuana in the past month exceeds that of girls by less than 2 percentage points. The difference increases to 3 percentage points among 10th graders and almost 8 percentage points among 12th graders. As with other substances, the use of illicit drugs is lowest among black youth of all grade levels (U.S. Department of Health and Human Services, 1999). White 12th graders were far more likely than to report cocaine use (2.5 percent to 0.6 percent) and marijuana use (24.4 to 18.3 percent).

Sexual Activity

Large shares of American adolescents are sexually active and are becoming so at increasingly younger ages. By the 12th grade, as many as 70 percent of American youth have engaged in sexual intercourse, and almost a quarter of them have had four or more different partners. Early sexual activity can put youth at risk for unplanned pregnancies, sexually transmitted diseases (STDs), and emotional problems associated with being sexually active at too young an age.

Data from the National Survey of Family Growth (NSFG) reveal two decades of increases in the share of teens who are sexually experienced (defined as ever having had intercourse). This trend was broken for the first time in 1995. Not surprisingly, age is an important correlate of teen sexual experience. Among youth who turned 20 between 1985 and 1987, the share of females who report having had intercourse by a given age increased from 2 percent at age 13 to 10 percent by age 15, 36 percent by age 17, and 52 percent by age 18. Over three-quarters of the cohort had had sex by age 20. Among males, the corresponding figures were 9 percent (by age 13), 27 percent (by age 15), 52 percent (by age 17), 64 percent (by age

18), and 80 percent (by age 20). It is important to note that while many teenagers are engaging in sexual activity, not all are. Even among the cohort of youth turning 20 between 1985 and 1987, close to half of girls and over one-third of boys had not had sex by the age of 18. Gender differences in the share of teenagers who are sexually experienced at a given age have narrowed dramatically over time. This is especially true of sexual activity at younger ages. Among youth turning 20 between 1970 and 1972, for example, 30 percent of boys had had intercourse by age 16, compared to only 9 percent of girls. For the 1985-1987 youth cohort, the two figures were 41 and 21, respectively. There are also racial differences in sexual activity among youth. Black youth are more likely than others to have first had sex as high school students. In 1995, for example, the percentage of students in the 9th through 12th grades who reported ever having had intercourse was lowest among white non-Hispanics (49 percent), higher among Hispanics (58 percent), and highest among black students (73 percent).

Most teenagers who become sexually experienced continue having sex. Among young adults ages 18 to 22 who have ever had intercourse, the majority (70 percent) report having a second sexual experience within six months of the first one. Between 1991 and 1995, the share of teenagers in the 9th through 12th grades who were sexually active (having had intercourse within the previous three months) remained quite stable at about 38 percent. As with sexual experience, sexual activity increases with age, and there are relatively small gender differences and relatively large racial/ethnic differences.

Sexually Transmitted Diseases

With the increase in sexual activity among youth comes an increasing risk of exposure to sexually transmitted diseases (STDs). In 1993, one-fourth of the 12 million new cases of STDs

were among adolescents. Rates of STD infection are higher among adolescents and young adults because of high rates of unprotected sex and because adolescents girls and young women may be more biologically susceptible to infection by STDs. Despite this higher risk, the reported rate of incidence of both gonorrhea and syphilis has declined among adolescents ages 10 to 19 between 1975 and 1996.

Gonorrhea rates have declined for all groups since 1975. For youth ages 15 to 19, the incidence of this disease dropped by almost half, from 1,275 cases per 100,000 youth to in 1975 to 571 cases per 100,000 in 1996.

Females and blacks have reported consistently higher rates of gonorrhea incidence over the past few decades. In 1996, there were 756.8 cases per 100,000 females ages 15 to 19 and only 394.3 cases per 100,000 males of the same age. The rate of gonorrhea incidence for blacks was often more than 10 times higher than that of other racial and ethnic groups, but it has declined substantially throughout the 1990s. For black youth ages 15 to 19, the rate decreased from 6,316 to 3,064 cases per 100,000 in just six years.

Trends in the rates of incidence of syphilis have been similar to the trends in gonorrhea, though syphilis has a much lower incidence across all groups than gonorrhea. Rates of syphilis declined for youth ages 10 to 14 and 15 to 19 since 1975, after reaching a peak in 1990. In 1996, there were 6.4 cases of syphilis reported per 100,000 youth ages 15 to 19. Like gonorrhea, the rates for females and blacks were much higher than for their counterparts. Females ages 15 to 19 reported 8.6 cases per 100,000 compared to 4.3 among males in 1996. In the same year, syphilis rates among blacks were 36.9 per 100,000, compared to 0.9 for whites in 1996.

In contrast to gonorrhea and syphilis, the incidence of HIV/AIDS has increased substantially for adolescents ages 13 through 19. One study estimates that people under the age

of 22 account for up to 25 percent of new HIV infection each year. And people under the age of 25 may account for 50 percent of new HIV infection. In 1986, 53 adolescents ages 13 to 19 reported having AIDS, but by 1996, the number rose to 403. The Centers for Disease Control and Prevention report that through June 1997, a cumulative total of 2,953 AIDS cases have been reported among youth ages 13 through 19. However, the number of diagnosed AIDS cases is much lower than the number of reported cases. Table 5.6 presents the estimated AIDS incidence among youth ages 13 to 19. This table reveals that there were 100 cases of AIDS in 1986 and 220 in 1996. Moreover, it shows the number of cases leveling off in the 1990s.

It is interesting to note that though the number of adolescents with AIDS is relatively small, substantially more young people are infected with HIV than are living with AIDS. Since the period between HIV infection and AIDS diagnosis can be several years, the large numbers of people who develop AIDS in their 20s likely became infected with HIV as adolescents. Through June 1997, the number of cases of AIDS reported among young adults ages 20 to 24 was over 22,000. The number of cases among young adults ages 25 through 29 was 85,000. The numbers in Table 5.9 do not include adolescents infected with HIV.

AIDS disproportionately affects black and Hispanic youth. Together these groups accounted for 75 percent of both reported and diagnosed cases among adolescents ages 13 to 19. The trend is especially strong in the 1990s. Since 1992, the number of diagnosed cases of blacks in this age group has surpassed the number of cases diagnosed among whites.

Auto Safety

Auto accidents are the single largest cause of deaths and injuries of young people. In 1997, one-third of all deaths of 15-24 year-olds resulted from automobile accidents. Moreover,

the youth death rate from auto accidents per 100,000 people is twice the rate experienced by adults age 25 and over. On a per mile of driving basis, youth death rates are 2.5 times the level of adult rates. A good deal of the differential is due to the inexperience of youth drivers and their willingness to take more risks than adults (Dee and Evans, forthcoming).

Fortunately, despite the fact that the extent of youth driving doubled over the last two decades, death rates have declined markedly. Fewer deaths from motor vehicle crashes accounts for most of the drop in the death rates of 15-19 year-olds during the 1990s. Between 1980 and 1997, the number of 20-24 year-olds killed in auto accidents per 100,000 fell from about 45 to about 30. Most of the decline took place over the 1986-1992 period, when the death rate fell by 25 percent. Between 1983 and 1995, fatalities per billion miles traveled declined by 53 percent among 16-19 year-olds and 33 percent among 20-24 year-olds (Dee and Evans).

Although the causes of the reduction in teen traffic deaths are difficult to determine, Dee and Evans attribute much of the decline since the 1980s to lower rates of alcohol-related accidents. State policies to raise the drinking age reduced auto teen fatalities by about 5 percent and mandatory seat belt laws led to a 7 percent reduction (Dee and Evans). Among 16-24 year-olds, the share wearing seat belts all the time rose from about 20 percent in the early 1980s to about 55 percent in 1997. In recent years, the picture looks somewhat less favorable. The growth in seat belt use has stabilized and the proportion of 9th through 12th graders exposed to drunk driving also remained virtually constant, declining only from 42 percent to 40 percent between 1991 and 1997.

Exercise and Participation in Sports

Sports and exercise are constructive activities that can improve health outcomes. Although the decisions to exercise and to participate in sports are personal ones, the availability of sport facilities, intramural programs at schools, and parks may play a role in the proportion of young people who are active. Overall, the proportion of 12th grade students reporting actively participating in sports or exercise almost every day has remained stable since the mid-1970s, at about 45 percent. However, two patterns are notable and disturbing. First, participation in exercise and sports declines markedly with age, from about 55 percent of 8th graders to 45 percent of 12th graders. Second, sports and exercise participation by black 12th graders is down sharply from 49 percent in 1976 to 38 percent in 1997. This dropoff in sports and exercise among black youth is a potentially important focus for policy, both because of their long-term impact on health but also because of the short-term significance of these activities for promoting teamwork, discipline, and sportsmanship.

Conclusions

The health of children and youth is generally better today than in a generation ago. The gains among infants and young children are particularly notable. Infant mortality, low birth weight, and child and youth death rates are lower than ever before. However, among youth, several high-risk behaviors have increased in the 1990s after having declined during the 1980s. About 22 percent of 12th graders reported smoking in 1997, a rate up from 17 percent in 1992. Illegal drug use and binge drinking are also up among 12th graders after falling from the 1980s through the early 1990s. These behaviors leave youth increasingly vulnerable to unintentional injuries and health problems. All three types of substance abuse are sharply higher among white youth than among black youth.

The signs for the future health of American youth and young adults are mixed. The decline in low-birth-weight babies bodes well, since low birth weights are associated with various long-term problems. Improvements in auto safety and health treatment have reduced death rates of 15-19 year-olds from about 89 per 100,000 in 1990 to 79 per 100,000 in 1996. Moreover, despite long-term increases in sexual activity, recent trends show reductions in early intercourse, and most types of sexually transmitted diseases are declining. Still, disturbing increases in some behaviors that expose young people to health risks took place over the 1990s. A major challenge of public policies will be to discourage these destructive actions by young people.

Chapter 6

Labor Market Trends

Young people participate in the labor market by working part-time while attending school, taking summer jobs between school years, trying out entry-level jobs after leaving full-time schooling, and ultimately moving into career-related positions. Researchers and policymakers have long recognized that the frequent moves into and out of the labor force and between jobs lead to high frictional unemployment. However, the problems of chronic joblessness among a significant minority of young people have long preoccupied the public. Long-term youth joblessness is especially troubling because of its potential for reducing job and wage opportunities in the future through a scarring effect. Young people often lack a close connection to careers at a critical time, a time when too many young people engage in crime, early unwed parenting, and drug use. Moreover, out-of-school jobless youth rarely qualify for benefit programs and thus can become invisible to public agencies. Helping disadvantaged, jobless youth with the education, training, and life skills they need to become productive citizens is the goal of one of the largest federal training programs, the Job Corps.

In recent decades, policymakers have changed their perspectives on how best to define the youth labor market problem. During the 1970s, especially the late 1970s, the federal government focused on the extremely high—over 40 percent—unemployment rates experienced by black teenagers and low-income youth. Finding jobs for teens in the summer and even in the school year became a major federal priority. Congress passed the Youth Incentive Entitlement Pilot Projects (YIEPP) to test the feasibility of ensuring part-time, school-year jobs and summer jobs for all poor teenagers in selected communities.

In recent years, the policy emphases have shifted toward helping disadvantaged young people complete high school and improve their basic education and life skills. The measured unemployment rate among teenagers attracts little attention. The shift in emphasis came about only partly because of changes in the underlying market conditions.

This chapter examines the trends in the youth labor market and patterns likely to emerge during the next decade, with special emphasis on problems of the disadvantaged. The highlights of the chapter are as follows:

- Changes in the overall state of the economy continue to explain most of the variation in youth unemployment, but changes in the proportion of youth in the labor force have also influenced the level of youth unemployment.

- Today, job accessibility is high for most young people, whether they are in school, looking for a summer job, or entering the full-time job market.

- Despite increases in the percentage of youth attending school and in the proportion of young women who become unwed mothers, the youth labor force participation rate has remained stable as students and mothers have raised their involvement in the labor force.

- The tight labor markets of recent years have substantially improved the job market situation for most minorities and disadvantaged groups. The most troubling exception is the stagnant employment rate of black 20-24 year-old men. In addition, while welfare policy focuses on jobs for single mothers, young less-educated men are falling behind.

- The racial gap in employment begins at an early age. By age 14 or 15, whites are much more likely than blacks to hold jobs with employers and freelance jobs.

- The declining youth share of the labor force and the retirement of a large number of less-educated workers have been favorable trends for all youth and especially for less-educated youth. The patterns will remain largely favorable, as the youth percentage of the labor force increases very slightly and the educational gap between retired workers and new entrants narrows slightly.

- Although employers are increasing the amount of training they provide to workers, major structural improvements in the way youth make the transition from school to careers have not materialized. As a result, young workers will continue to move from job to job without gaining portable occupational credentials or a continuum of relevant experience and training.

Aggregate Labor Force Trends

The youth population bulge of the 1960s and 1970s led to more than a doubling of the youth labor force. Between 1959 and 1978, the size of the 16-24 year-old work force jumped from 10.9 to 25 million, an average increase of 700,000 new young workers per year. The youth labor force grew from 16 percent to 24 percent of the nation's labor force. Some researchers argued that nearly any labor market would find this large increase difficult to absorb—increased youth unemployment and reduced wages were the inevitable outcome of the youth bulge.[1] The next two decades witnessed a reversal of these youth population and labor force trends. The size of the youth labor force actually declined from 25.4 million in 1979 to 22.2 million in 1999, lowering the youth share of the labor force back to the 16 percent level of the late 1950s (see Figure 6.1).[2]

These ups and downs in the youth share of the population exerted an independent but small influence on the youth unemployment rate. Controlling for the adult unemployment rate, a one percentage point increase in the youth share of the labor force led to about a 0.16 rise in the unemployment rate of 16-24 year-olds.[3] Between 1958 and 1978, the youth share rose from 15.6 to 24.5 percent of the labor force, or nearly nine percentage points. A straightforward statistical analysis indicates that the result of this

[1] A recent paper by Korenman and Neumark (2000) on the impact of youth population changes across countries finds that a bulge in the youth population raises youth unemployment rates but has little impact on youth employment levels.

[2] The data for these sections come from the Bureau of Labor Statistics. See the sections on employment statistics in www.bls.gov.

[3] These findings come from an ordinary least squares regression prepared by the authors relating the unemployment rate of 16-24 year-olds to the youth share of the labor force, the adult unemployment rate, and a time trend.

increased youth share was that the 1978 youth unemployment rate was 1.4 percentage points higher than it would have been had the youth share of the labor force remained at 15.6 percent. The decline in the youth share between 1978 and 1999 appears to have lowered youth unemployment rates by about the same 1.4 percentage points. Thus, of the 2.3 percentage point decline in the unemployment rate of 16-24 year-olds from 12.2 to 9.9 percent, the majority (60 percent) resulted from the fall in the youth share of the labor force.

Over the coming decade, the youth labor force will grow somewhat more rapidly than the overall labor force. While the total labor force is expected to increase by 12 percent between 1998 and 2008, the labor force of 16-24 year-olds will increase by about 15 percent, or 3 million workers. Broadly, however, the nation's labor force will see virtually no change in the share of young workers—as in 1959 and 1998, one in six workers in 2008 will be between the ages of 16 and 24.

Population trends are expected to remain the main driving force behind the changes in the size of the youth labor force. Rising labor force participation rates between 1959 and 1978 (from 55 percent to 66 percent) accounted about 5 of the 15 million additional young workers. Since 1978, the participation rate of young workers has remained at about 66 percent and is expected to stay at that level over the next decade.

Interestingly, young women's labor force participation rates reveal very different patterns than their older female counterparts. Over the past 20 years, female labor force participation rates increased very slowly for the youngest groups. While adult women (ages 25-54) raised their participation rate from 60.6 to 76.5 percent, young women (ages

16-24) experienced only a small increase, from 61.7 to 63.3 percent (Fullerton, 1999). The Bureau of Labor Statistics (BLS) projects a small further increase over the next ten years for 20-24 year-old women, but no change in participation among 16-19 year-old women.

