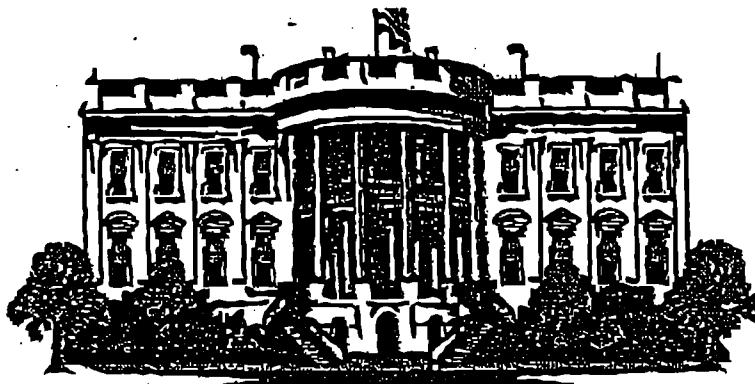


CEA Report



THE WHITE HOUSE

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COMMENTS: Here are some comments on CEA report
Eric Gould is still looking at smoking
section - I'll send you his comments, too if
he has any.
Thanks.

INCOMPLETE AND VERY ROUGH DRAFT.

Raising Responsible and Resourceful Youth: Teens and their Families in the 21st Century

Abstract

This report—prepared for a White House Conference on ~~American~~ Teenagers—focuses on the opportunities and challenges facing American young people. The report highlights demographic changes in the population of teens and their families occurring over the past century. Many trends have been positive; teens generally face fewer health risks and greater economic opportunities than ever before. Teens today are far better educated than were their predecessors. ~~Other trends are cause for concern to teens and their families. Many of the greatest risks facing teens are the consequence of their own behavior and the behavior of those around them. High rates of teen pregnancy and teen smoking are among trends that present serious risks to the current and future welfare of American teens. Clearly, there is more work to be done.~~

An important focus of our paper is the potential for parents to have a positive role in influencing ~~constructive behavior and protecting teens from serious danger.~~ Data described in this report indicate that teens who have a strong relationship with their parents—built on spending time together—are more likely to do well in school and to refrain from smoking or taking drugs, and are less likely to become pregnant or be involved in violent incidents [check]. Parents make a good investment when they take time to retain a strong connection with their children.

- ① "Despite these recent positive trends, the rates of teen pregnancy and birth, are still too high, and..."
- ② "teens to make responsible decisions & to reach their potential."

1. Introduction

Considerable public attention has been focused on the extraordinary importance of direct parental involvement in the intellectual and social development of infants and young children. In 1997 the "White House Conference on Early Childhood Development and Learning: What New Research on the Brain Tells Us About our Youngest Children" increased national awareness of the role parents play in the development of pre-school children. Similarly, there is broad agreement on the importance of high-quality education outside the home for children as they grow older. Recent public opinion polls, for instance, rate education policy as the most important factor in the upcoming presidential election. And as we discuss later in this report, the focus on education is justified; the economic value of becoming well educated has never been higher.

The 2000 White House Conference on ^{raising responsible & responsible} American Teenagers calls attention to an aspect of the development of young people that sometimes receives less attention: the role of continued parental involvement in the lives of their teenage children. This topic is of clear relevance to today's families. Societal changes over the past century—especially the expanding role of women in the labor force and broad changes in family structure—have contributed to an environment in which many parents ^{go much} find it difficult to spend time with their children. Research suggests, though, that parents make a good investment when they take time to establish a close bond with their teenage children. A strong parent-child bond is an important factor in successful and healthy development of teens. *as both parents and children would like. (supports Galinsky research)*

Our report begins by examining demographic and economic changes among teens and their families over the past one hundred years, and by highlighting the ways in which these changes have created additional challenges to teens and parents in finding time to spend together. We turn next to a series of issues and trends important to teens and their families—including discussions of trends in teens' education, work for pay, volunteer activity, nutrition, threat of violence and high-risk behavior. In the concluding section of the paper we turn to evidence concerning the link between the parent-teen relationship and behavioral outcomes of the teen.

Many of the youth-focused trends we discuss are positive. Teenagers are staying in school longer and many are more involved in community service. The prevalence of many harmful or destructive behaviors among teens is on the decline—including youth violence, teenage pregnancy ^{childbearing, smoking} and drinking. There are many challenges facing today's teens. An important theme of our report is that parents play an important part in working with their teen children in meeting these challenges; young people who have a close parent-child bond are most likely to avoid dangerous and destructive behavior. There is also a role for the broader community and for public policy in providing an environment in which America's youth can flourish.

2. The Changing Lives of Teens and their Families Over the Past Century

A conference on teens in the year 2000 seems an appropriate occasion to reflect on significant changes that have occurred over the past century, many of which have led to greatly expanded possibilities for America's youth. Teens today face fewer health risks and greater economic opportunities than ever before. They are more likely to complete high school and attend college than were young people in previous generations. Minority and female teens especially are far more likely to become full participants in the economic prosperity of our era.

In 1900, many African American teens were children of former slaves, and levels of education for these youth were extremely low. Few young women could anticipate working outside their own homes or farms. Female teens in 1900 would be women in their thirties before the 19th Amendment was adopted, granting them the right to vote.

In 1900, the United States had a very young population; more than 2 in 5 US residents were under the age of 20, and more than 1 in 5—about 15.7 million individuals—were age 10 to 19. Our population is now aging compared to the turn of the century—today about 1 in 7 Americans are age 10 to 19—but the number of youth in the United States has continued to increase, to 21.9 million by 1950 and to 39.3 million by 1999. These 20.1 million young men and 19.1 million young women are a racially and ethnically diverse group. And the diversity of the population can be expected to increase over the coming decades. [Put in pie charts that show breakdown: About xx percent are of Hispanic origin, and the remaining population include American Indian, Eskimo, and Aleut (xx percent of the population), xx percent Asian and Pacific Islander, xx percent Black, and xx percent White. And give projections. Chart 1. Also, how does the racial/ethnic diversity of teens compare with the rest of the population.] Most of today's teens were born in the United States, but a sizable number—about 6 percent—are immigrants (predominantly from xx, xx, and xx). [Can we find out what fraction of the population—especially teen population—was immigrants in 1900 and 1950? Yu-Chin and Sarah, we want any evidence we can find to help us make the point the continued success of the US over the next 50 years depends in large measure on how on an inclusive labor market and society more generally.] *Sources?*

*do we want
15-19, per
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The lives of today's young people are far different than 100 years ago. Statistics for families generally highlight one important difference: In 1900, more than 4 in 5 children lived in two-parent families on a farm ^{or in} and in a two-parent non-farm family in which the father worked in the market and the mother worked at home. In contrast, today fewer than 2 percent of children live on farms and less than one quarter of children live in households in which the father is the breadwinner and mother is a homemaker. ^{and xx% live in two-parent families.}

Young people today enjoy far better prospects for a long and healthy life than did their predecessors. In this century, improved sanitation has dramatically reduced typhoid and cholera in the United States, and the widespread use of vaccines has eliminated smallpox and polio. Death rates from coronary disease have declined by more than 50 percent in just the past three decades. In 1900 the life expectancy of a white 15 year-old was 62 and of a black 15 year-old was just 52. Over the last 100 years, the racial disparity has narrowed, and life expectancy had increased dramatically, to 78 for white 15 year-olds and to about 73 for black 15 year-olds. (See Table 1 for these and other indicators for teens and their families.) [Chart 1 needs to have lots of interesting stuff about teens today, 50 years ago, 100 years ago.]

Today's young people also enjoy greater economic prosperity and far more conveniences. At the turn of the last century fewer than 10 percent of dwellings had electricity, and only a very few wealthy families had automobiles. Now, most households have autos, nearly all homes (over xx percent as of 199xx – get from ERP Chart 3-1) have a television, and xx percent of teens live in homes that have computers with Internet access. [Can Doug get this last statistic from the CPS? Or just get from ERP Chart 3-1.] In 1900 there were fewer than 2 phones per 100 people in the US. Now about xx percent of US households [ERP 3-1] have cellular phones. Over the past century income per capita has increased eight-fold. And this income can today acquire a vast

¹ See the 2000 *Economic Report of the President* for sources. Current numbers based on 1998 statistics.

array of goods and services that were simply unavailable in the past: from antibiotics and airline flights to CDs and video games.

Hand in hand with increasing prosperity has been a dramatic increase in the level of education of America's youth. In 1900 only about 10 percent of teens age 14 to 17 were enrolled in school. Among individuals born in 1880 (who were 19 or 20 at the beginning of the century), only half of white women completed 8 years of formal education and fewer than half of nonwhite women had 5 years of education. For this same cohort, the median education was xx years for white young men and only xx years for black young men. In contrast, today most 19 and 20 year-olds are still in school. As recently as 1940, only 41 percent of whites and 12 percent of African Americans completed high school. By 1998, 88 percent of both groups graduated from high school.² America's high school graduation class increased from only about 66,000 in 1900 to well over 2 million per year in the 1990s. As we discuss below, there have also been substantial increases in the proportion of young people, especially women, going on to college and graduate school.

Two additional trends that shaped the American family were dramatic changes in female labor force participation and an increasing diversity of the family structure. In 1900 only 20 percent of women worked for pay, while in 1999 about 60 percent of women over age 16 were in the labor force (employed or looking for work). There have also been important shifts in rates of childbearing among single women, and in the prevalence divorce. In combination, these trends have created big changes in the American family. The "traditional" one-breadwinner, one-homemaker married couples have been declining as a share of all families, from 67 percent in 1952 to 27 percent in 1999.

One positive aspect of the transformation of American society over the past 100 years is the expansion of economic opportunities for women. In 1900 job opportunities for women were severely limited: only a fifth of women worked for pay, and those who did were mainly single and poor. In the early 1900s about 47 percent of female workers worked in manufacturing or agriculture and 29 percent more as private household workers. It is estimated that in 1890, over 90 percent of African American female workers worked as servants or agricultural workers. Although there are still substantial gender differences in some occupations, female representation in many key professions has increased substantially over the last fifty years. For example, in 1950 only 3.5 percent of lawyers and 6.1 percent of physicians were women. These proportions have increased to 28.8 percent and 24.5 percent, respectively. And these trends are likely to continue; a higher fraction of young women than men now go to college, and the female share of enrollment in professional schools has been rising and exceeded 40 percent by 1996.

The trends in female integration into the labor force signal to today's young women a great broadening of opportunities for their own future success. In combination with the increasing prevalence of one-parent families, though, the integration of women into the labor force has contributed to a serious "time crunch" for many American families. Families in the 21st century face a big challenge in finding time to spend together. In section 4 of this report we return to this issue, and discuss evidence highlighting the value to teens when families members do find ways of remaining connected to one another. First, though, we turn in section 3 to a few of the current trends and issues that affect today's teens.

3. Key Recent Trends for America's Teens

² High school completion statistics are for the cohort of young people who are just past the years when they would generally be in school: 25 to 29 year-olds. See the 2000 *Economic Report of the President* for details.

The goal of this section is to highlight—in series of short sub-sections—a number of trends that are important to American teens. Much of what can be said about youth is positive: there are positive developments to report in youth-related trends in education, volunteerism, and many indicators of high-risk teen behavior. Our focus on high-risk behaviors in some of the discussion below does not stem from the intention of presenting a one-sided view of America's youth. Rather, the intention is to highlight the fact that in general many threats to teen well-being are social and behavioral; these are important factors that can be affected by teens themselves, in interaction with their families and with society more generally.

3.1. Trends in Education for Teens

One hundred years ago formal education was a far less important job qualification for most workers than it is now. Over the past 100 years, well over half of workers were occupied in farming, forestry, or fishing or as laborers, fabricators, or operators. Now fewer than 1 in 7 workers are in these occupations. At the same time, there has been a huge increase in managerial, professional, technical, sales, and administrative support occupations. This evolution in the labor market from one based on strong backs to one based on strong minds has both caused and been caused by substantial improvements in educational attainment. The change in levels of education is a significant feature of twentieth century America. And the increasing value of education is of great important to today's teens, who are making investments in their own human capital that will affect their welfare for the remainder of their lives.