Participation rates of male youth have declined steadily over the past two decades, falling by 6.5 percentage points from 74.9 in 1978 to 68.4 in 1998. Labor force activity declined for middle-aged men as well, but only by 2.5 percentage points. BLS projects little change over the next 10 years in participation rates for any groups of men.

The recent, relatively constant youth labor force participation rates are surprising, given that young people are increasingly likely to attend school and students are less likely to participate in the labor force. However, this outcome is explainable in light of two offsetting trends. The expanding share of students was counterbalanced by an increase in rates of labor force participation by students, resulting in a stable overall youth labor force participation rate. Between 1980 and 1998, enrollment rates rose from 46 to 62 percent among 18-19 year-olds, from 31 percent to 45 percent among 20-21 year-olds, and from 16 to 25 percent among 22-24 year-olds (U.S. Census Bureau, 1999). For 16-24 year-olds as a whole, the share enrolled in school increased from 42 to 54 percent; labor force participation rates remained constant at 82 percent for those not enrolled, but increased for the enrolled group from 47 to 51 percent. Employment of college students increased substantially; between 1980 and 1998, the percentage of full-time college students in the labor force rose from 45 to 54 percent and the percentage

employed increased from 40 to 50 percent. The rising amount of work effort was mostly part-time work.[4]

Employment rates among in-school youth have trended upward, almost entirely because of the increasing employment of college students. The employment-population ratio of in-school 16-24 year-olds rose from 36 percent in 1970 to 42 percent in 1986; since 1986, the employed share of the in-school population has risen only slightly, to 44 percent. Jobholding among college students accounts for much of the growth in employment among students. The employment-population ratio of high school students increased only from 31 percent in 1970 to 34 percent by 1980 and has remained at that level. However, full-time college students have raised their employment rates steadily and substantially, from 33 percent in 1970 to 40 percent in 1980 to over 50 percent in late 1999.

Marriage and family status also influence the labor force activity of young people. The declining share of married men in their early and late 20s tends to lower participation rates for the overall cohort, since the labor force activity of married men is about 10 points higher than that of single men. For women, declining marriage rates work in the opposite direction, raising overall participation rates because single women are more likely to work than are married women.

Further complicating the labor force story of young women is the rising proportion of young mothers who are working. The precise timing of the trends differs, but married and unmarried mothers have become increasingly involved in the labor market. For example, married women with children under age 6 increased their work force activity from 45 percent in 1980 to 59 percent in 1990 and then to 64 percent in

[4] These data come from various issues of *Employment and Earnings*, U.S. Bureau of Labor Statistics.

1998. Among single mothers, labor force participation rose modestly between 1980 and 1990 (from 44 to 49 percent), but then jumped to 67 percent by 1998. The improved work incentives associated with the Earned Income Tax Credit and the time limits and tighter work requirements in the welfare system have no doubt influenced the recent dramatic increases in labor force activity among single mothers.

Trends in Earnings

The earnings of young people show virtually no increases in the last 20 years. Although the tabulated earnings data do not distinguish between enrolled and non-enrolled youth, over 80 percent of the full-time workers are not enrolled in school. Thus, the trends among full-time workers provide a picture of the earnings of the non-enrolled.

Looking at weekly earnings, we find that full-time workers in the 20-24 year-old age group (in 1979) had a median weekly paycheck of $185 per week, or $377 in 1999 dollars, using recently released price indices. This weekly pay was virtually identical in real terms to the $373 per week earned in late 1999 and early 2000. Thus, earnings of young workers have stagnated or declined over the last two decades.[5]

Among the broader group of 16-24 year-olds, the real weekly wage increases have been modest, but have kept pace with the increases of adult male workers. Between 1985 and 1998, earnings of 16-24 year-olds as a proportion of earnings of workers ages 25 and over declined only slightly for males (from 54 to 52 percent) but more substantially for females (from 71 to 63 percent). Adult women gained relative to adult men at a faster rate than the gains for young women relative to young men. This was

[5] For data on earnings in 1979, see U.S. Department of Labor (1988), adjusted using price measures reported by Stewart and Reed (1999); the recent data come from U.S. Bureau of Labor Statistics (2000).

partly because young women were already earning 88 percent of what young men earned in 1985. The female-male ratios increased from .67 to .76 among adult women and from .88 to .91 among young women.

Youth Employment Trends and the Economic Expansion of the 1990s

Youth employment trends take place in the context of an overall job market and are highly sensitive to the nation's demand for labor. When the unemployment rate of adult men falls by 1 percentage point, the unemployment rate of youth typically declines by 1.26 points. Thus, the employment expansion of the 1980s and the unusually tight labor market of the late 1990s have no doubt played important roles in the movement of aggregate youth trends. The unemployment rate of 16-24 year-olds peaked in 1982 at nearly 18 percent, then declined to 11 percent in 1989, only to rise to 14 percent in 1992 and then fall to 10 percent in 1998. The group of 16-24 year-olds not enrolled in school also fared well; their unemployment rate declined to 9.2 percent in 1998 from 14 percent in 1980. Today, 20-24 year-olds face a 7.5 percent unemployment rate, down from about 15 percent in 1982 and 11 percent in 1992. The one weakness is among out-of-school, less-educated youth; young high school dropouts experienced a 17 percent unemployment rate in late 1999.

The record long and still-healthy economic expansion of the U.S. economy is, not surprisingly, raising employment most among the more disadvantaged members of society. The gains in employment-population ratios and declines in unemployment rates over the expansion were substantially higher among youth, minorities, and less-educated workers than among prime-age white workers (Lerman and Schmidt, 1999). The employment-population ratio for teens increased 9 percent between 1992 and 1999—

from 40.9 to 44.7. This was a significant change, especially when compared with gains of only 4.3 percent for all workers. Similarly, unemployment rates for teens dropped by 5.8 percentage points, from 20 percent in 1992 to 14 percent in 1999—a drop of 37 percent in six years. The gains for black teens were even more dramatic. The employment-population ratio for this group grew 19 percent between 1992 and 1999, and the group's unemployment rate decreased by 12.3 percentage point from 40 to 28 percent—the largest drop of any group over the same period.

Advances for youth are common in an expanding economy. If nearly all the skilled workers are already employed earlier in the business cycle, employers will turn toward less-qualified workers to fill new jobs during a period of expansion. This practice creates an obvious benefit for youth, but shortages of high-skilled workers tend to lead to inflationary wage increases. In addition, adding low-skilled workers has the potential to lower productivity and increase costs for a firm. Though a typical expansion sets off increases in the supply of labor and offsets some of the upward pressure on wages, labor force participation rates in the 1990s rose only slightly, by only 0.7 percent.

Why, then, has the U.S. economy not already faced significant wage pressures and the accompanying restrictive policies that prevent unemployment from falling? One part of the explanation is a demographic phenomenon that ends up raising the educational level of the work force. Despite the labor market gains for youth and less-educated workers, Lerman and Schmidt (1999) find that fully 94 percent of the 11.7 million newly employed adult workers (age 25 and over) had at least some college, and over half had earned at least a BA degree. The normal tendency for employers to draw on less-educated workers at peaks in the business cycle has been offset by the long-term increase

in the educational status of the population. What implications does this have for in- and out-of-school youth?

While the typical high school dropout of any age had an easier time finding a job in 1998 than in 1992, dropouts did not account for any of the growth in employment over these six years. This can be explained by the fact that the high school dropout population declined by 2.8 million in that period, as the number of young high school dropouts becoming adults was smaller than the number of older dropouts dying. At the same time, while the typical adult college graduate was no more likely to be employed in 1998, the population of college graduates age 25 and over increased by 7.5 million, or 20 percent, well above the 7 percent growth in the total adult population. As a result, college graduates constituted 65 percent of the 11.5 million person *increase* in the 25 and over population.

The ability of employers to draw upon a growing pool of highly-educated workers has no doubt been a force toward mitigating inflationary pressures and possibly toward raising the nation's rate of growth of labor productivity. If this pattern continues in the future, in- and out-of-school youth can expect to fare better in the labor market, as they would in any expansion. However, the educational level of net additions to the work force will not rise nearly as fast as in recent years. The reason is that while the older workers leaving the work force within the last decade had much lower educational attainment than new entrants, the gap between retirees and entrants will narrow in the future. For example, 29 percent of today's 65-74 year-olds lacked a high school degree and only 10 percent had received a BA. In contrast, only 20 percent of 55-64 year-olds and 13 percent of 45-54 year-olds did not attain a high school degree. Still, young

workers in general and disadvantaged youth in particular will benefit from the fact that the economy will be losing large numbers of workers with very low educational levels. The declining supply of less-educated workers raises the opportunities of the remaining inexperienced and less-educated workers.

Today's healthy employment conditions probably are attracting some young people into the job market and away from full-time schooling. At the same time, enrollment rates remain high, partly because of the large, continuing wage gap between college-educated and high school-educated workers and the increasing tendency to combine work and schooling.

Labor Force and Employment Trends for Minorities and Disadvantaged Youth

What about minority and low-income young people? Have they kept pace with the job market gains experienced by other young people, especially in recent years? Here, the picture is mixed but, unfortunately, subpar educational competencies, criminal records, and early unwed parenthood have limited these groups' success in the job market. Trend data are readily available for minority youth, but not for low-income youth. Thus, the review below highlights trends mostly relating to black and Hispanic youth. We also present data for high school dropouts and those with just a high school degree to give insight in to the outcomes for relatively disadvantaged youth.

The labor force, employment, and unemployment developments vary substantially by ethnic group and gender. Black young men have experienced significant declines in employment rates. Over the same period, employment levels of black young women have reached new peaks and unemployment rates have fallen to new lows. Figures 6.2

through 6.7 review the labor market trends of black young men and women, including teenagers (ages 16-19) and 20-24, 25-34, and 35-44 year-olds. The gender differences over the expansion of the 1990s are especially striking. Black male youth did experience declines in unemployment rates, though not nearly as dramatic as those among black young women. However, black men saw no change (16-19 year-olds) or continuing declines (20-24 year-olds) in employment-population ratios. At 58 percent, the employed share of young black men is at the lowest point since 1982.

It is quite disturbing that the employed share of black men in their early 20s is the same in 1999 at a national unemployment rate of 4 percent as in 1992 when the nation's unemployment rate was 7.5 percent. This pattern is puzzling, since the 1999 unemployment rate of 20-24 year-old black men is below the 1979 level, when a much higher proportion of black men held jobs. Meanwhile, 20-24 year-old black women have overtaken black men in terms of employment. In spite of the more extensive parenting responsibilities of black women than black men, the employed share of black women reached 62 percent in 1999, or four points higher than black men. Fortunately, for some reason black men raise their employment levels significantly as they reach their late 20s and early 30s. The employed proportion of 25-34 year-old black men stood at 83 percent in 1999, 25 percentage points higher than the rate for black 20-24 year-olds.

Evidence for highly favorable effects of low unemployment on young African-American males comes from Freeman and Rodgers (1999). They estimate that the proportion of employed 16-24 year-old out-of-school youth jumped 15 or 16 percentage points, and that wages increased between 1992 and 1998 in metropolitan areas with significant declines in unemployment or with unemployment rates below 4 percent for

the entire period. The gains for African-American youth were even higher over the period, with employment-population ratios reaching 91 and 72 percent.

The long-term trends in the employment of Hispanic youth are remarkably stable in spite of large variations in unemployment rates and in the face of a doubling of the numbers of young Hispanic men and women.[6] In the recent expansion, unemployment rates have reached 25-year lows. The tight labor market of the 1990s and perhaps changes in the nation's income transfer programs have apparently stimulated Hispanic young women to enter the labor force and help them find jobs at record levels. By 1999, the employed proportion of 20-24 year-old Hispanic women reached 57 percent, up from 50 percent in 1994 and 48 percent in 1978. However, unlike the case of black men in their early 20s, Hispanic men maintained a very high employment level. As of 1999, over 80 of percent of 20-24 year-old Hispanic men held jobs, a rate similar to the 79 percent rate among whites and well above the 58 percent rate among black men.

Young high school dropouts face serious disadvantages in the job market. Given the rising level of education of other young people, one might expect the job market position of dropouts to have worsened because of the well-documented rising demand for skill and because they are a more marginal group within the 16-24 year-old cohort. Notwithstanding these expectations, today's employment situation for young dropouts is more favorable than in 1979, the business cycle peak of two decades ago. The employed share of the 16-24 year-old dropout population is 56 percent, three points higher than in 1979 and six points higher than in 1980. Although the employed share of male dropouts stands at a rate somewhat below the 1979 level (67 vs. 71 percent), the unemployment

[6] All the data in this paragraph come from the U.S. Bureau of Labor Statistics, www.bls.gov.

rate of male dropouts is only 14 percent in late 1999, as compared to 16 percent in 1979 and 23 percent in 1980.

For those non-enrolled 16-24 year-olds with only a high school diploma, employment conditions are quite similar to the period 20 years ago. The unemployment rates and employment-population ratios are similar to those in 1979 and somewhat better than those in 1980. Among young men, the job market statistics were more favorable in 1979 than in 1999, but the 1980 situation was considerably less favorable. About 87 percent of men with only a high school degree were employed in 1979, as compared to 81 percent in 1980 and 83 percent in 1999; the unemployment rate for this group was 8.1 percent in 1979, 13 percent in 1980, and 9 percent in 1999.

Summer Work Activities of Youth

Summer employment remains an important component of youth work activity. Youth employment has expanded by nearly 15 percent during the summers of recent years. In 1999, the youth labor force increased by 3.3 million workers in the April-July period, up from about 21.4 million in March.[7] The economy was able to generate an additional 2.8 million jobs for youth and thereby absorb over 85 percent of these youth entrants into jobs. As a result, the unemployment rate of 16-24 year-olds moved up only modestly from 9.4 to 10.1 percent.

Over the last ten years, summer labor force activity among youth has been on a downward trend. The labor force participation rate of 16-24 year-olds was 77.5 percent in 1989 and 72.6 percent in July 1999.

[7] The tabulations in this section come from data drawn from *Employment and Earnings*, March through August 1999 issues.

Black youth increase their labor force activity during the summer at a higher rate than white youth, but are not absorbed into jobs as well as white youth. An additional 12 of every 100 black 16-24 year-olds entered the job market in the summer of 1999, raising their participation rate from about 52 to nearly 64 percent as the white rate went from 66 to 75 percent. About 75 percent of the new black entrants found jobs, but their unemployment rate rose from 17.3 to 21.9 percent. While black youth employment grew by 19 percent, their labor force participation rose by 21 percent and unemployment jumped by 44 percent or about 250,000 people.

Work Experience of Today's Junior High and High School Students

The future youth labor market situation depends partly on the educational attainment of today's young people and partly on their work experience. Recent data are available on 14 and 15 year-olds from the 1997 National Longitudinal Survey of Youth. Using these data, the U.S. Bureau of Labor Statistics (1999) reports that in the 1996-97 period, more than half (57 percent) of this young cohort participated in some type of work experience while age 14 and that almost two-thirds (64 percent) worked at some point while age 15. Work was defined as either "employee" jobs, in which youths have an on-going relationship with an employer such as a restaurant or supermarket, or "freelance" jobs outside the home, in which youth are hired as needed to perform tasks such as babysitting or yard work. Most 14-year-olds worked in freelance jobs, while a majority of 15-year-olds worked in employee jobs. Perhaps because girls have easier access to babysitting jobs, they were more likely to work than boys at age 14 (59 percent

to 55 percent). However, at age 15, when employee jobs become more important, the gender difference was minimal (64.1 among girls to 63.4 percent among boys).

Despite the lower average family incomes of minority youth, white youth engaged in paid work at substantially higher rates than did black or Hispanic youth. About 68 percent of white 14 and 15 year-olds worked, as compared to about 43 percent of blacks and about 45 percent of Hispanics. Given that white youth are less likely to live in poor neighborhoods, one might expect whites to have a special advantage in terms of access to freelance jobs. In fact, racial differences in work at freelance jobs are actually slightly narrower than are differences in employee jobs.

Wages paid to 14 and 15 year-olds averaged from $5.50 to $5.71 per hour in employee jobs. Surprisingly, those who worked did so for nearly half the weeks in the year, averaging about 25 weeks per year even at age 14 and about 26 weeks per year at age 15. Girls and boys worked about the same number of weeks, though at age 15 boys averaged 27 weeks in comparison to 24 weeks for girls. Although girls earned about 10 percent less than boys at age 14 ($5.20 per hour to $5.73), the wage gap narrowed to about 5 percent, or 24 cents per hour, by age 15 ($5.58 to $5.82).

Whites worked significantly more weeks per year but, surprisingly, earned a lower hourly wage rate than blacks and Hispanics. At age 14, whites worked approximately 27.5 weeks per year while blacks and Hispanics worked 16.0 and 16.7 hours respectively. By age 15, whites averaged double the number of weeks worked by blacks (44 compared to 22.2) and 1.7 times the weeks worked by Hispanics (26.5). At this age, whites earned an average of $5.66 per hour, compared to $5.90 for blacks and $5.59 for Hispanics.

Surprisingly, young people were as likely to work at some point during the school year as during the summer. Of enrolled 14-16 year-olds, 28 percent worked both while school was in session and over the summer months. About 8 percent worked only over the school months. Only 6 percent worked during the summer but not during the school year. By implication, most of the youth entering the job market between April and July have held some job while school was in session.

Breaking down the percentage of weeks employed during the school year and summer uncovers some surprising results. The 28 percent of youth who worked during both the school year and summer months (year-round workers) worked more weeks in both periods than did those who worked in only one of the periods. These year-round workers worked for 59 percent of the weeks during the school year as well as 77 percent of all of the summer weeks. They have a stronger attachment to the formal labor market and more consistent employment patterns.

Boys were somewhat more likely than girls to work all year, as 26 percent of girls and 30 percent of boys worked year-round in employee jobs. The proportion of males and females working only during summer months and only during school months were roughly equal.

Jobs during high school appear to have positive impacts on post-secondary educational attainment and on labor market outcomes, such as unemployment, duration of employment after completing schooling, and earnings. However, high-intensity employment involving more than 20 hours a week appears to worsen educational outcomes, which in turn could limit long-term career prospects (Committee on the Health and Safety Implications of Child Labor, 1998). Long working hours by young people has

also been associated with substance abuse, insufficient sleep and exercise, and limited time with families, though researchers have yet to establish high-intensity work as the cause of problem behaviors. Still, a National Research Council report recommends authorizing the Department of Labor to set standards limiting the weekly maximum hours of work for 16 and 17 year-olds during the school year.

Job Turnover and the Transition from School To Career

A job is not necessarily a step toward a career. For many young people, especially those bound for four-year colleges, the primary purpose of a part-time, school-year job or a full-time summer job is to earn enough to contribute to education or living expenses. Yet, for the more than 60 percent of youth who leave school with at most a high school diploma, the goal is to find employment that will provide not only an adequate salary but also an opportunity for advancement and a route to a productive career. Unfortunately, the labor market offers few such options for young people without a post-secondary degree. Instead, too many young workers move from job to job, gaining little serious occupational training or meaningful occupational qualifications. Young men average about nine job changes between the ages of 18 and 32. Frequent movement between jobs does not end by the late 20s. The typical young man has three different jobs in the five years between the ages of 28 and 32.

Within the current U.S. institutional structure, high rates of mobility can play a positive role for many young people. Some use job changes as a way of discovering their best career match (Neal, 1999). Although it is difficult to identify in the data when a young person is changing careers when moving from one employer to another, Neal's

evidence shows that most job changes involve career changes. When the proportion of job changes within the same career is higher, the higher a young person's education and work experience. However, even among high school graduates with over seven years of work experience, 45 percent of the job changes involve changes in careers.

Many analysts have worried that the absence of a well-articulated system of integrating young people into careers has deleterious effects on social and educational outcomes as well as careers. As Stephen Hamilton and Mary Agnes Hamilton (1999) recently argued,

> When young people in their midteens see that their older brothers and sisters have no real prospects of career-entry employment and that their school performance and personal choices have no direct impact on the kinds of jobs they can get, they conclude that doing well in school is not important to career success and that the risks associated with crime, drugs, and sex are acceptable.... Working alongside high school graduates in grocery stores and fast-food restaurants, they find confirmation of their belief that school has nothing to do with real life. Not until their reach their mid- to late twenties, when employers view them as eligible for good jobs, do they discover the value of academic knowledge (p. 196).

In 1994, President Clinton proposed and Congress passed the School to Work Opportunities Act (STWOA) in an effort to encourage states to build more effective systems for integrating young people into careers. Although many communities have developed constructive programs in which young people learn more about careers, engage in job shadowing, work in internships, and attend career academies, the vast majority of high school students are unable to make a smooth transition from education to jobs with clear pathways toward rewarding careers.

Conclusion

While a healthy job market and a declining youth share of the population have contributed much to today's low youth unemployment rates, social forces are behind many of the youth labor force trends observed over the last two decades. More youth are staying in school and combining work and schooling. Delays in marriage without an accompanying reduction in childbearing have led to an increase in unwed motherhood among young women. Still, the labor force activity of young women, including young minority women, has increased with the growing social acceptance of working mothers and income transfer policies that promote labor force participation by single mothers. Black young men in their early 20s are the one youth subgroup showing little gain in employment over the last few years. Disadvantaged young men face special barriers in the job market because of the increasing share with a criminal record and their low basic skills.

Although forecasting is difficult, the next decade is unlikely to witness as many changes relevant to aggregate youth labor force activity as the last two decades. Further increases in school enrollments are plausible, but the enrollment growth of the 1980s and 1990s is unlikely to extend into the next decade. Marriage rates among youth are unlikely to increase, but childbearing among young, unmarried women could decline significantly, raising school enrollment and possibly labor force participation rates as well.

Policies aimed at improving the transition between education and careers could play a critical role in improving employment outcomes for youth. To the extent that states, communities, local school systems, and industry associations collaborate to

integrate work with learning and to build viable vocational qualifications, young people may be able to gain much more from their employment experiences than they do today. Should such systems become a reality, the impacts will not show up in the youth employment and unemployment statistics. However, for the majority of young people who do not attain a BA degree, developing a more effective school-to-career system could have highly favorable impacts on educational capabilities, earnings, and even such social behaviors as crime, drugs, and early unwed parenting. At this point, there is great uncertainty about whether improvements will be large enough to alter the quality of future careers.

Chapter 7

Summary and Policy Implications

The future for America's youth presents enormous opportunities as well as difficult challenges. The continuing strong economy has generated jobs for young workers to near record levels and has raised wage rates for the first time in many years. Education levels continue to rise; nearly 90 percent of young adults have a high school diploma or the equivalent. Juvenile crime and delinquency rates have recently leveled off after sharp increases in the early 1990s. Welfare reform has encouraged millions of mothers of young children to enter the labor market for the first time, providing new hope for financial self-sufficiency.

Most young people have a positive outlook. About two of three state that they will have many opportunities available after they graduate high school and almost three in four see a close relationship between their own work effort and their ultimate success.[1] The number taking action to take advantage of these opportunities—doing homework, attaining A's and B's, taking hard classes, and participating in extracurricular activities—varies significantly between boys and girls; low-income, middle-income, and high-income youth; and youth in one-parent and two-parent families. However, even among young people from less advantaged groups, over half report having many opportunities in the future.

Still, troubling patterns remain for several groups of young people. The continuing increase in the number of children growing up in single-parent families—

[1] These data come from reports by produced by the Horatio Alger Association (1999).

especially families headed by never-married parents—is particularly worrying. High rates of poverty and related risk factors are directly correlated with growing up in single-parent households. The high concentration of poor children and families in certain geographic areas tends to compound the risk factors. In addition, while juvenile crime and delinquency rates are beginning to decline, the rates of incarceration have actually increased. And although the strong economy is helping young workers, like others in the labor market, some groups are still experiencing difficulties. Those young persons with limited education and skills have significantly fewer employment opportunities. Most notably, the employment and earnings of young African-American males have been stagnant, and nearly 40 percent of young Hispanic adults lack a high school diploma.

The emerging trends facing youth in the U.S. have implications for public policy. First, the country will confront a growing youth population that is more diverse ethnically, socially, and economically. By 2010, barely a majority of youth will have grown up in two-parent families, and one in five will be of Hispanic origin. Policies will have to recognize the diversity of experiences and backgrounds. Second, while the youth population is increasingly likely to pursue higher education, one in four young people have been unable to complete a standard high school diploma. The problem is only slightly offset by the rising number of high school dropouts who attain a GED certification that permits entry into college and some jobs. GEDs are far from equivalent to a diploma with regard to knowledge or long-term success in the job market. Thus, policies must do more to prevent students from dropping out of school, and programs must try harder to encourage dropouts to achieve a full diploma. Young people must become more aware of the reality that a GED is a poor substitute for a full diploma,

especially since the availability of a GED appears to encourage some students to leave school before they attain their diploma (Chaplin, 2000). Achieving success in reducing the number of dropouts is particularly challenging in today's high employment environment, given that low unemployment rates make jobs attractive relative to schooling and raise dropout rates. One state policy that is costly but appears to exert positive effects on the completion of high school is the adoption of low college tuition (Gruber, forthcoming).

Third, most youth still engage in one or more behaviors that put them at risk of health or social problems. While the trends are mixed, public programs can build on the decline in such risky behaviors as unprotected sexual activity, fighting, carrying weapons, and drunk driving. Discouraging risky behavior should continue, but the focus should shift from policies that intervene in crisis or problem situations (including late intervention and treatment) toward policies that actively promote positive youth development (early intervention and prevention). In addition, broad policies, such as enforcing mandatory seat belt laws, raising the prices of cigarettes and reducing the price of marijuana, deter risky behaviors (Gruber, forthcoming). However, incentive-related policies are not enough, since most of the improving and worsening trends are apparently driven by social and attitudinal factors that are hard to identify.

Fourth, youth problems are increasingly concentrated among a minority of young people, often in specific geographic areas. While exceptions abound, youth who engage in one risky behavior are likely to engage in several; youth who have the least parental support also tend to have fewer economic resources and attend weaker, more dangerous schools; and youth who do poorly in school often cannot find good jobs or training

positions outside school. The multifaceted nature of these problems makes it all the more important for there to be coordination across agencies at the federal, state, and local levels of government to deal with individual families and young people.[2] The traditional federal response to youth issues establishing targeted categorical "treatment" programs, is unlikely to work. Instead, the emphasis should be on establishing a mission with specific goals, providing funding that is both flexible and adequate to meet those goals, and assisting local communities in using these funds to support effective practices and programs.

The only national agenda for youth to emerge in a major way has been the education standards movement and the effort to upgrade academic education. Little has been done to develop a larger youth development agenda, one that encourages extracurricular as well as academic programs, one that insures mentoring through well-developed community programs and though opportunities for internships, and one that promotes training and quality careers for the majority of youth not completing a B.A. degree.

Policies must do better to prevent poverty and its negative impact on the well-being of children. This means improving the preparation of youth for the labor market of the future with, for example, school-to-work programs and industry-school partnerships that expand potential career opportunities for non-college-bound youth. Doing more to coordinate career preparation with industries that can provide internships and training opportunities is especially critical in low-income communities. In addition, young people should learn more about the benefits of stable families and how best to achieve stability.

[2] For examples of local youth-focused initiatives, see Blank and Steinbach (1998).

As noted above, most public policies and programs are designed to address youth "problems" (e.g., substance abuse, out-of-wedlock childbearing, academic failure) are aimed at teenagers. A growing body of research suggests that efforts to keep youth on a positive trajectory and protect them from adverse outcomes should begin earlier in the lives of children during the critical ages (10 to 14) leading up to adolescence (Burt, Resnick, and Novick, 1998). Perhaps an approach emphasizing the promotion of youth development at young ages can yield more promising results than a focus on the specific crises teens experience. Broad-based mentoring and after-school programs, especially in geographic areas most at risk, are promising strategies that should be tried and closely evaluated.[3] Since the highest proportion of youth crimes are committed in the after-school hours, these efforts to help adolescents and older youth develop their talents and maturity are likely to yield beneficial side effects.[4]

Achieving such beneficial effects is a critical task for the health of young people and society at large. As of 1997, 15-19 year-olds accounted for 20 percent of violent crimes, and one-third of property crimes, but only 7 percent of the population. Homicide is the second leading cause of death among young men. In the late 1990s, youth crime declined, but only after increasing substantially through the late 1980s. Although not enough is known about the best approaches to reducing crime, Mendel (2000) argues that the programs promoting positive youth development for 10-14 year-olds also offer the most cost-effective methods for reducing youth crime. Further, even programs that target youth exhibiting behavioral problems do best when the interventions are at early ages.

[3] See, for example, Tierney et al. (1995) and Hahn et al. (1994).
[4] For examples of mentoring and other youth development programs, see James (1998) and James (2000).

Evidence on the impact of stringent penalties on youth crime is mixed, but they are no doubt a high-cost strategy (Levitt and Lochner, forthcoming; Mendel, 2000).

Finally, the scope of youth policy should probably be broadened to simultaneously strengthen the family—the institution that has perhaps the greatest influence on the development of children and youth. The pervasive negative effect of growing up in poor single-parent households is clear. The recent policy interest in improving the employability and wage-earning potential of fathers, especially young teenage fathers, is in a very real sense part of the nation's youth policy agenda. By improving fathers' employment and wages, their financial and nonfinancial contributions to children are also enhanced. Raising family incomes will benefit children materially, and increasing the involvement of fathers in their lives will benefit them intrinsically.

References

Bauman, Kurt J. "Shifting Family Definitions: The Effect of Cohabitation and Other Nonfamily Household Relationships on Measures of Poverty." *Demography* 36, no. 3 (August 1999): 315-25.

Blank, Martin J., and Carol Steinbach. "Communities: Powerful Resources for America's Youth." In *The Forgotten Half Revisited*, edited by Samuel Halperin, 59-81. Washington, D.C.: American Youth Policy Forum, 1998.

Bumpass, Larry L., and James A. Sweet. "National Estimates of Cohabitation." *Demography* 53 (1989): 913-27.

Burt, Martha R., Gary Resnick, and Emily R. Novick. *Building Supportive Communities for At-Risk Adolescents*. Washington, D.C.: American Psychological Association, 1998.

Campbell, Paul R. *Population Projections for States, by Age, Sex, Race and Hispanic Origin: 1995 to 2025*. U.S. Bureau of the Census, Population Division no. PPL-47. Washington, D.C., 1996.

Chaplin, Duncan. *GEDs for Teenagers: Are There Unintended Consequences*. Washington, DC: Urban Institute, 1999.

Child Trends. "Facts at a Glance." <www.childtrends.org>. December 1999.

Choy, Susan P. *College Access and Affordability*. Office of Educational Research and Improvement, National Center for Educational Statistics, U.S. Department of Education no. NCES 1999-108. Washington, D.C., 1999.

Committee on the Health and Safety Implications of Child Labor, National Research Council. *Protecting Youth at Work: Health, Safety, and Development of Working Children and Adolescents in the United States*. Washington, D.C.: National Academy Press, 1998.

Cook, Philip J., and Michael J. Moore. "Environment and Persistence in Youthful Drinking Patterns." In *Risky Behavior Among Youth: An Economic Analysis*, edited by Jonathan Gruber. Chicago, Illinois: The University of Chicago Press, forthcoming.

Dalaker, Joseph. *Poverty in the United States: 1998*. U.S. Census Bureau Current Population Reports, Series P60-207. Washington, D.C.: U.S. Government Printing Office, 1999.

Dee, Thomas, and William Evans. "Teens and Traffic Safety." In *Risky Behavior Among Youth: An Economic Analysis*, edited by Jonathan Gruber. Chicago, Illinois: The University of Chicago Press, forthcoming.