Chart xx [4-2 in the ERP] provides one major indicator of the dramatically increasing levels of education: high school completion rates for cohorts of young adults (25 to 29 year-olds) who are likely to be out of school. The chart shows a strong increase in high school completion for whites and especially African Americans over the past 60 years. The historically large gap between the races in the high school completion largely disappeared by 1998, with both groups having a high school completion rate just short of 90 percent. Hispanics have not made the same gains, however, and the proportion of this population that had completed high school (which includes those Hispanics who immigrated as adults) was only 63 percent in 1998.³

Of course, high school completion is hardly the only important indicator about trends in education for America's teens. The challenge for students and schools is developing the increased skill and achievement levels necessary to succeed in the marketplace and to participate more fully in American life in general. Fortunately, high school teens today are taking more courses in core academic subjects than did their counterparts in the early 1980s, and the courses they are taking are more challenging. For example, a higher percentage of high school graduates are completing algebra and higher-level mathematics courses, as well as courses in biology, chemistry, and physics, than in the 1980s. The proportion of students taking college advance placement examinations has also increased dramatically, from 50 twelfth-graders out of every thousand in 1984 to 131 per thousand in 1997.

Although measuring educational progress is difficult, test scores may be indicative, and in fact there has recently been some good news about trends in teens' achievement as measured by data from the National Assessment of Educational Progress (NAEP). In mathematics, for example, between 1990 and 1996, the fraction of 8th graders performing at or above the "basic" achievement level increased from 52 to 62 percent of students, and for 12th graders the fraction

³ [What do we want to say about this? Talk about the President's proposed Hispanic Education Action Plan?] — good idea. — also other init. such as GEAR up. Refer to JB, Bethany.

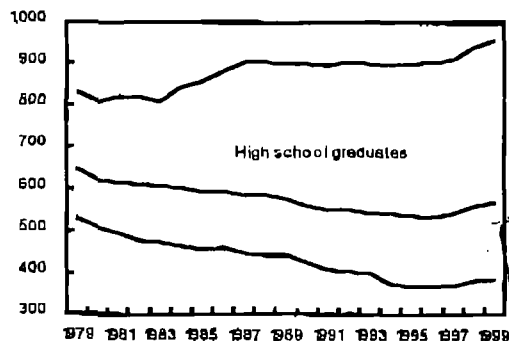
increased from 58 percent to 69 percent of students. Progress was also found in science achievement levels, relative to the early 1980s, though there was little change in reading performance from 1971 though 1996. In addition, improvement can be seen in the scores on the Scholastic Assessment Test (SAT, a test typically take by college-bound high school juniors and seniors). Between 1976 and 1995, the combined verbal and mathematics scores of African Americans climbed by over 50 points, while those of white students remained roughly stable. Observed trends in SAT scores are particularly impressive given that the proportion of high school graduates taking the test has increased by about a fourth since the early 1970s.

Evidence suggests that the importance of teens' acquiring a solid education is increasing in terms of future labor market success. Research shows that among individuals with a high school education (but no further college education), those with greater mastery of basic math and reading subsequently have higher earnings. And, importantly, this relationship between skills and wages has grown stronger over recent years. [from ERP p. 136. Need cite, a little more discussion of evidence.]

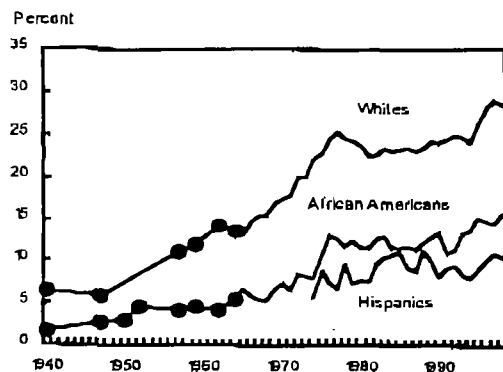
3.2. Going to College in an Increasingly High-Tech World

Even as youth have been completing high school at increasing rates, shifts in the economy have created rising demand for workers who have attained yet higher levels of education. The result is that a high school diploma alone is no longer a ticket to the middle class.

Chart xx provides indirect but striking evidence about the rising demand for workers with higher levels of education. Between 1979 and 1999 the median weekly wages (adjusted for inflation) of comparable male college graduate full-time workers age 25 and over increased by 15 percent. Despite recent improvements in wages, the median real wage of men with only a high school diploma fell by 12 percent over this period. For those with less than a high school degree, real wages declined by 27 percent. As a result of these trends the wage gap between college graduates and high school graduates increased from 29 percent in 1979 to 68 percent in 1999, and the gap between college graduates and those without a high school degree increased from 57 percent in 1979 to 147 percent in 1999.



College Completion Rates of 25- to 29-Year-Olds by Race and Ethnicity



These wage trends underscore the importance to today's teens of completing high school and making a successful transition to higher education. As indicated in chart xx, college completion rates have indeed increased dramatically over the past six decades. Women are now continuing on to college in record numbers; by 1995 more women aged 18 to 24 were enrolled in college than men. However, unlike high school completion rates, the racial and ethnic gap in college graduation remains large.

Recent research shows that the disparity in college enrollment is closely related to family income. Table xx reproduces results by Thomas Kane,⁴ indicating for the high school class of 1992 the fraction of students by income group who enrolled in post-secondary school within 20 months of graduation.