Freeman, Richard. "Why Do So Many Young American Men Commit Crimes and What Might We Do About It?" *Journal of Economic Perspectives* 10, no. 1 (Winter 1996): 25-42.

Freeman, Richard B., and William M. Rodgers III. *Area Economic Conditions and the Labor Market Outcomes of Young Men in the 1990s Expansion*. NBER Working Paper No. W7073. Cambridge, Massachusetts: National Bureau of Economic Research, 1999.

Fullerton, Howard N. "Labor Force Projections to 2008: Steady Growth and Changing Composition." *Monthly Labor Review* November 1999.

Green, Patricia, Bernard L. Dugoni, and Steven J. Ingels. *Trends Among High School Seniors: 1972-1992*. Office of Educational Research and Improvement, National Center for Education Statistics. U.S. Department of Education, 1995.

Gruber, Jonathan. "Introduction." In *Risky Behavior Among Youth: An Economic Analysis*, edited by Jonathan Gruber. Chicago, Illinois: The University of Chicago Press, forthcoming.

Gruber, Jonathan, and Jonathan Zinman. "Youth Smoking in the U.S.: Evidence and Implications." In *Risky Behavior Among Youth: An Economic Analysis*, edited by Jonathan Gruber. Chicago, Illinois: The University of Chicago Press, forthcoming.

Hamilton, Stephen. "Creating New Pathways to Adulthood." In *From Education to Work: Cross-National Perspectives*, edited by Walter Heinz. Cambridge University Press, 1999.

Hamilton, Stephen, and Mary Agnes Hamilton. "Creating New Pathways to Adulthood by Adapting German Apprenticeship to the United States." In *From Education to Work: Cross-National Perspectives*, edited by Walter R. Heinz, 194-213. Cambridge, United Kingdom: Cambridge University Press, 1999.

Horatio Alger Association. *State of Our Nation's Youth: 1999-2000*. Alexandria, VA: Horatio Alger Association of Distinguished Americans, Inc., 1999.

Korenman, Sanders, and David Neumark. "Cohort Crowding and Youth Labor Markets: A Cross-National Analysis." In *Youth Employment and Joblessness in Advanced Countries*, edited by David G. Blanchflower and Richard B. Freeman. Chicago, Illinois: University of Chicago Press, 2000.

Lerman, Robert I., and Stefanie Schmidt. *An Overview of Economic, Social, and Demographic Trends Affecting the U.S. Labor Market.* http://www.urban.org/employment/dol_fr/dol_finalreport.html: Urban Institute, 1999.

Levesque, Karen, et al. *Vocational Education in the United States: Toward the Year 2000.* National Center for Education Statistics, U.S. Department of Education no. NCES 2000-029. Washington, D.C., 2000.

Levitt, Steven, and Lance Lochner. "The Determinants of Juvenile Crime." In *Risky Behavior Among Youth: An Economic Analysis*, edited by Jonathan Gruber. Chicago, Illinois: The University of Chicago Press, Forthcoming.

Lindberg, Laura Duberstein, et al. *Teen Risk-Taking: A Statistical Portrait.* Washington, D.C.: Urban Institute, 2000.

McLanahan, Sara, and Gary Sandefur. *Growing Up with a Single Parent: What Hurts. What Helps.* Cambridge: Harvard University Press, 1994.

Mendel, Richard. *Less Hype, More Help: Reducing Juvenile Crime, What Works--and What Doesn't.* Washington, D.C.: American Youth Policy Forum, 2000.

National Research Council and Institute of Medicine. *Risks and Opportunities: Synthesis of Studies on Adolescence.* Board on Children, Youth, and Families: Forum on Adolescence. Washington, D.C.: National Academy Press, 1999.

Neal, Derek. "The Complexity of Job Mobility Among Young Men." *Journal of Labor Economics* 17, no. 2 (April 1999): 237-61.

O'Donoghue, Ted, and Matthew Rabin. "Risky Behavior Among Youths: Some Issues from Behavioral Economics." In *Risky Behavior Among Youth: An Economic Analysis*, edited by Jonathan Gruber. Chicago, Illinois: The University of Chicago Press, forthcoming.

Pacula, Rosalie L., et al. "Marijuana and Youth." In *Risky Behavior Among Youth: An Economic Analysis*, edited by Jonathan Gruber. Chicago, Illinois: The University of Chicago Press, forthcoming.

Pittman, Karen, and Merita Irby. "Reflecting on a Decade of Promoting Youth Development." In *The Forgotten Half Revisited*, edited by Samuel Halperin, 159-70. Washington, D.C.: American Youth Policy Forum, 1998.

Sawhill, Isabel. "Families at Risk." In *Setting National Priorities: The 2000 Election and Beyond*, edited by Henry Aaron and Robert D. Reischauer, 97-136. Washington, D.C.: Brookings Institution Press, 1999.

Snyder, Howard N., and Melissa Sickmund. *Juvenile Offenders and Victims: 1999 National Report*. Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs. Washington, D.C.: U.S. Department of Justice, 1999.

Stewart, Kenneth J., and Stephen B. Reed. "Consumer Price Index Research Series Using Current Methods, 1978-98." *Monthly Labor Review* June 1999: 29-38.

Teichler, Ulrich. "The Contribution of Education and Training to the Employability of Youth: Changing Concerns, Debates and Measures." In *Preparing Youth for the 21st Century: The Transition from Education to the Labour Market*, 215-62. Paris, France: Organisation for Economic Co-operation and Development, 1999.

U.S. Bureau of Labor Statistics. *College and Work Activity of 1998 High School Graduates*. News Release USDL 99-175. Washington, D.C., 1999a.

———. *Employment Experience and Other Characteristics of Youths: Results from a New Longitudinal Survey*. Tech. Rept. No. USDL 99-110. Washington, D.C., 1999.

———. *Usual Weekly Earnings of Wage and Salary Workers: First Quarter 2000*. Tech. Rept. No. USDL 00-110. Washington, D.C., 2000.

U.S. Census Bureau. "Historical Tables." <www.census.gov>. March 1999a.

———. *Statistical Abstract of the United States: 1989*. 109th. Washington, D.C., 1989.

———. *Statistical Abstract of the United States: 1994*. 114th. Washington, D.C., 1994.

———. *Statistical Abstract of the United States: 1999*. 119th. Washington, D.C., 1999b.

U.S. Department of Education. *Digest of Education Statistics*. National Center for Education Statistics. Washington, D.C.: U.S. Department of Education, 1999b.

———. *Getting There: A Report for National College Week*. Washington, D.C.: U.S. Department of Education, 1999a.

———. *On the Road to Economic Development: A Guide for Continuing Education Programs at Historically Black Colleges and Universities*. Office of Educational Research and Improvement. Washington, D.C.: U.S. Department of Education, 1996b.

———. *Youth Indicators, 1996*. National Center for Education Statistics no. NCES 96-027. Washington, D.C.: U.S. Department of Education, 1996.

U.S. Department of Education, National Center for Education Statistics. *The Condition of Education 2000.* Tech. Rept. No. NCES 2000-062. Washington, D.C.: U.S. Government Printing Office, 2000b.

———. *Digest of Educational Statistics 1999.* By Thomas D. Snyder and Charlene M. Hoffman no. NCES 2000-031. Washington, D.C., 2000a.

U.S. Department of Health and Human Services. *Trends in the Well-Being of America's Children and Youth: 1998.* Office of the Assistant Secretary for Planning and Evaluation. Washington, D.C.: U.S. Government Printing Office, 1998.

———. *Trends in the Well-Being of America's Children and Youth: 1999.* Office of the Assistant Secretary for Planning and Evaluation. Washington, D.C.: U.S. Government Printing Office, 1999.

U.S. Department of Labor. *Employment Experience and Other Characteristics of Youths: Results from a New Longitudinal Survey.* Bureau of Labor Statistics. Washington, D.C., 1999.

U.S. Department of Labor, Bureau of Labor Statistics. *Labor Force Statistics Derived From the Current Population Survey, 1948-97.* Bulletin 2307. Washington, D.C.: U.S. Government Printing Office, 1988.

Waite, Linda. "Does Marriage Matter?" *Demography* 32, no. 4 (November 1995).

Appendix: Tables and Figures

Table 2.1--Number (in millions) of Children Under Age 18 in the U.S., by Age: Selected Years, 1950-2020

	1950	1960	1970	1980	1990	1996	1997	2000	2010	2020
All children	47.3	64.5	69.8	63.7	64.2	69.0	69.5	70.8	72.5	77.6
Under age 6	19.1	24.3	20.9	19.6	22.5	23.4	23.2	22.9	23.9	26.4
Ages 6-11	15.3	21.8	24.6	20.8	21.6	23.0	23.4	24.3	23.6	25.8
Ages 12-17	12.9	18.4	24.3	23.3	20.1	22.6	23.0	23.6	25.0	25.4

Sources: U.S. Bureau of the Census Current Population Reports, Series P-25, No. 311, No. 917, No. 1130 (Table 2 in each); and unpublished data, U.S. Bureau of the Census. As cited in U.S. Department of Health and Human Services, 1999. Table PF1.1.

Table 2.2--Population Distribution of Children Under Age 18 in the U.S., by Race/Ethnicity: Selected Years, 1980-2020

	1980	1990	1996	1997	2000	2010	2020
White, non-Hispanic (in millions)	47.1	44.2	45.6	45.6	45.4	42.7	42.4
% White, non-Hispanic	74	69	66	64	64	59	55
Black, non-Hispanic	9.3	9.5	10.2	10.2	10.6	11.3	12.2
% Black, non-Hispanic	15	15	15	15	15	16	16
Hispanic	5.7	7.9	10.0	10.3	11.0	13.7	17.2
% Hispanic	9	12	14	15	16	19	22
Asian American, non-Hispanic	1.1	2.0	2.6	2.7	3.1	4.0	5.0
% Asian American, non-Hispanic	2	3	4	4	4	6	6
Native American, non-Hispanic	0.5	0.6	0.7	0.7	0.7	0.7	0.8
% Native American, non-Hispanic	1	1	1	1	1	1	1

Source: U.S. Bureau of the Census, *Detailed Charactaristics of the Population*. As cited in U.S. Department of Health and Human Services, 1999. Table PF1.4.

Table 2.3--Percentage of Children Under Age 20 Who Were Foreign Born, by Age and Race/Ethnicity: 1970, 1980, 1990

	1970	1980	1990
All Children	1.2	2.9	3.7
Under Age 5	0.6	1.4	1.4
Ages 5-9	1.1	2.6	2.7
Ages 10-14	1.4	3.2	4.3
Ages 15-19	1.8	4.1	6.5
White, Non-Hispanic	1.2	1.7	1.8
Black, Non-Hispanic	0.5	1.8	2.2
Native American, Eskimo, Aleut	—	1.5	1.1
Asian and Pacific Islander	—	40.0	33.2
Hispanic	—	14.0	15.8

Source: U.S. Bureau of the Census, National Origin and Language PC (2-1A), 1970; U.S. Bureau of the Census, *Detailed Characteristics of the Population*, 1980, Chapter D, U.S. Summary; U.S. Bureau of the Census, *The Foreign-Born Population in the U.S., 1990*, CP-3-1, and 1990 STF-3A files. As cited in U.S. Department of Health and Human Services, 1999. Table PF1.5A.

Table 2.4--Percentage Distribution of Children Under Age 18 in the U.S., by Living Arrangement and by Race/Ethnicity: Selected Years, 1970-1997

	1970	1980	1990	1991	1992	1993	1994	1995	1996	1997
All Children										
Two parents	85	77	73	72	71	71	69	69	68	68
Mother only	11	18	22	22	23	23	23	23	24	24
Father only	1	2	3	3	3	3	3	4	4	4
No parent	3	4	3	3	3	3	4	4	4	4
White										
Two parents	90	83	79	78	77	77	76	76	75	75
Mother only	8	14	16	17	18	17	18	18	18	18
Father only	1	2	3	3	3	3	3	3	4	4
No parent	2	2	2	2	2	2	3	3	3	3
Black										
Two parents	58	42	38	36	36	36	33	33	33	35
Mother only	30	44	51	54	54	54	53	52	53	52
Father only	2	2	4	4	3	3	4	4	4	5
No parent	10	12	8	6	7	7	10	11	9	8
Hispanic										
Two parents	78	75	67	66	65	65	63	63	62	64
Mother only	—	20	27	27	28	28	28	28	29	27
Father only	—	2	3	3	4	4	4	4	4	4
No parent	—	3	3	4	3	4	5	4	5	5

Sources: U.S. Bureau of the Census Current Population Reports, Series P-20, No. 410, No. 461, No 468, No. 478, No. 491 (Table 4 in each); and No 484, Table A-5; also unpublished data, U.S. Bureau of the Census. As cited in U.S. Department of Health and Human Services, 1999. Table PF2.1A.

Table 3.1--Enrollment in Educational Institutions, by Level and Control of Institution: Fall 1980-Fall 2008 (in thousands)

Level of Instruction and Type of Control	Fall 1980	Fall 1985	Fall 1990	Fall 1995	Fall 1996 [1]	Fall 1997 [2]	Fall 1998 [2]	Fall 1999 [2]	Fall 2000 [2]	Fall 2005 [2]	Fall 2008 [2]
All levels	58,305	57,226	60,267	64,803	65,674	66,170	67,309	67,871	68,334	69,942	70,351
Public	50,335	48,901	52,061	55,933	56,682	57,161	58,187	58,668	59,065	60,436	60,735
Private	7,971	8,325	8,206	8,869	8,993	9,010	9,121	9,203	9,269	9,506	9,616
Elementary and secondary education [3]	46,208	44,979	46,448	50,540	51,375	51,821	52,718	53,112	53,445	54,426	54,268
Public	40,877	39,422	41,217	44,840	45,592	45,953	46,792	47,143	47,439	48,335	48,201
Private	5,331	5,557	5,232	5,700	5,783	5,867	5,927	5,970	6,006	6,091	6,067
Grades K-8 [4]	31,639	31,229	33,973	36,772	37,245	37,495	38,110	38,338	38,543	38,376	38,034
Public	27,647	27,034	29,878	32,341	32,759	32,951	33,522	33,722	33,903	33,756	33,455
Private	3,992	4,195	4,095	4,431	4,486	4,545	4,588	4,616	4,640	4,620	4,579
Grades 9-12	14,570	13,750	12,475	13,769	14,131	14,324	14,608	14,774	14,902	16,050	16,234
Public	13,231	12,388	11,338	12,500	12,834	13,003	13,270	13,420	13,537	14,579	14,746
Private	1,339	1,362	1,137	1,269	1,297	1,322	1,339	1,354	1,366	1,471	1,488
Higher education [5]	12,097	12,247	13,819	14,262	14,300	14,350	14,590	14,758	14,889	15,516	16,083
Public	9,457	9,479	10,845	11,092	11,090	11,208	11,395	11,525	11,626	12,101	12,534
Private	2,640	2,768	2,974	3,169	3,210	3,143	3,194	3,233	3,263	3,415	3,549

1. Higher education data are preliminary.

2. Projected.

3. Includes enrollments in local public school systems and in most private schools (religiously affiliated and nonsectarian). Excludes subcollegiate departments of institutions of higher education, residential schools for exceptional children, federal schools, and home-schooled children. Based on Department estimates, the home-schooled children numbered approximately 800,000 to 1,000,000 in 1997-1998. Excludes preprimary pupils in schools that do not offer first grade or above.

4. Includes kindergarten and some nursery school pupils.

5. Includes full-time and part-time students enrolled in degree-credit and nondegree-credit programs in universities and 2-year and 4-year colleges.

NOTE.--Higher education enrollment projections are based on the middle alternative projections published by the National Center for Education Statistics. Because of rounding, details may not add to totals. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data and "Fall Enrollment in Institutions of Higher Education" surveys; Integrated Postsecondary Education Data System (IPEDS), Higher Education General Information Survey (HEGIS), "Fall Enrollment" surveys, and Projections of Education Statistics to 2008. (This table was prepared July 1998). As cited in Digest of Education Statistics, 1998. Tables 2 & 3.