Percentage of Students From Families In Each Income Quintile Enrolling in Post-Secondary Schools Within 20 Months of High School Graduation

Parental Income Quintile	Total	Vocational, Technical	2-Year College	4-Year College
Top	90	5	19	66
Second	79	6	25	48
Third	70	7	25	38
Bottom	60	10	22	28

The vast majority (90 percent) of students whose parents were in the top quartile of the income distribution was pursuing post-secondary education, most of them in four-year colleges. By way of comparison, just 60 percent of students whose parents were in the bottom quartile of the income distribution were enrolled in post-secondary education and more than half of these young people were in vocation or technical schools or in two-year colleges. Kane's research suggests that some of these differences stem from differences in youths' preparedness for college and in family attitudes toward education, rather than financial barriers. Still, Kane concludes that, "Much of the difference in college attendance by parental income remains, even after controlling for non-financial explanations for going to work directly out of college."

Once students have completed their formal education, young people face a rapidly changing workplace, typified by fields such as information technology (IT). These changes afford significant opportunities for those with the appropriate skills, but also present a challenge—that no group of young people is left behind. A recently released report by the Office of Technology Policy⁵ indicates a striking digital divide in the IT work force, with women, Blacks, and Hispanics significantly underrepresented in this rapidly growing, highly-paid sector. This divide stems in part from underrepresentation in the educational pipeline. As we have noted, young women now attend college at rates as high as young men. However, they are far less likely to earn degrees in science and engineering than are men. For racial and ethnic minorities the situation is the reverse: among college freshman in 1996, the proportions planning to earn bachelor degrees in science and engineering were at least as high for blacks, Hispanics, and Native Americans as for whites (and somewhat higher for Asians). The significant underrepresentation of blacks and Hispanics in IT professions instead stems from the generally lower rates at which these young people attend college. ~~reflects~~

Teens, their families, and the broader community clearly face a serious challenge in finding ways to insure that more young people have college access. Educational outreach programs designed to motivate and support students from low-income families can be effective in increasing prospects for higher education and subsequent employment. An evaluation of

⁴ Thomas J. Kane, "Rethinking The Way Americans Pay For College," *The Milken Institute Review*, Third Quarter 1999.

⁵ "The Digital Work Force: Building Infotech Skills at the Speed of Innovation," U.S. Department of Commerce, Office of Technology Policy, June 1999.

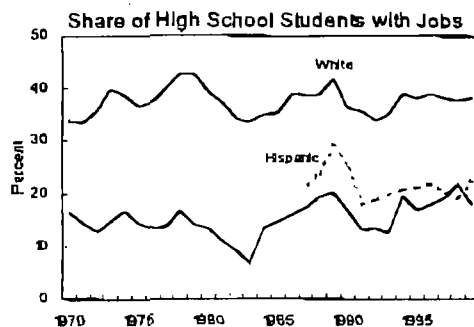
Upward Bound, a federally funded program to help high school students attend college, found that students in the program were four times more likely to earn a college degree than other students from similar backgrounds. [Need cite, from ERP.] Along with interventions such as Upward Bound, the federal government can play a large role by ensuring adequate funding for scholarship and loan programs for higher education and thereby help more young people take advantage of strong demand for college-educated and high-tech workers.

3.3. Teens Working While in School

(should probably have D&L
look at this section)

[Need to get cites for this section from Mike.]

As we have noted, one hundred years ago the large majority of even mid-teen youth (14 to 17) were no longer in school and were expected to be productive in their homes, farms or in the labor market. Today, 90 percent of teens in this age group are still in school, but many teens are in addition actively involved in the labor market. Some teens, as young as 16 and 17 are facing the major challenges in making the transition to a career.⁶ More typically, many of today's youth combine school with a job.



Working may provide important lessons for young people about responsibility, punctuality, dealing with people, and money management, while increasing self-esteem and independence. In turn, these traits may lead to increased rates of employment and higher wages in the years following high school. However, work can create conflicts with schooling by taking away time from other valuable activities, such as studying and sleeping.

Approximately 3.3 million young people are both enrolled in high school and employed in the labor market. This figure represents about a third of the 9.9 million high school students ages 16 and above (up to a maximum of age 24). Of those employed, only about 6 percent report working full-time. While employment rates have been fairly constant over time, there are fairly substantial differences between racial and ethnic groups (see chart xx). Part of these differences may be explained by the differences in unemployment across the groups. The unemployment rate for white youths who are enrolled in high school is currently 13.4 percent. The rate for African Americans and Hispanics is about 24 percent. When high school students are interviewed directly, about 80 percent report that they have held a job at some point during their junior or senior years of high school. Half of all working 15- to 17-year olds have jobs in the retail sector (restaurants, fast-food outlets, grocery stores, and other retail stores).

Researchers have examined the effect of work on a number of outcomes. The direct effect of high school employment is difficult to identify because the decision to work is correlated with many other observed and unobserved factors. For example, factors such as motivation, work effort, and parental support may be associated with both the decision to work as a teenager and subsequent educational and employment outcomes. Nonetheless, some conclusions have emerged.

⁶ Recent strength of the labor market has helped. Although unemployment rates are generally high for teens, and very high especially for minority teens, recently teen unemployment rates have declined. [Need statistics.] Also ... [Job Corps has been shown to be effective in increasing prospects for 16 and 17 year-olds.]

Corps?

Subsequent educational attainment. There is little consensus among researchers about the effect of working while in school on subsequent educational attainment, as measured by school performance (grades), grade completion, and persistence in school. However, a number of studies have found that if harmful effects exist, they result from working many hours per week. One recent study that controls for unobserved factors found that extensive employment during the school year had a negative impact on academic performance, especially that of racial minorities.

Vocational development and occupational attainment. Researchers have found that students who work in school also tend to have greater future job market success, as measured by better employment prospects or higher wages. However, a recent study that carefully controls for the complicated selection issues found that the future economic returns to working in school (both high school and college) are probably more modest than those found in previous research.

Health and safety. It has been estimated that each year about 100,000 young people seek treatment in hospital emergency departments for work-related injuries. The rate of injury per hour worked appears almost twice as high for children and adolescents as for adults—about 4.9 injured per 100 full-time equivalent workers among adolescents, compared with 2.8 for all workers. The most common nonfatal injuries observed among working young people are lacerations, sprains and strains, contusions, burns, and fractures.

In sum, while the general evidence is mixed, one clear lesson is that young people who work while in school are best off if they do so in moderation. (Evidence suggests that summer employment does not carry the same potential for detrimental impact as does work during the school year.) Health and safety issues are also an important concern.

3.4. *Teens and Community Service*

Research has shown that young people do better on almost every level when they have meaningful involvement in useful and necessary tasks. Moreover, some experts argue that a *lack* of meaningful involvement is a critical issue for many teens today. Sociologist Stephanie Coontz, for example, concludes that, "What many young people have lost are clear paths for gaining experience doing responsible, socially necessary work, either in or out of the home, and for moving away from parental supervision without losing contact with adults" (Coontz 199X).

The growing emphasis on community service among school-aged youth in this country has begun to make important strides toward providing teens with more meaningful involvement and counteracting the "rolelessness" Coontz describes. At both the local and national level, community service has attracted increasing attention as way to enrich the lives of young people while building stronger communities. Research on the effects of participating in community service, discussed below, show that teens benefit on many fronts from this involvement.

Teen service to the community is not new. In fact, survey evidence suggests that the percentage of American high school seniors who participated in "community affairs or volunteer work" in any given year was relatively stable from the mid-1970s through the early 1990s (Youniss and Yates 1997). Another study found that the percentage of 12- through 17-year-olds who volunteered in 1995 was similar to the percentage who volunteered in 1991 (Hodgkinson and Weitzman 1997). What is new is the growing emphasis by schools on community service and, in particular, "service learning"—curriculum-based community service that integrates classroom instruction with community service activities. In 1983-84, for example, 27 percent of high schools offered community service opportunities to their students and only 9 percent

offered service-learning. By 1998-99, these figures had risen dramatically to 83 percent and 46 percent, respectively (NCES 1999). These trends have the potential to make community service a more valuable experience for teens.

Recent data on school-related community service comes from the Department of Education's *National Student Service-Learning and Community Service Survey* (NCES 1999). It shows that, in 1998-99, 77 percent of middle schools and 83 percent of high schools had students participating in community service activities recognized by and/or arranged through the school. A somewhat smaller percentage, 71 percent for both middle and high schools, reported arranging community service opportunities for their students. Moreover, 38 percent of middle schools and 46 percent of high schools had students participating in service learning. National data are not available on the prevalence of community service graduation requirements, but anecdotal evidence points to an upward trend. Cities such as Chicago, Washington, D.C., and Louisville, Kentucky, have recently implemented community service requirements for graduation, while Maryland has begun the first state-wide requirement.

Efforts to encourage volunteering have also come from the national level. In 1993, President Clinton outlined a vision for a national service program that would allow young people to serve their country while earning funds for a college education. The result is AmeriCorps, which brings together people of different racial, ethnic and economic backgrounds to solve community problems. Since the program's inception 5 years ago, over 150,000 AmeriCorps members aged 17 and over have served as tutors, mentors, conservationists, disaster-relief workers, and other roles. Today there are more than 350 AmeriCorps programs nationwide serving an estimated 4,000 communities.

Research on the effects of community service on young volunteers, while somewhat limited, seems promising. Two of the most carefully evaluated community service programs are the Teen Outreach Program (TOP) and the Valued Youth Program (VYP). Both programs had sizable positive effects on participants. TOP, offered to middle and high school students at 237 sites across the United States and Canada, combined volunteer community service opportunities with classroom discussions about life options. Results from a random assignment evaluation, based on seven years of follow-up data, show that participants had a 5 percent lower rate of course failure in school, an 8 percent lower rate of school suspension, a 33 percent lower rate of pregnancy, and a 50 percent lower rate of school dropout, compared to the control group. VYP, on the other hand, was focused on middle school students and was designed to show at-risk youth that they were valued by having them tutor younger children. Results after two years, based on a random assignment evaluation, show that the program increased tutors' reading grades and substantially cut dropout rates: Only 1 percent of tutors had dropped out by the end of the second year of the program, while 12 percent of students in the control group dropped out. Studies of other community service programs, including those focused on service-learning, have also shown positive effects, but few have been evaluated as rigorously as TOP and VYP. [May modify that ending based on phone meeting set up 4/20 to discuss these findings with Joe Allen, UVA.]

3.5. Nutrition

In an environment in which teens and their families are constantly being pulled different directions, it is important for them to remember the importance of eating well. Poor nutrition among teens is a serious problem. Poor nutrition can damage teens' health, with results

persisting into adulthood. Also, eating patterns established by young people transfer to adulthood. Poor eating—especially excess consumption of fats and insufficient consumption of fruits and vegetables—has been linked to cancer and heart disease later in life. Research by the USDA Center for Nutrition Policy indicates that a substantial fraction of 13 to 18 year-old youths have a “poor diet” (20 percent) or a diet that “needs improvement” (74 percent). These researchers found that the quality of diets for teens is lower than for younger children, and that this decline in diet quality is linked to declining consumption of fruit and milk.⁷

One potential factor in poor nutrition for teens is food insecurity—uncertainty about the source of one’s next meal. Detailed analysis by Jay Bhattacharya and Janet Currie (forthcoming) suggest that food insecurity is indeed a problem for a small fraction of America’s teens, 5.5 percent by their estimate, and they find that food insecurity is more common among low-income teens. However, they fail to find a strong relationship between insecurity and measured nutritional deficiencies among teens. The nutritional problems for American teens are not a lack of food but rather because of choices made by many teens and their families. [Put in stuff about nutrition and TV watching.] As Bhattacharya and Currie conclude that the best hope for improving teen nutrition is thus “broad-based policies designed to alter the composition of the diet.” Such policies would continue efforts to provide education and information (e.g., through nutrition labeling) or be based on the direct provision of healthy food (as in the revised school lunch program).

FG is this consistent w/ what we know?

primarily (?)