Table 3.2--Enrollment in Public Elementary and Secondary Schools, by Race/Ethnicity: Fall 1986 and Fall 1996

Race/Ethnicity	Percent Distribution	
	Fall 1986	Fall 1996
White [1]	70.4	64.2
Black [1]	16.1	16.9
Hispanic	9.9	14.0
Asian or Pacific Islander	2.8	3.8
American Indian/Alaska Native	0.9	1.1

1. Excludes persons of Hispanic origin.

NOTE--The 1986 data were derived from the 1986 Elementary and Secondary School Civil Rights sample survey of public school districts. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, Office for Civil Rights, 1986 State Summaries of Elementary and Secondary School Civil Rights Survey; and National Center for Education Statistics, Common Core of Data survey. (This table was prepared May 1998.) As cited in the Digest of Education Statistics, 1998. Table 45.

Table 3.3--Enrollment Rates of 18-24 year-olds in Institutions of Higher Education, by Race/Ethnicity: 1970-1997

Year	Total Enrollment		White Enrollment		Black Enrollment		Hispanic Enrollment	
	Percent of all 18-24 year-olds	Percent of HS graduates [1]	Percent of all 18-24 year-olds	Percent of HS graduates [1]	Percent of all 18-24 year-olds	Percent of HS graduates [1]	Percent of all 18-24 year-olds	Percent of HS graduates [1]
1970 [2]	25.7	32.7	27.1	33.2	15.5	26.0	---	---
1975	26.3	31.4	27.4	31.3	20.4	30.1	20.4	33.0
1980	25.7	30.5	27.3	31.0	19.4	26.0	16.1	27.6
1981	26.2	31.3	27.7	31.6	19.9	26.6	16.6	28.5
1982	26.6	31.6	28.1	32.0	19.9	26.5	16.8	27.6
1983	26.2	31.3	28.0	31.8	19.2	25.3	17.3	29.9
1984	27.1	31.8	28.9	32.6	20.3	25.6	17.9	28.8
1985	27.8	32.5	30.0	33.9	19.6	24.5	16.9	25.0
1986	27.9	32.7	29.7	33.3	21.9	26.9	17.6	28.3
1987	29.7	35.4	31.9	36.6	23.0	28.2	17.7	26.6
1988	30.2	36.0	33.1	37.4	21.1	26.8	17.1	29.1
1989	30.9	36.5	34.2	38.3	23.4	28.5	16.0	26.6
1990	32.1	37.7	35.2	39.2	25.3	30.4	16.2	26.8
1991	33.3	39.3	36.8	41.0	23.4	28.2	17.8	31.4
1992	34.4	42.0	37.3	42.8	25.2	33.9	21.3	37.5
1993	34.0	41.6	36.8	42.6	24.5	32.8	21.7	36.1
1994	34.6	42.3	38.1	43.7	27.7	35.6	18.8	33.1
1995	34.3	42.3	37.9	44.0	27.5	35.4	20.7	35.2
1996	35.5	43.4	39.5	45.1	27.4	35.9	20.1	34.5
1997	36.2	44.6	40.6	46.8	29.8	39.6	22.4	36.1

1. Includes students who were enrolled in college, but did not report high school completion.
2. Data for white and black enrollment include persons of Hispanic origin.

different definition of graduation and may not be directly comparable with figures for other years. All college students are counted as high school graduates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished data. (This table was prepared September 1998.) As cited in Digest of Education Statistics, 1998, Table 186.

Table 3.4--Fall Enrollment in Historically Black Colleges and Universities, by Type and Control of Institution: 1976-1994

Year	All Institutions			Public Institutions			Private Institutions		
	Total	4-year	2-year	Total	4-year	2-year	Total	4-year	2-year
1976	222,613	206,676	15,937	156,836	143,528	13,308	65,777	63,148	2,629
1977	226,062	209,898	16,164	158,823	145,450	13,373	67,239	64,448	2,791
1978	227,797	211,651	16,146	163,237	150,168	13,069	64,560	61,483	3,077
1979	230,124	214,147	15,977	166,315	153,139	13,176	63,809	61,008	2,801
1980	233,557	218,009	15,548	168,217	155,085	13,132	65,340	62,924	2,416
1981	232,460	217,152	15,308	166,991	154,269	12,722	65,469	62,883	2,586
1982	228,371	212,017	16,354	165,871	151,472	14,399	62,500	60,545	1,955
1983	234,446	217,909	16,537	170,051	155,665	14,386	64,395	62,244	2,151
1984	227,519	212,844	14,675	164,116	151,289	12,827	63,403	61,555	1,848
1985	225,801	210,648	15,153	163,677	150,002	13,675	62,124	60,646	1,478
1986	223,275	207,231	16,044	162,048	147,631	14,417	61,227	59,600	1,627
1987	227,994	211,654	16,340	165,486	150,560	14,926	62,508	61,094	1,414
1988	239,755	223,250	16,505	173,672	158,606	15,066	66,083	64,644	1,439
1989	249,096	232,890	16,206	181,151	166,481	14,670	67,945	66,409	1,536
1990	257,152	240,497	16,655	187,046	171,969	15,077	70,106	68,528	1,578
1991	269,335	252,093	17,242	197,847	182,204	15,643	71,488	69,889	1,599
1992	279,541	261,089	18,452	204,966	188,143	16,823	74,575	72,946	1,629
1993	282,856	262,430	20,426	208,197	189,032	19,165	74,659	73,398	1,261
1994 [1] ...	280,071	259,997	20,074	206,520	187,735	18,785	73,551	72,262	1,289

1. Preliminary data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Fall Enrollment in Colleges and Universities;" and Integrated Postsecondary Education Data System (IPEDS), "Fall Enrollment" survey. (This table was prepared May 1996.) As cited in Digest of Education Statistics, 1996. Table 215.

Table 3.5--General Educational Development (GED) Credentials Issued, and Number and Age of Test Takers: U.S. and Outlying Areas: 1971-1996

Year	Number of credentials issued, in thousands [1]	Number completing test battery, in thousands [2]	Percent Passed	Percent Distribution of Test Takers, by Age				
				<20	20-25	25-30	30-35	35+
1971	227	---	---	---	---	---	---	---
1972	245	---	---	---	---	---	---	---
1973	249	---	---	---	---	---	---	---
1974	295	412	71.6	35	27	13	9	17
1975	342	507	67.5	33	26	14	9	18
1976	337	507	66.5	31	28	14	10	17
1977	331	488	67.8	40	24	13	9	14
1978	381	467	81.6	31	27	13	10	19
1979	435	583	74.6	35	27	13	8	16
1980	488	708	68.9	37	27	13	8	15
1981	500	701	71.3	37	27	13	8	15
1982	494	692	71.4	37	28	13	8	15
1983	477	678	70.4	34	29	14	9	15
1984	437	613	71.3	32	28	15	9	16
1985	427	622	68.6	33	26	15	10	16
1986	439	648	67.7	33	26	15	10	16
1987	458	662	69.2	33	24	15	10	18
1988	421	617	68.2	36	23	14	10	17
1989	364	554	65.7	36	24	13	10	16
1990	419	628	66.7	35	25	14	10	17
1991	471	672	70.1	33	27	14	10	17
1992	465	653	71.2	32	28	13	11	16
1993	476	652	73.0	33	27	14	11	16
1994	499	684	73.0	34	26	13	10	16
1995	513	698	73.5	37	25	13	10	15
1996	514	733	70.1	40	25	13	9	15

1. Number of people receiving high school equivalency credentials based on the GED tests.
2. Number of people completing the entire GED battery of five tests.

NOTE--Because of rounding, percentages may not add to 100. Some data have been revised from previously published figures

SOURCE: American Council on Education, General Educational Development Testing Service. (This table was prepared August 1998.) As cited in Digest of Education Statistics, 1998. Table104.

Table 3.6--Civilian Noninstitutional Population 16-24 Years of Age Not Enrolled in School, by Educational Attainment: October 1985-1999

Education	Year			
	1985	1990	1995	1999
Total	19,143	16,285	15,489	15,807
Less than a High School Diploma	4,267	3,848	3,854	3,832
% Less than HS	22.3%	23.6%	24.9%	24.2%
High School Graduates, No College	14,876	8,373	6,585	6,992
% HS, No College	77.7%	51.4%	42.5%	44.2%
Less than Bachelor's Degree	2,978	2,632	3,582	3,404
% Less than BA	15.6%	16.2%	23.1%	21.5%
College Graduates	1,572	1,433	1,468	1,579
% College Graduates	8.2%	8.8%	9.5%	10.0%

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*. November 1985, 1990, 1995, 1999.

Table 3.7--Years of School Completed by Persons Age 25-29, by Race/Ethnicity: 1920-1997

Year	Percent, by Years of School Completed											
	All Races			White, Non-Hispanic [1]			Black, Non-Hispanic [1]			Hispanic		
	<5 years of elementary school	High school or higher [2]	4+ years of college [3]	<5 years of elementary school	High school or higher [2]	4+ years of college [3]	<5 years of elementary school	High school or higher [2]	4+ years of college [3]	<5 years of elementary school	High school or higher [2]	4+ years of college [3]
1920 [4]	---	---	---	12.9	22.0	4.5	44.6	6.3	1.2	---	---	---
1940	5.9	38.1	5.9	3.4	41.2	6.4	27.0	12.3	1.6	---	---	---
1950	4.6	52.8	7.7	3.3	56.3	8.2	16.1	23.6	2.8	---	---	---
1960	2.8	60.7	11.0	2.2	63.7	11.8	7.2	38.6	5.4	---	---	---
1970	1.1	75.4	16.4	0.9	77.8	17.3	2.2	58.4	10.0	---	---	---
1975	1.0	83.1	21.9	0.6	86.6	23.8	0.5	71.1	10.5	8.0	53.1	8.8
1980	0.8	85.4	22.5	0.3	89.2	25.0	0.7	76.7	11.6	6.7	58.0	7.7
1982	0.8	86.2	21.7	0.3	89.1	23.8	0.7	81.0	12.6	6.6	61.0	9.7
1985	0.7	86.1	22.2	0.2	89.5	24.4	0.4	80.5	11.6	6.0	60.9	11.1
1986	0.9	86.1	22.4	0.4	89.6	25.2	0.5	83.5	11.8	5.6	59.1	9.0
1987	0.9	86.0	22.0	0.4	89.4	24.7	0.4	83.5	11.5	4.8	59.8	8.7
1988	1.0	85.9	22.7	0.3	89.7	25.1	0.3	80.9	12.0	6.0	62.3	11.3
1989	1.0	85.5	23.4	0.3	89.3	26.3	0.5	82.3	12.7	5.4	61.0	10.1
1990	1.2	85.7	23.2	0.3	90.1	26.4	1.0	81.7	13.4	7.3	58.2	8.2
1991	1.0	85.4	23.2	0.3	89.8	26.7	0.5	81.8	11.0	5.8	56.7	9.2
1992	0.9	86.3	23.6	0.3	90.7	27.2	0.8	80.9	11.1	5.2	60.9	9.5
1993	0.7	86.7	23.7	0.3	91.2	27.2	0.2	82.7	13.3	4.0	60.9	8.3
1994	0.8	86.1	23.3	0.3	91.1	27.1	0.6	84.1	13.6	3.6	60.3	8.0
1995	1.0	86.9	24.7	0.3	92.5	28.8	0.2	86.7	15.4	4.9	57.2	8.9
1996	0.8	87.3	27.1	0.2	92.6	31.6	0.4	86.0	14.6	4.3	61.1	10.0
1997	0.8	87.4	27.8	0.1	92.9	32.6	0.6	86.9	14.2	4.2	61.8	11.0

1. Includes persons of Hispanic origin for years prior to 1980.

2. Data for years prior to 1993 include all persons with at least 4 years of high school.

3. Data for 1993 and later years are for persons with a bachelor's degree or higher.

4. Estimates based on Bureau of the Census retrojection of 1940 Census data on education by age.

NOTE--Data for 1980 and subsequent years are for the noninstitutional population.

SOURCE: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1960, Vol. 1, part 1; Current Population Reports, Series P-20 and unpublished data; and 1960 Census Monograph, "Education of the American Population," by John K. Folger and Charles B. Nam. (This table was prepared July 1998.) As cited in Digest of Education Statistics, 1998. Table 8.

Table 4.1--Juvenile Proportion of Arrests and Crimes Cleared: 1997

Most Serious Offense	Arrests	Crimes Cleared
Violent Crime Index	17%	12%
Murder	14	8
Forcible Rape	17	11
Robbery	30	17
Aggravated Assault	14	12
Property Crime Index	35	23
Burglary	37	20
Larceny-Theft	34	24
Motor Vehicle Theft	40	21
Arson	50	46

Source: FBI's Uniform Crime Reporting Program. As cited in Snyder and Sickmund, 1999.

Table 4.2—Juvenile Arrests as a Percent of Total Arrests, by Sex and Race: 1997

	Juvenile Arrests as a Percent of Total Arrests				
	All Persons	Males	Females	Whites	Blacks
Total	19	18	23	20	16
Violent Crime Index	17	17	17	16	19
Murder	14	14	8	13	14
Forcible Rape	17	17	27	17	18
Robbery	30	30	28	31	29
Aggravated Assault	14	14	16	14	15
Property Crime Index	35	35	34	38	29
Burglary	37	37	32	39	30
Larceny-Theft	34	34	33	37	27
Motor Vehicle Theft	40	39	43	41	38
Arson	50	52	37	54	39
Other assaults	17	16	24	17	17
Vandalism	43	44	34	47	30
Weapons (carrying, possessing)	24	24	26	26	20
Prostitution	1	2	1	1	1
Drug abuse violations	14	15	11	14	13
Gambling	17	18	6	6	22
Liquor laws	25	22	35	27	11

Source: FBI's *Crime in the United States 1997*, tables 38, 39, 40, and 43. As cited in Snyder and Sickmund, 1999.

Table 4.3—Proportion of Youth Engaging in Deviant and Delinquent Behavior, by Age, Sex, and Race/Ethnicity: 1997

Behavior	Total	Ages 12-13	Ages 14-15	Age 16	Male	Female	White	Nonwhite	Rural	Urban
Had sex										
Ever	29	—	23	43	30	28	26	37	29	30
Last 12 months	21	—	16	32	22	21	19	27	21	22
Became pregnant										
Ever	6	—	4	10	—	6	5	9	5	7
Smoked cigarettes										
Ever	42	27	48	58	42	42	45	34	43	41
Last 30 days	21	8	25	37	21	21	23	16	20	21
Before or during school or work in last 20 days	5	2	6	9	6	4	5	5	5	5
Drank alcohol										
Ever	39	26	52	68	46	44	48	26	45	45
Last 30 days	21	8	25	37	21	21	23	16	20	21
Before or during school or work in last 20 days	5	2	6	9	6	4	5	5	5	5
Used marijuana										
Ever	21	8	25	38	22	20	22	19	19	22
Last 30 days	9	4	11	17	10	9	10	8	8	10
Before or during school or work in last 20 days	4	1	5	7	4	3	4	3	4	4
Ran away from home										
Ever	11	6	12	17	10	11	10	11	10	12
Carried a handgun										
Ever	10	8	11	12	16	3	10	9	11	12
Last 12 months	6	4	6	7	9	2	6	5	6	5
Last 30 days	3	2	3	3	5	1	3	3	3	3
To school in last 30 days	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Belonged to a gang										
Ever	5	3	6	6	6	3	4	7	5	5
Last 12 months	2	2	2	3	3	1	2	3	2	2
Purposely destroyed property										
Ever	28	25	31	30	37	20	30	25	29	28

Last 12 months	16	14	17	15	20	11	16	14	15	16
Stole something worth over $50										
Ever	8	4	10	11	10	5	7	9	7	9
Last 12 months	5	3	6	7	7	3	5	6	4	6
Stole a vehicle for use or sale										
Ever	1	<0.5	2	2	2	1	1	1	1	1
Sold any drugs										
Ever	7	2	9	12	9	5	8	5	7	7
Last 12 months	5	2	7	9	7	4	6	4	5	6
Sold hard drugs (e.g. cocaine, LSD, or heroin)										
Ever	3	1	3	6	3	2	3	3	3	3
Sold marijuana										
Ever	5	2	7	10	7	4	6	4	5	6
Committed assault										
Ever	18	15	19	22	23	12	16	21	17	18
Last 12 months	12	10	13	13	16	8	11	14	12	12
Was arrested										
Ever	8	4	10	12	10	5	7	9	6	9
Number of times										
Once	5	2	6	7	6	3	4	5	4	5
2 or more	3	1	4	5	4	2	3	4	2	4

Source: Bureau of Larbor Statistics' The National Longitudinal Survey of Youth 1997. As tabulated by Snyder and Sickmund, 1999.