3.6. Suicide, Accidental Deaths, and Homicide: The Role of Guns

Harm to teens ^{is behavioral, and thus, preventable.} ~~often stems from their own behavior and the behavior of those around them.~~ The most visible and distressing example concerns suicide and homicide. In 1997, suicide and homicide were the second and third leading causes of death among teens after accidents (check).⁸ Although both suicide and homicide are fairly rare events for teens (around 1 per 10,000 teens per year),⁹ many of these deaths may be preventable. It is thus vitally important to look at recent trends in teen violence and their proximate causes, and to search for strategies that will reduce the number of such tragedies.

As with many of the issues we discuss in this report, there are numerous facets to this issue that cannot be treated in a page or two. Here we focus on one extremely important, policy-relevant factor—the role of guns. Guns are far and away the most common means of fatal teen violence, used in 85% of teen homicides and 63% of teen suicides. Moreover, changes in gun availability and gun possession are closely tied to recent teen homicide and suicide trends, in particular the sharp rise gun-related deaths among teens that began in the mid-1980s. Although the patterns presented below apply to the teen population at large, the following discussion of mortality trends focuses primarily on black teens because this group has been most affected by the increase in gun-related deaths.

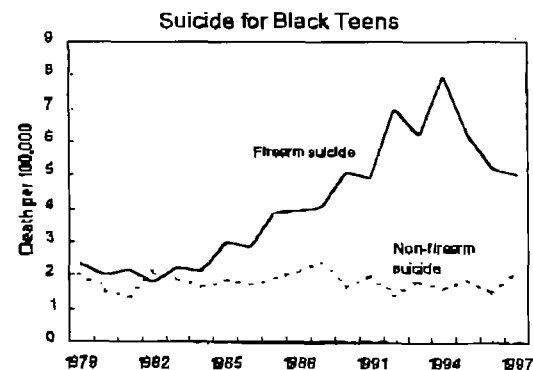
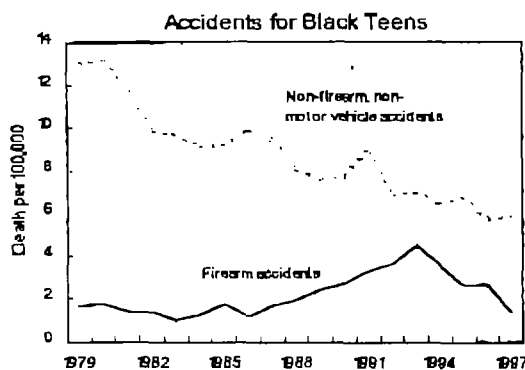
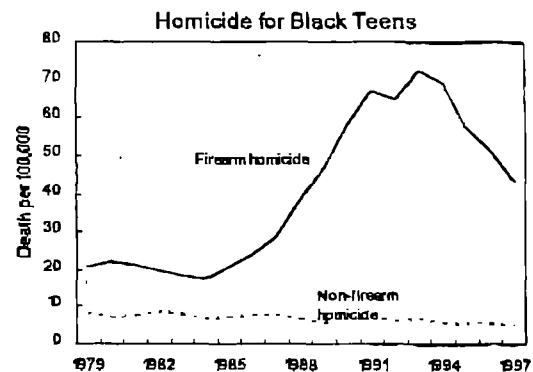
⁷ A good source for many statistics about children and young is www.ChildStats.gov. Statistics about nutrition listed here can be found at that site.

⁸ In 1997, there were 2,601 homicides and 1,802 suicides among teens aged 15 to 19. Male teens composed 85 percent of homicide victims and 83 percent of suicide victims. Black teens were slightly less likely to commit suicide than white teens (7.1 per 100,000 vs. 10.0 per 100,000) while black teens are substantially more likely to be homicide victims than white teens (48.4 per 100,000 vs. 7.0 per 100,000). Source: Center for Disease Control.

⁹ Recent reports have shown that although such fatal tragedies are especially rare in America’s schools, recent highly visible tragedies have created a false public perception about the likelihood of homicide occurring in schools. See, “School House Hype: Two Years Later”, Justice Policy Institute/Children’s Law Center, April, 2000.

Blumstein and Cork (1996) link the dissemination of guns into the hands of American teenagers and young adults in the late 1980s with the advent and growth of the crack trade.¹⁰ Crack cocaine first arrived in large cities like Miami, Los Angeles, and New York in about 1983. After remaining fairly constant from 1975 through 1984, drug arrest rates among non-white juveniles more than doubled from 1985 to 1989. Guns were carried by teens directly involved in drug markets, but possession became far broader as other teens acquired a gun in reaction to this trend—for perceived self-protection or as a status symbol.¹¹ This period saw a dramatic proliferation of guns: domestic production of pistols, the type of gun most commonly traced to teens by law enforcement,¹² more than tripled to 2.3 million units in 1993. Consistent with this presumed increase in teen gun possession in the late 1980s, juvenile arrest rates for weapons law violations more than doubled from the mid-1980s to the early 1990s.

Blumstein and Cork point to a mid-1980s increase in teenage gun possession as a factor in several trends, the most disturbing of which is the rapid rise in deaths among black teens due to gun homicide (see chart xx). There are two competing explanations for the sharp rise in homicides. First, the rise in gun possession may have directly increased the lethality of confrontations among



teens. Second, there may have simply been an increase in teens' inclination toward violence. If the latter explanation were the predominant influence we might expect to observe an increase in both gun and non-gun homicide. In fact, non-gun homicide victimization among black teens remained roughly constant through the 1980s. Trends in black teen suicide and black teen accidental death show a similar pattern: increased gun fatalities in the early 1990s with no contemporaneous corresponding increase in non-firearm mortality rates. The rate of fatal gun accidents was more than four times as high in 1993 as in 1983 (see chart xx) and the rate of teen gun suicides increased rapidly in the mid-1980s. Non-gun suicide rate and accidental deaths so

¹⁰ Blumstein, A. and Cork, D., "Linking Gun Availability to Youth Gun Violence", *Law and Contemporary Problems*, Winter 1996.

¹¹ Blumstein and Cork cite a 1993 study by [getting cite from OEOB library] conducted in center-city schools in which 22 percent of students possessed guns, with 68 percent citing protection as the main reason.