Table 4.4--Incidence of Youth Delinquent Behaviors: 1997

Behavior	Proportion of 16 year-olds Engaging in Behavior Who Did So by Age 12
Purposely destroyed property	79
Committed assault	63
Carried a handgun	60
Belonged to a gang	52
Smoked cigarettes	39
Ran away from home	34
Stole something worth over $50	34
Drank alcohol	31
Was arrested	21
Used marijuana	15
Sold hard drugs (cocaine, LSD, or heroin)	11
Sold any drugs	10

Source: Authors' analysis of the Bureau of Labor Statistics' The National Longitudinal Survey of Youth 1997 (machine-readable data file). As cited in Snyder and Sickmund, 1999.

Table 4.5--Incidence of Delinquent Behaviors by Age And Employment Status: 1997

Behavior	15 Year-Olds		16 Year-Olds	
	Unemployed	Employed	Unemployed	Employed
Smoked cigarettes				
Last 30 days	24%	30%	32%	34%
Drank alcohol				
Last 30 days	28	34	35	40
Before or during school or Work in last 30 days	7	7	9	9
Used marijuana				
Last 30 days	13	15	18	16
Before or during school or Work in last 30 days	5	6	7	6
Carried a handgun				
Last 12 months	5	8	7	6
Last 30 days	3	4	4	3
Had sex				
Last 12 months	21	19	32	32
Belonged to a gang				
Last 12 months	2	2	4	2
Destroyed property				
Last 12 months	16	16	15	15
Stole something worth Over $50				
Last 12 months	7	9	8	5
Committed assault				
Last 12 months	12	13	14	12

Source: Authors' analysis of the Bureau of Labor Statistics'The National Longitudinal Survey of Youth 1997 (machine-readable data file). As cited in Snyder and Sickmund, 1999.

Table 4.6--Crime and Drug Abuse Costs to Society: 1999
Invoice

To: American Public
For: One Lost Youth

Description	Cost
Crime:	
Juvenile career (4 years @ 1-4 crimes/year)	
Victim cost	$62,000-$250,000
Criminal justice costs	$21,000-$84,000
Adult career (6 years @ 10.6 crimes/year)	
Victim costs	$1,000,000
Criminal justice costs	$335,000
Offender productivity cost	$64,000
Total crime cost	**$1.5-$1.8 million**
Present value	**$1.3-$1.5 million**
Drug abuse:	
Resources devoted to drug market	$84,000-$168,000
Reduced productivity loss	$27,600
Drug treatment costs	$10,200
Medical treatment of drug-related illnesses	$11,000
Premature death	$31,800-$223,000
Criminal justice costs associated with drug crimes	$40,500
Total drug abuse cost	**$200,000-$480,000**
Present value	**$150,000-$360,000**
Cost imposed by high school dropout:	
Lost wage productivity	$300,000
Fringe benefits	$75,000
Nonmarket losses	$95,000-$375,000
Total dropout cost	**$470, 000-$750,000**
Present value	**$243,000-$388,000**
Total loss	**$2.2-$3 million**
Present value	**$1.7-2.3 million**

Source: Author's adaptation of Cohen's "The Monetary Value of Saving a High-Risk Youth," *Journal of Quantitative Criminology*. As cited in Snyder and Sickmund (1999).

Table 5.1—Infant, Neonatal, and Postneonatal Mortality Rates (Deaths per 1,000 Live Births), by Race/Ethnicity[1]: Selected Years, 1960-1997

	1960[2]	1970	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Infant[3]	26.0	20.0	12.6	10.6	9.2	8.9	8.5	8.4	7.6	7.6	7.2	7.2
White	22.9	17.6	10.9	9.2	7.6	7.3	6.9	6.8	6.3	6.3	6.0	6.0
Black	44.3	33.3	22.2	19.0	18.0	17.6	16.8	16.5	15.1	15.1	14.2	14.2
Hispanic	—	—	—	8.6	7.8	7.5	6.8	6.7	6.1	6.1	5.8	6.0
Neonatal[4]	18.7	15.1	8.5	7.0	5.8	5.6	5.4	5.3	5.1	4.9	4.7	4.8
White	17.2	13.7	7.4	6.0	4.8	4.5	4.3	4.3	4.2	4.1	3.9	4.0
Black	27.8	23.2	14.6	12.6	11.6	11.2	10.8	10.7	10.2	9.8	9.2	9.4
Hispanic	—	—	—	5.4	5.0	4.6	4.3	4.1	4.1	4.0	3.7	3.9
Postneonatal[5]	7.3	4.9	4.1	3.7	3.4	3.4	3.1	3.1	2.9	2.7	2.5	2.5
White	5.7	4.0	3.5	3.2	2.8	2.8	2.6	2.5	2.4	2.2	2.1	2.0
Black	16.5	10.1	7.6	6.4	6.4	6.3	6.0	5.8	5.6	5.3	5.0	4.8
Hispanic	—	—	—	3.2	2.8	2.8	2.5	2.6	2.5	2.1	2.1	2.0

1. Estimates for whites and blacks include Hispanics of those races. Persons of Hispanic origin may be of any race. Hispanic rates not avaiable prior to 1985. Infant mortality by Hispanic origin reported by 17 states and the District of Columbia in 1985, 45 states, New York state (excluding NY City), and the District of Columbia in 1990, 47 states, New York state (excluding NY City), and the District of Columbia in 1991, 48 states and the District of Columbia in 1992, and 49 states and the District of Columbia since 1993.

2. Data for 1960 are by race of child; all others years are by race of mother.

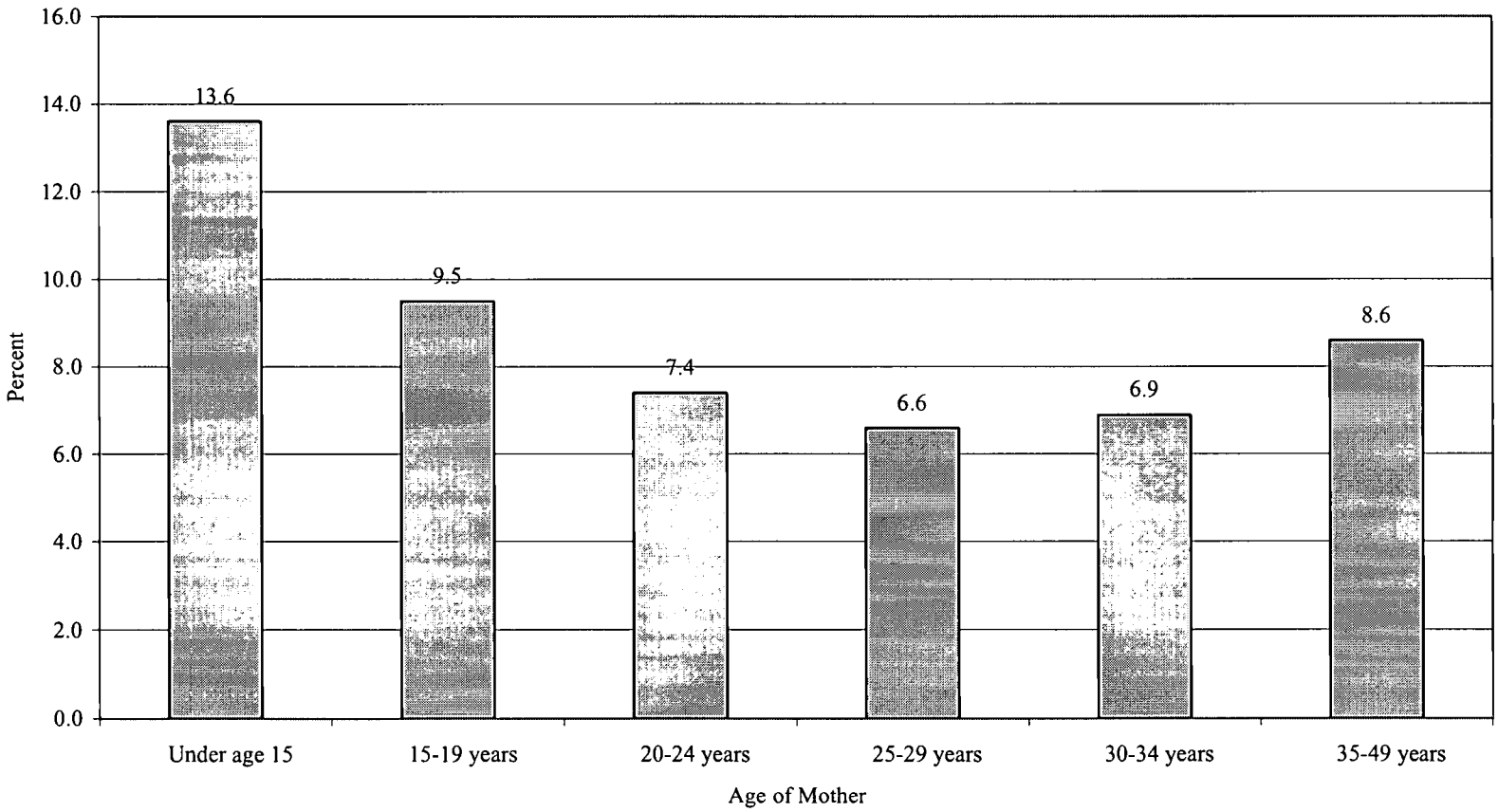
3. Under one year old.

4. Under 28 days old.

5. Twenty-eight days to one year old.

Source: U.S. Department of Health and Human Services, *Trends in the Well-Being of Youth*, 1999.

Figure 5.1--Percentage of Low Birth-Weight Infants Born in the U.S., by Age of Mother: 1997



Source: U.S. Department of Health and Human Services, *Trends in the Well-Being of Youth*, 1999.

Table 5.2--Percentage of Low Birth-Weight[1] Infants Born in the U.S. by Mother's Race/Ethnicity[2] and Age: Selected Years, 1970-1997

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Total	7.9	7.4	6.8	6.8	7.0	7.1	7.1	7.2	7.3	7.3	7.4	7.5
Race/ Ethnicity												
White[3]	6.9	6.3	5.7	5.7	5.7	5.8	5.8	6.0	6.1	6.2	6.3	6.5
Black[3]	13.9	13.2	12.7	12.7	13.3	13.6	13.3	13.3	13.2	13.1	13.0	13.0
American Indian/Alaskan Native[3]	8.0	6.4	6.4	5.9	6.1	6.2	6.2	6.4	6.5	6.6	—	6.8
Asian/Pacific Islander[3]	—	—	6.7	6.2	6.5	6.5	6.6	6.5	6.8	6.9	—	7.2
Hispanic Origin[4]	—	—	6.1	6.2	6.1	6.1	6.1	6.2	6.3	6.3	6.3	6.4
Age												
Under age 15	16.6	14.1	14.6	12.9	13.3	13.7	13.2	13.5	13.7	13.5	12.7	13.6
15-19 years	10.5	10.0	9.4	9.3	9.3	9.3	9.3	9.2	9.3	9.3	9.3	9.5
20-24 years	7.4	7.1	6.9	6.9	7.1	7.2	7.1	7.2	7.3	7.3	7.4	7.4
25-29 years	6.9	6.1	5.8	5.9	6.2	6.3	6.2	6.4	6.4	6.4	6.5	6.6
30-34 years	7.5	6.8	5.9	6.1	6.4	6.6	6.5	6.7	6.7	6.7	6.8	6.9
35-49 years	8.8	8.4	7.2	7.1	7.4	7.7	7.8	8.1	8.2	8.3	8.3	8.6

1. Low birth weight is defined as infants weighing 2,500 grams (5lb. 8oz.) or less.

2. Birth figures for Hispanic infants in 1980 are based on data from 22 states that reported Hispanic origin on the birth certificate, 23 states and the District of Columbia in 1985, 48 states and the District of Columbia in 1990, 49 states and the District of Columbia in 1992, and 50 states and the Distrcit of Columbia since 1993.

3. Includes persons of Hispanic origin.

4. Persons of Hispanic origin may be of any race.

Source: U.S. Department of Health and Human Services, *Trends in the Well-Being of Youth*, 1999.

Table 5.3--Child and Youth Death Rates (Death Rates per 100,000 Population in Each Age Group) in the U.S., by Age Group, Gender, and Race: Selected Years, 1960-1997

	1960	1965	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Ages 1-4	109.1	95.9	84.5	69.9	63.9	51.8	46.8	47.4	43.6	44.8	42.9	40.6	38.3	35.8
Gender														
Male	119.5	104.3	93.2	76.7	72.6	58.5	52.4	52.0	48.0	49.5	47.3	44.8	42.4	39.7
Female	98.4	87.1	75.4	62.7	54.7	44.8	41.0	42.7	39.0	39.9	38.2	36.2	34.0	31.8
Race														
White	95.2	83.2	75.1	63.3	57.9	46.6	41.1	41.7	38.1	38.3	36.5	35.1	32.9	31.6
Black	—	—	140.0	106.2	97.6	80.7	76.8	79.7	73.2	79.1	77.2	70.3	67.1	59.2
Ages 5-9	49.0	43.9	42.1	35.2	30.4	25.0	22.2	21.5	20.4	21.1	19.9	19.7	19.8	18.5
Gender														
Male	56.3	50.8	49.7	41.4	353.0	28.5	25.6	24.5	23.7	23.2	22.6	22.5	22.6	20.2
Female	41.5	36.8	34.2	28.6	25.6	21.4	18.5	18.4	16.8	19.0	17.0	16.7	16.9	16.6
Race														
White	46.2	40.8	39.9	33	28.4	22.9	20.3	19.8	18.3	19.0	17.6	17.7	18.0	16.2
Black	—	—	56.4	47.4	41.7	36.2	32.3	32	32.1	32.9	31.8	30.2	30.3	30.1
Ages 10-14	44.0	40.5	40.6	35.3	30.8	28.0	26.0	25.8	24.6	25.6	25.2	25.5	24.3	23.2
Gender														
Male	55.0	50.9	51.3	44.9	38.3	35.0	31.6	32.9	30.7	31.7	31.2	31.0	29.3	27.9
Female	32.6	29.7	29.5	25.3	22.9	20.6	20.2	18.2	18.2	19.2	18.8	19.6	19.0	18.3
Race														
White	41.4	38.6	38.4	33.7	29.8	27.0	24.3	24.2	22.8	23.7	23.0	23.6	22.3	21.8
Black	—	—	54.6	44.3	36.6	34.8	36.6	36.4	35.3	37.2	37.9	36.8	35.3	32.1
Ages 15-19	92.2	95.3	110.3	100.2	97.9	80.5	87.9	89.0	84.3	86.9	86.8	83.5	79.2	74.8
Gender														
Male	130.1	136.0	157.8	145.4	141.4	113.4	127.2	128.6	122.4	126.0	126.6	119.5	112.0	104.5
Female	54.0	53.9	61.7	53.8	53.1	46.2	46.4	47.2	44.0	45.6	44.8	45.7	44.2	43.4
Race														
White	87.9	90.9	103.1	98.0	99.1	80.2	81.4	80.5	75.6	77.0	76.8	75.6	72.3	69.5
Black	—	—	158.0	114.4	92.3	85.2	127.7	141.2	135.5	143.6	145.0	130.2	120.1	107.6

Source: U.S. Department of Health and Human Services, Trends in the Well-Being of Youth, 1999.

Table 5.4—Selected Chronic Health Conditions[1] for Children Under Age 18 (Rate per 1,000 Children) in the U.S.: Selected Years, 1984-1996

	1984	1987	1990	1992	1993	1994	1995	1996
Respiratory Conditions								
Hay Fever	61	64	57	71	57	61	66	59
Chronic Bronchitis	50	62	53	54	59	55	54	57
Chronic Sinusitis	47	58	57	69	80	65	76	64
Asthma	43	53	58	63	72	69	75	62
Skin Conditions								
Dermatitis	39	32	31	41	36	38	35	31
Serious Acne	26	26	26	25	28	29	26	24
Impairments								
Deformity/Orthopedic Impairment	35	36	29	33	29	28	30	26
Speech Impairment	16	19	14	21	20	21	18	16
Hearing Impairment	24	16	21	15	17	18	15	13
Visual Impairment	9	10	9	10	7	9	7	6
Other Conditions								
Heart Disease	23	22	19	19	20	18	19	24
Migraine Headache	11	8	14	13	13	16	13	15
Anemia	11	8	10	11	9	12	7	5
Epilepsy	7	4	4	3	5	5	4	5

1. Chronic health conditions as defined in the National Health Interview Survey are conditions that either a.) were first noticed three months or more before the reference date of the interview; or b.) belong to a group of conditions (including heart disease, diabetes, and others) that are considered chronic regardless of when they began. The prevalence estimates are based on reports by parents or other adult respondents in response to checklists administered in household interviews.

Source: U.S. Department of Health and Human Services, *Trends in the Well-Being of Youth*, 1999.

Table 5.5—Substantiated and Indicated[1] Incidences of Child Maltreatment by Type of Maltreatment, Race/Ethnicity[2], Gender, and Age[3]: 1990-1997

	1990	1991	1992	1993	1994	1995	1996	1997
Total[4]	798,318	857,968	1,002,288	1,018,692	967,398	970,285	1,001,973	965,623
Type of Maltreatment (% of total)								
Abuse	51	50	45	46	44	43	24	25
Neglect	49	50	55	54	56	57	52	55
Race/Ethnicity (% of total)								
White	55	56	55	54	56	55	53	—
Black	25	27	26	25	26	27	27	—
Hispanic	9	10	10	9	9	10	11	—
Other	4	4	4	4	4	5	—	—
Unknown	7	5	6	9	4	3	—	—
Gender (% of total)								
Male	47	46	46	47	47	47	48	47
Female	53	54	54	53	53	53	52	52
Age (% of total)								
Under age 1	8	8	7	7	7	7	7	7
Age 1-5	31	32	32	33	33	33	32	31
Age 6-12	37	38	37	38	38	39	40	40
Age 13-17	20	20	19	20	20	20	20	19
Age 18+/unknown	5	2	5	2	2	2	2	3

1. Some states have a classification of "indicated" when there is sufficient reason to suspect that a child may have been maltreated or is at risk of maltreatment, but the allegation cannot be substantiated to the level of evidence required by the law.

2. Persons of Hispanic origin may be of any race. Estimates of blacks and whites include persons of Hispanic origin.

3. Some states have included persons age 18 and older in their statistics on child abuse and neglect. Because these presons are considered victims of child maltreatment under the laws of their states, statistics in this table include these persons. Such individuals account for fewer than one percent of all victims.

4. The total number of substantiated and indicated cases is not directly comparable from year to year because the number of reporting states and territories varies from year to year.

Source: U.S. Department of Health and Human Services, *Trends in the Well-Being of Children and Youth*, 1999.

Table 5.6--Estimated AIDS Incidence in Adolescents Ages 13-19, by Gender and Race/Ethnicity: 1981-1996

Year	Total[1]	Male	Female	White	Black	Hispanic
1986	100	80	20	40	30	20
1987	110	90	20	50	40	10
1988	140	100	40	60	50	30
1989	160	110	50	70	60	30
1990	190	130	70	70	70	40
1991	200	140	60	90	80	40
1992	220	120	100	70	100	40
1993	240	150	90	70	110	50
1994	220	140	90	70	120	40
1995	220	120	100	60	110	40
1996	220	120	110	50	120	60

1. Totals include other race and ethnic groups not specified. Totals may not equal the sum of the rows due to rounding.

Source: U.S. Department of Health and Human Services, *Trends in the Well-Being of Children and Youth*, 1998.

Figure 6.1--Youth Share of the Labor Force and Youth Unemployment Rate: 1949-1999

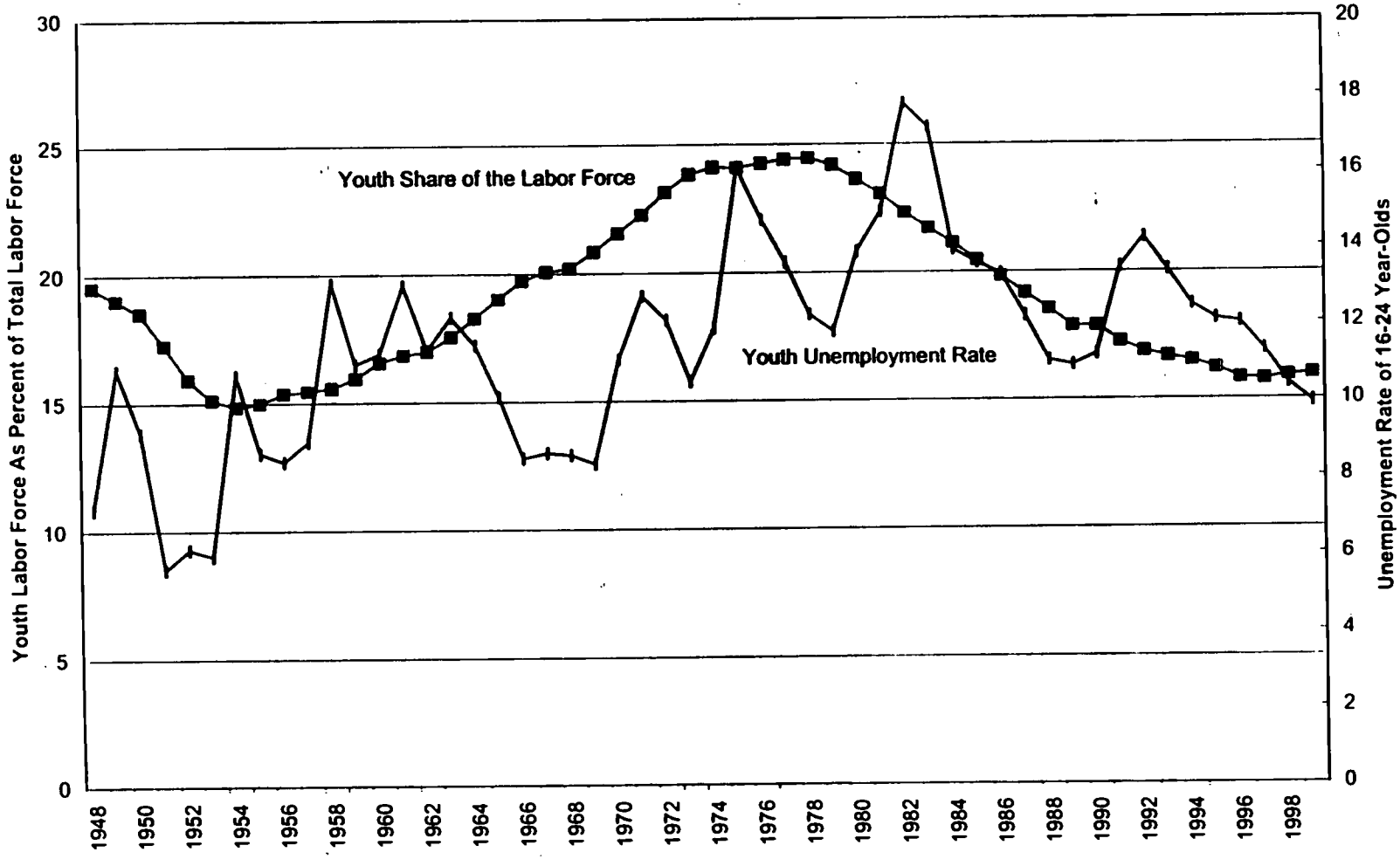
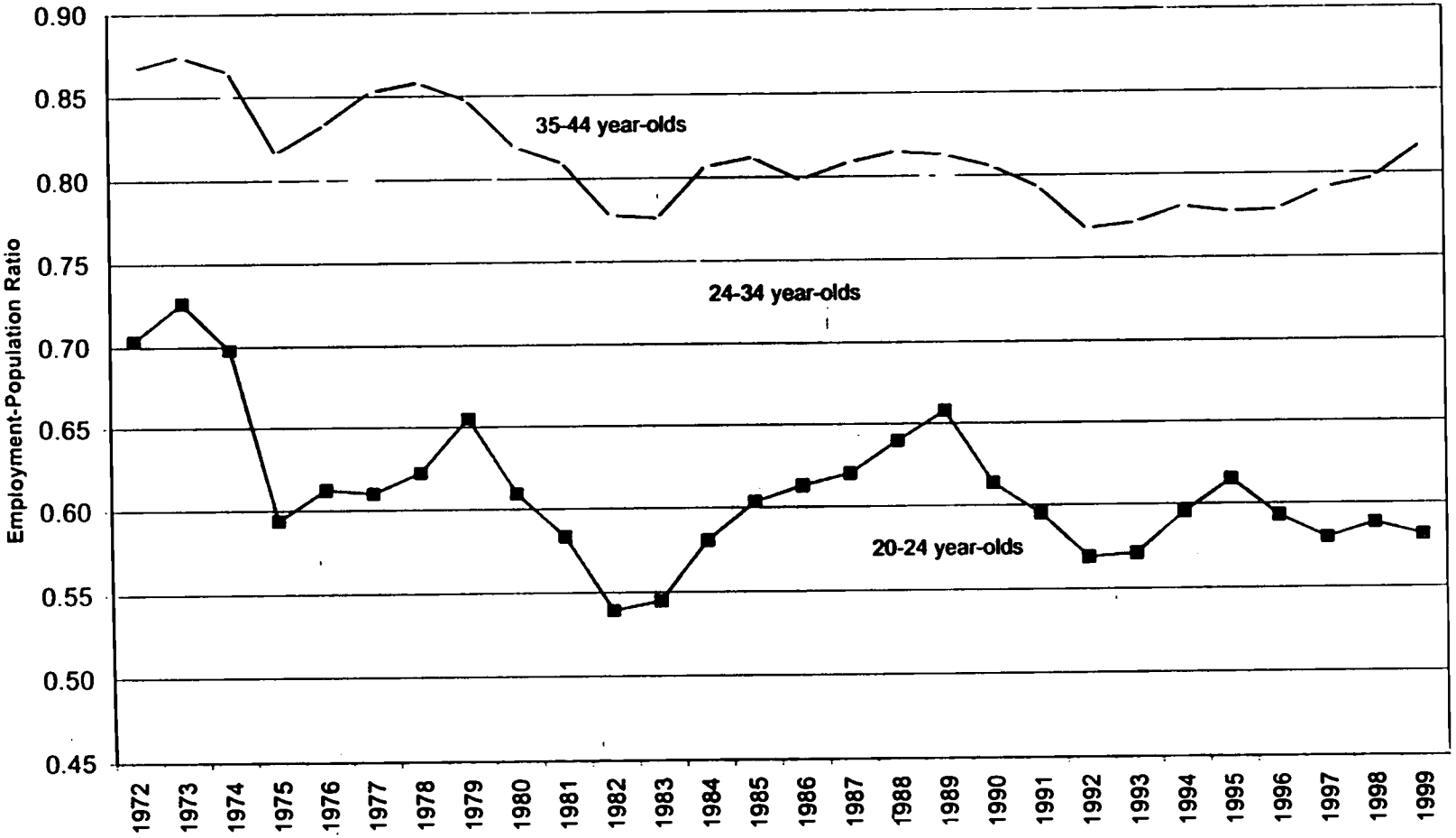


Figure 6.2--Employment-Population Ratios of Black Men, Ages 20-24, 25-34, and 35-44: 1972-1999



Prepared by Robert I. Lerman, Urban Institute. Source: US Bureau of Labor Statistics.

Figure 6.3--Unemployment Rates of Black Men, Ages 20-24, 25-34, and 35-44: 1972-1999