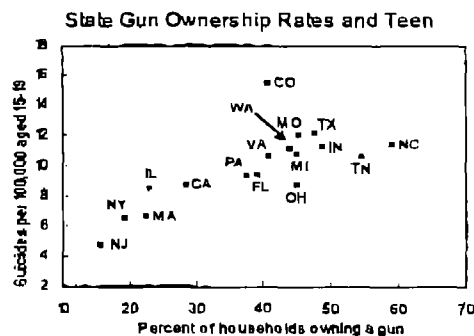
¹² "Kids and Guns", U.S. Department of Justice, March 2000.

no such upward trend. Again, evidence is consistent with a causal effect of gun possession on mortality.

A cross-state comparison of gun suicide and gun accident rates among all teens provides additional support to the idea that gun access increases suicides. Because guns are an especially lethal means of suicide, suicide attempts (which are often impulsive) are more likely to be successful when guns are present. In states where more households have guns, teen suicide rates are much higher (see chart xx, which presents statistics for the 17 large states for which there are ownership data).¹³ Importantly, this relationship holds because gun-related teenage suicide is higher in states with high gun ownership; non-gun teen suicides are unaffected by gun ownership. As an alternative approach, we can also make a comparison using an index of gun availability developed by Philip Cook.¹⁴ In the four states with the highest levels of gun availability, the teen suicide rate is twice the rate in the four states with the lowest gun availability. Fatal gun accidents occurred more than *ten times* as often among teens in the top four gun index states.

By the mid-1990s gun-related death rates were declining from historic peaks for both black teens and teens generally. It is important to understand why.

One explanation consistent with the analysis we have presented here is that gun possession in more recent cohorts of teenagers is lower than in their immediate predecessors. Policies that are effective in reducing the gun access and gun possession by teens should reinforce the recent downward trend in teen mortality.



3.7. Adolescent Pregnancy and Births

Teen birth and pregnancy rates for teens of all races are steadily declining but remain one of the most serious challenges facing our nation. In 1995, Pres. Clinton challenged parents & leaders all across this country to join together in a national campaign against teen pregnancy to make a difference.

The most recent trends have in fact been encouraging. The overall birth rate to teens age 15-19 declined by 18 percent from 1991 to 1998 and teen birth rates have fallen in every State and across ethnic and racial groups. For a subset of teens, girls ages 15 to 17, the birth rate, 30 births for every 1,000 teen girls in 1998, was the lowest rate in four decades. In addition, teen pregnancy rates for this group are at the lowest level since 1976, the earliest year for which data are available. More generally, the teen pregnancy rate decreased by approximately 16 percent between 1991 and 1996 (the latest year available). The abortion rate declined by 22 percent over the same period, and the share of pregnancies ending in abortion fell. (See Chart xx for recent trends.)

¹³ This analysis was prepared using: Smith, T. and Martos, L., "Attitudes Towards and Experiences With Guns: A State-level Perspective," National Opinion Research Center, December.

¹⁴ Gun availability in each state is estimated at the average of the percentage of homicides and suicides that are firearm related. This index, created by Philip Cook, is used to designate states with the highest average gun levels (Louisiana, Alabama, Mississippi, and Kentucky) and lowest average gun levels (Hawaii, Massachusetts, Rhode Island, and New Jersey) for 1988-1997. Analysis using this index follows Miller, M., Azrael, D., and Hemenway, D. "Firearm Availability and Unintentional Firearm Deaths, Suicide, and Homicide Among 5-14 Year-Olds" (forthcoming).

¹⁵ President Clinton identified teenage childbearing as [need quote and cite]. An example of recent contributions about the causes and effects of teenage childbearing is *Kids Having Kids* [cite].

Sources (A) "Births: Final data for 1998," National Vital Statistics Reports, 3/28/00, NCHS, CDC.

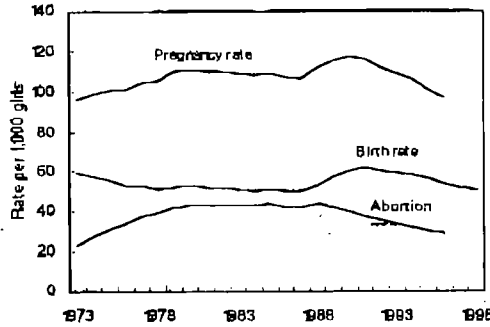
(B) "Trends in Pregnancies & Pregnancy Rates by Outcomes" Vital Health and Statistics reports, 02/00, NCHS, CDC.

(C) *Kids Having Kids*; Robin Hood Foundation's Special Report on Adolescent Childbearing, 1996, Rebecca Maynard.



Similarly, repeat births among teens declined by 21 percent from 1991 to 1998, when nearly 18 percent of teen mothers had a second child. Though these trends are encouraging, teen mothers face even greater challenges if they do not have the supports they need to raise their children. One strategy to reduce repeat pregnancies and break the cycle of dependency is Second Chance Homes, or adult-supervised and supportive living arrangements for unmarried teen parents and their children who have nowhere else to go.

in addition
 The large majority of births to teens are to unmarried young women. To put this in historical perspective, in 1930-34, among teens (age 15 to 19) having their first child, about 15 percent of young women were unmarried. The corresponding number for teens in 1990-94 was 69-75 percent. In 1998, 78 percent of all teen births were to unmarried young women.



Despite recent reductions in teen pregnancy and childbearing, teen birth rates are very high compared to other countries.¹⁶ Among concerns surrounding this high rate is that in the US adolescent childbearing has been tied to a number of negative outcomes for both the mother and the child. A recently published series of studies on teen parenthood found that roughly four-fifths of teen mothers end up on welfare. The children were found to have poorer health outcomes and were 50 percent more likely to be of low birthweight. In addition, the

sons of adolescent mothers were found to be 2.7 times as likely to be incarcerated as the sons of mothers who delayed pregnancy, and the daughters of adolescent mothers were one-third more likely to become teen mothers themselves. [From ERP, need cites.] → see C on previous page.