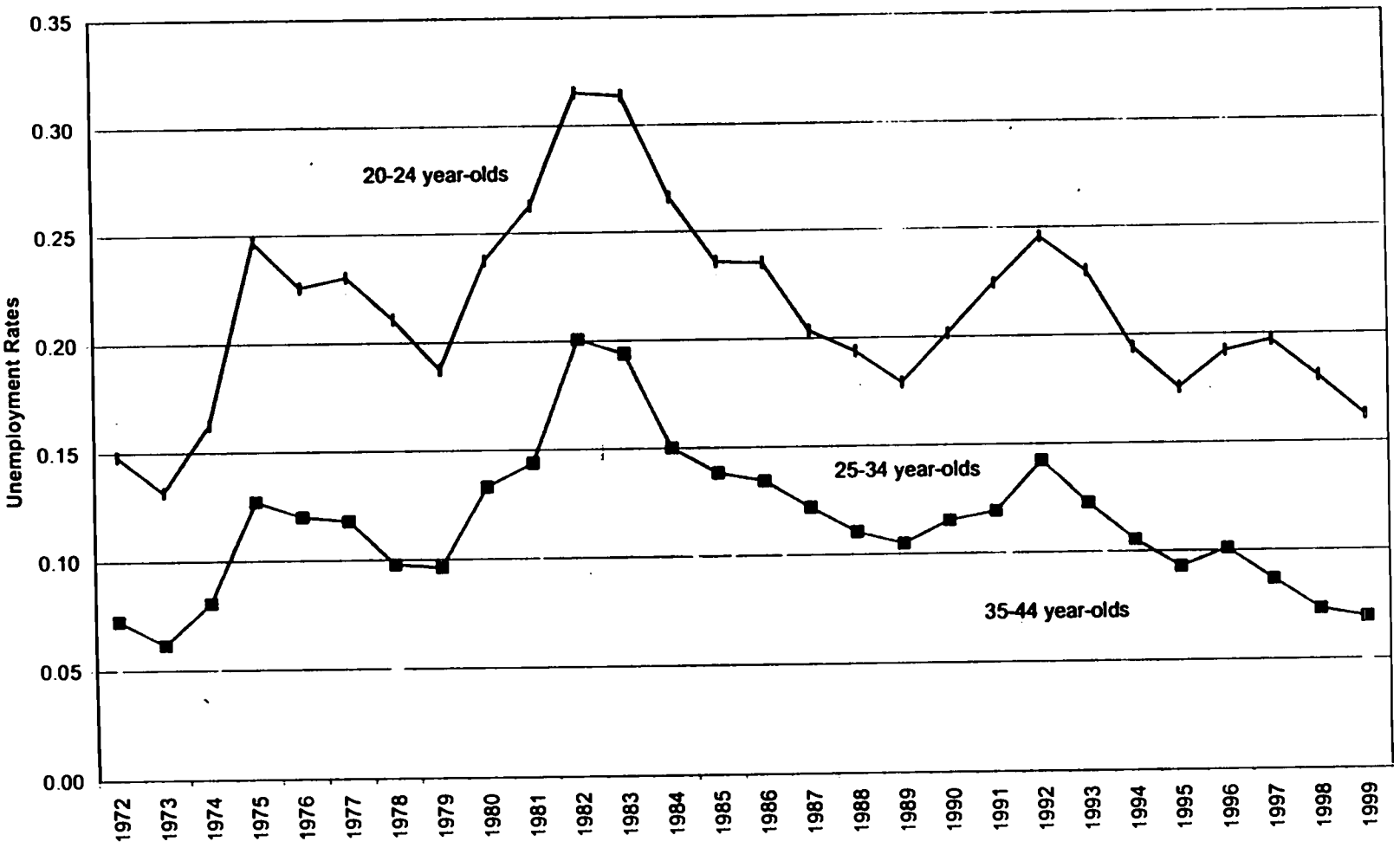
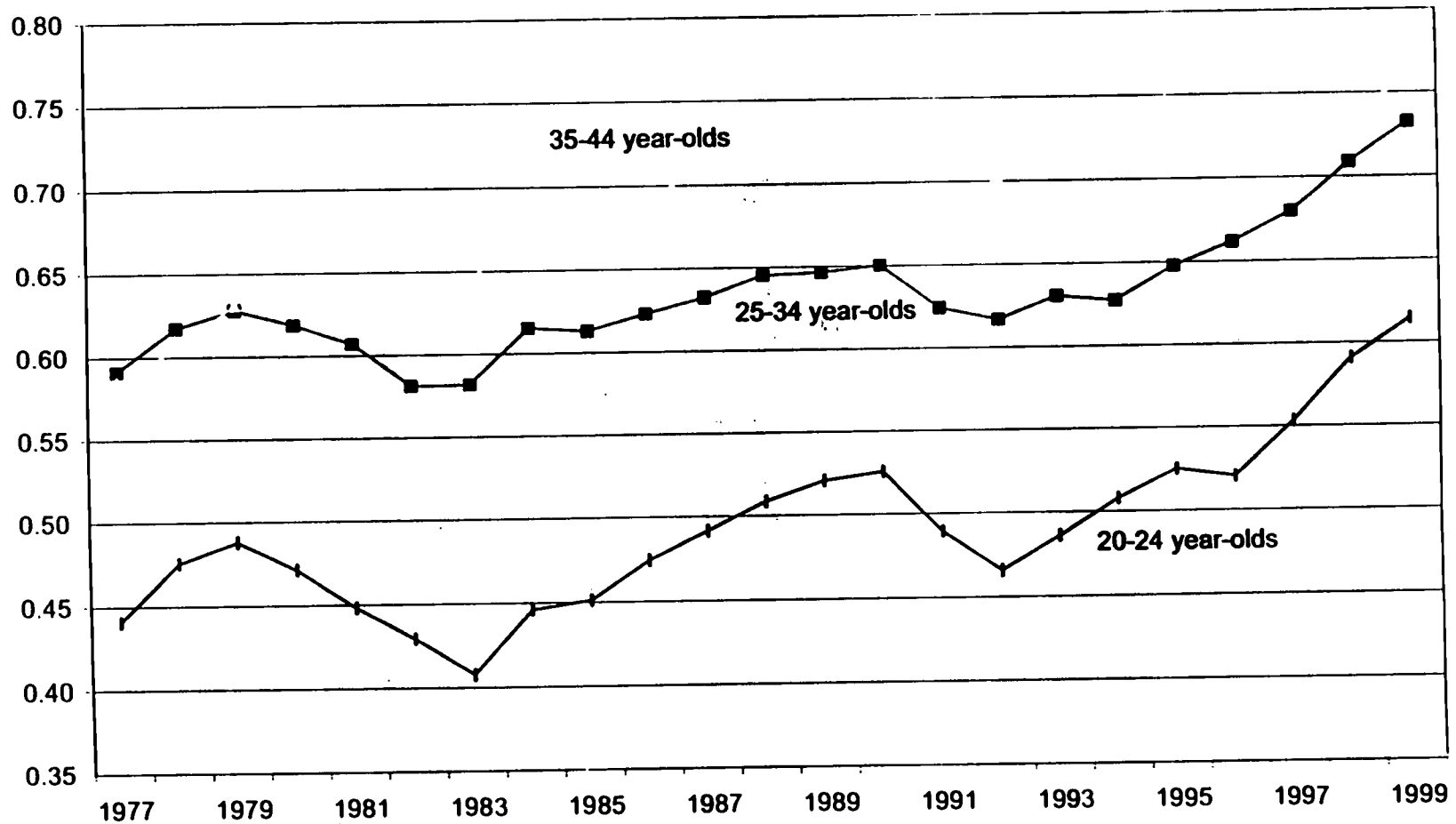


Figure 6.4--Employment-Population Ratios of Black Women, Ages 20-24, 25-34, and 35-44: 1977-1999



Prepared by Robert I. Lerman, Urban Institute.

Source: US Bureau of Labor Statistics.

Figure 6.5--Unemployment Rates of Black Women, Ages 20-24, 25-34, 35-44: 1977-1999

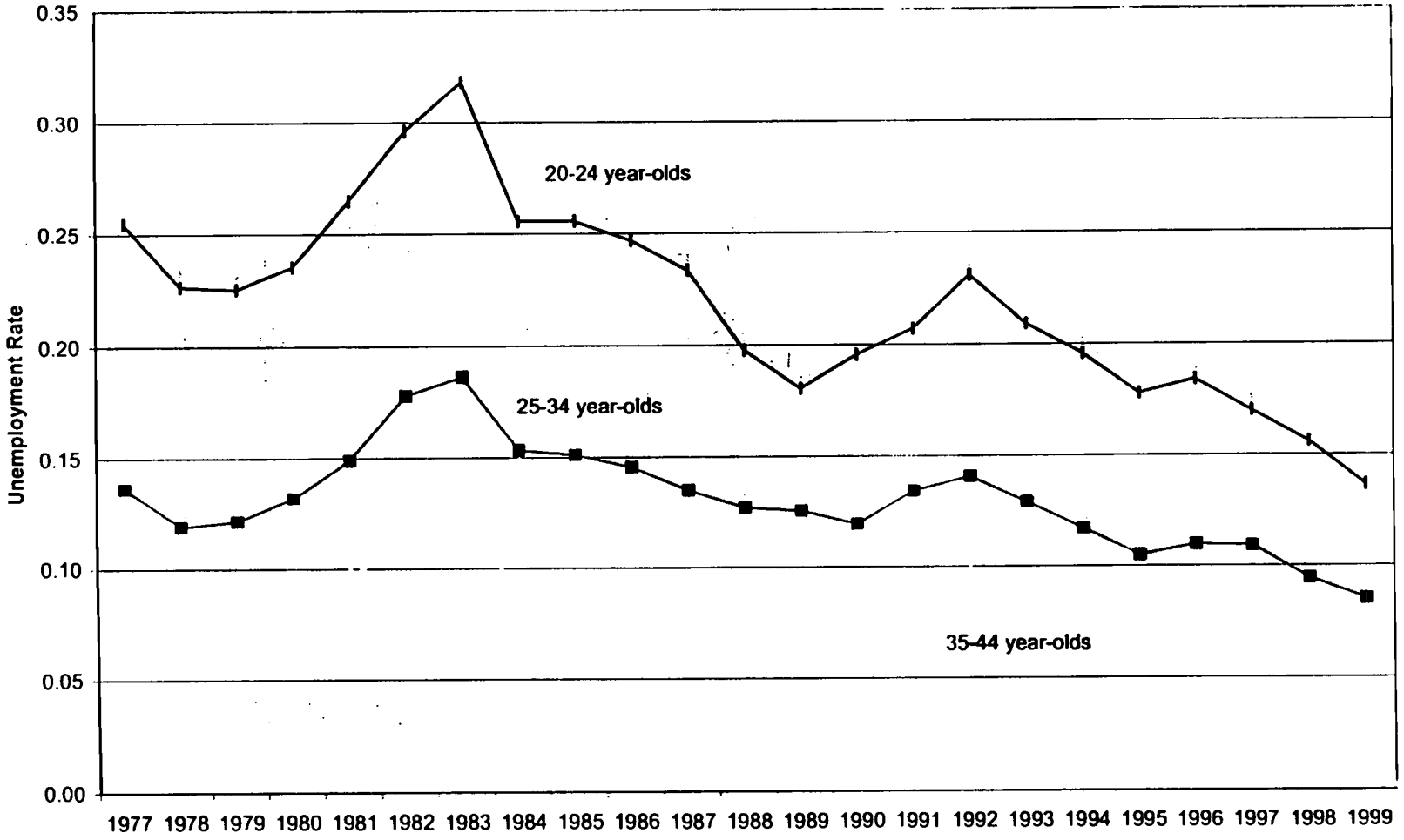


Figure 6.6--Employment-Population Ratios of Black Teenagers by Sex: 1972-1999

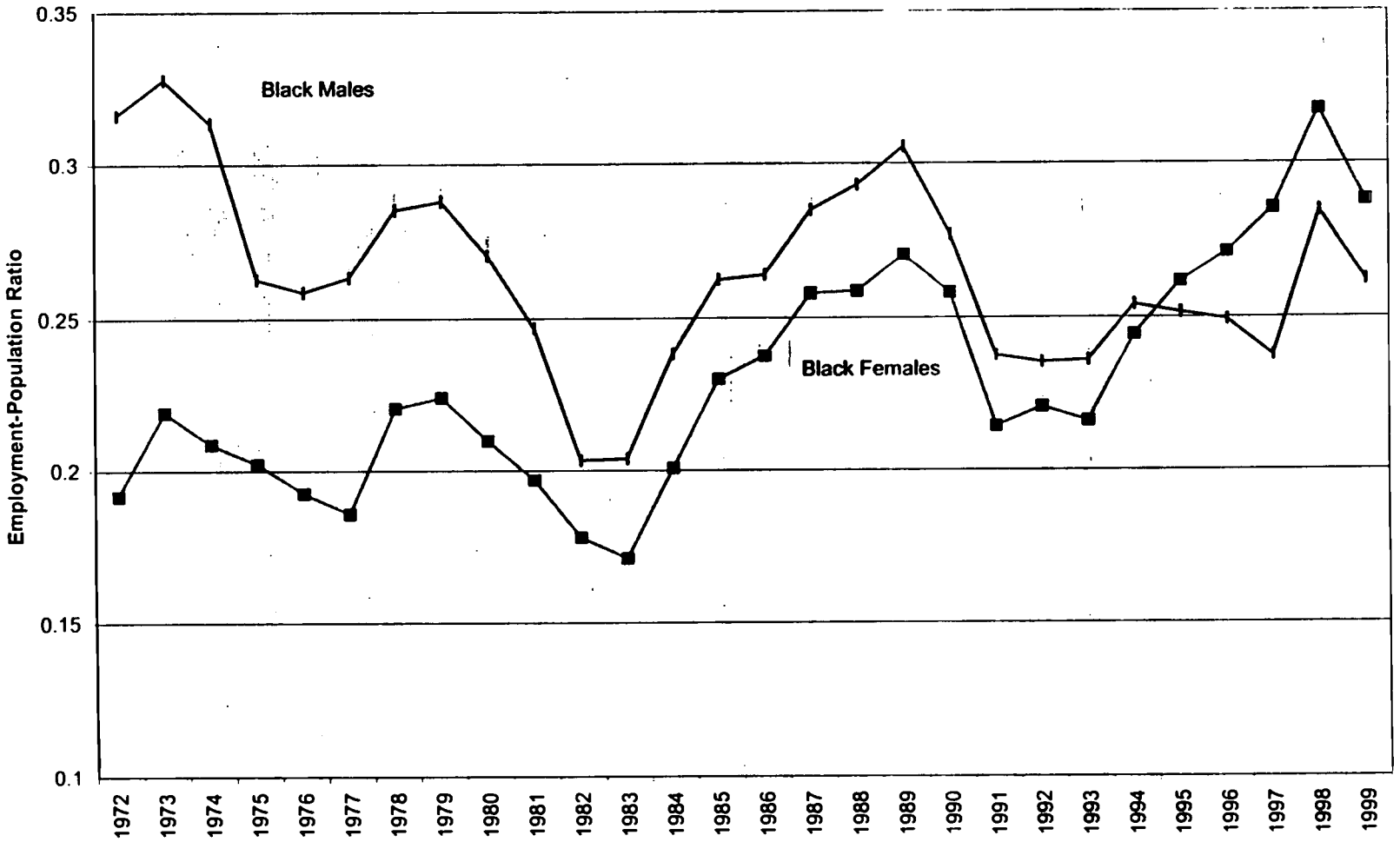
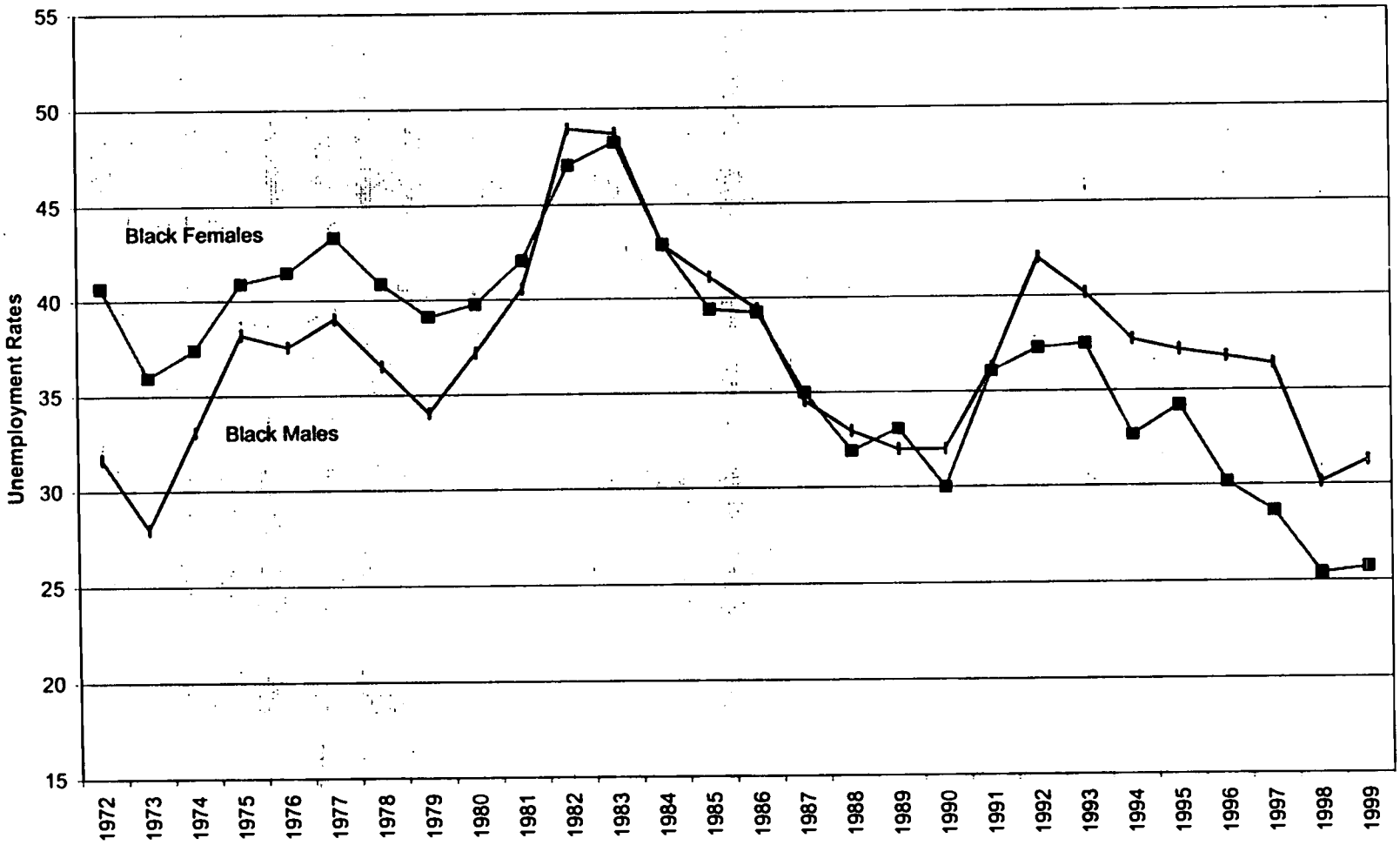


Figure 6.7--Unemployment Rates of Black Teenagers by Sex: 1972-1999



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

REPRODUCTION BASIS

☑ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").