Moreover, despite positive news about generally declining teen pregnancy and birth rates, evidence about a recent upturn in sexual activity among girls under the age of 15 highlights the serious challenge facing teens, their families and their communities. In particular, data from the National Survey of Family Growth shows that in 1988, 11 percent of teen girls under the age of 15 had had sex. In 1995, this fraction had increased to 19 percent.

As we discussed below, there is evidence that parents can play an important role in teens' decisions about having sex at young ages. Teens who have a strong attachment to their parents are less likely to be sexually active and less likely to become pregnant. [Check.] The web site www.teenpregnancy.org gives considerable additional information about the seriousness of the problem of teen pregnancy and the issue of who suffers the consequence, as well as information for teens and their families about preventing teen pregnancy (see the web site's "facts and stats," which provides citations). Among the points emphasized are:

- Most adults (95 percent) and teens (85 percent) believe it is important that society give the strong message to school-age young people to abstain from sex until they are out of high school. Still, most adults believe that sexually active teens should have access to contraceptives.
- Many teens rate their parents rate high as a preferred and trustworthy source of information about contraception. About half of teens say their parents are a reliable source for such information, compared to 12 percent who say a friend.

or 93% is latest, but this may not be released yet. (ck w/ NCTRP)
 AGI ?
¹⁶ A recently published study compiled data on adolescent birthrates for 46 developed countries over recent decades, and gathered abortion and pregnancy rates for a subset of these countries [cite]. The range in the pregnancy rates across these countries in the mid-1990s is very wide, from a low of 12 births per 1,000 adolescent females in the Netherlands to a higher levels, near 80 per 1,000, in Bulgaria and the United States. Western European and other developing countries generally have lower teen pregnancy rates than eastern European countries and the United States. Over the early 1990s adolescent pregnancy rates declined in nearly all of the reporting countries. International comparisons of adolescent birth and abortion rate data reveal a similar pattern.

- Tr smoking is also associated with other high-risk behaviors. Youth between 12 and 17 who smoke are more than 11 times more likely to use illicit drugs, and 16 times more likely to drink heavily than nonsmoking youth. Smoking is associated w/ a host of other risk behaviors, such as
- A majority of sexually active teens—both boys and girls—say that they wished they had waited. fighting and engaging in unprotected sex. (cite A)

3.8. Smoking.

4.1 million young people under the age of 18 are smokers. It has been estimated that every day more than 3000 American youth become regular smokers, about one third of whom will die prematurely as a result. If this trend continues, more than 5 million young people living today will die prematurely. (cite B)

In 1998, 9 percent of 8th graders, 16 percent of 10th graders, and 22 percent of 12th graders reported smoking daily in the previous 30 days. For all three groups, rates of smoking generally increased from 1992, though from 1997 to 1998 there were declines for the older two groups (and a flat trend for the 8th graders). Over the longer term, the incidence of youth smoking declined between the mid-1970s and the early 1990s, prior to the recent upswing. The recent increase contrasts with the continued steady decline in adult smoking rates and has resulted in a youth smoking rate that is nearly twice that of adults. The high rate of smoking among young people is particularly troubling because smoking by youth is strongly linked to smoking as an adult. [Might want to add that young smokers tend to seriously underestimate the likelihood that they will continue smoking in the future.]

A study by Jonathan Gruber and Jonathan Zinman (1999) analyzing the most recent available (1997) data from the Monitoring the Future (MTF) survey shows that while adult smoking tends to be concentrated among those in low socioeconomic status groups, youth smoking is more diffuse. The single most important determinant of smoking is race, with black youth smoking much less than white youth. Youth smoking is more likely in the suburbs than in either the city or rural areas and it is positively correlated with parental education. It is also more likely, however, among those with worse academic performance, those who miss more school, and those who do not plan to go to college. The study provides direct evidence that more hours worked by the teen and more income lead to smoking among high school seniors, and the authors speculate that some of the other correlations reflect unmeasured aspects of income.

In trying to explain why youth smoking has increased in the 1990s, it is natural to ask whether changes in background factors have been important. For the most part, these factors appear not to have been. However, smoking does appear to have risen among "advantaged" youth relative to disadvantaged youth, particularly in the 1990s. Nevertheless, these relative changes are swamped by the general increases in smoking rates across all groups. These increases in smoking have also been accompanied by increases in the use of other substances such as alcohol and marijuana. Some evidence suggests that use of other substances may be complementary to smoking, so that the rise in smoking induced an increase in the use of other substances as well. However, the correlation was much tighter in the 1990s than in earlier periods, suggesting the possibility that teen tastes shifted toward substance use generally in the 1990s.

A final factor that may help explain the rise in teen smoking in the 1990s is the price of cigarettes. The potentially important role of cigarette price is particularly intriguing from the standpoint of public policy, since prices are much more likely to be under the control of policy than background characteristics. Gruber and Zinman estimate that for seniors, a 10 percent increase in price would reduce the proportion of youth who smoke about 6½ percent and the total number of cigarettes smoked by about 13 percent. Overall, the researchers' work suggests that

- (A) National Household Survey on Drug Abuse; Population Estimates 1998, SAMHSA, HHS.
- (B) "Trends in Cigarette Smoking in the U.S.; Projections to the yr 2000," JAMA, John Pierce et al, vol 261, pp 61-65, 1989

the decline in cigarette prices over the early and mid-1990s led to about one third of the increase in smoking among high school seniors. Curiously, the price increase does not appear to explain trends for younger teen smokers, though restrictions on access to cigarette purchases did seem to lower the quantity of cigarettes smoked by younger teens.

4. The Importance of the Parent-Teen Relationship

In section 2 of this report we emphasized some of the general society trends over the past century that have led to current busy lives that many American families lead. A recent Council of Economic Advisers report shows that the upward trend in labor market activity among parents has been substantial over the past few decades: for two-parent families with children under 18 annual hours of paid work increased by 497 hours (18 percent) from 1969 to 1996; for single parent households they increased by 297 hours (28 percent). These changes in parents' hours of paid work generally reflect increases by wives and by single parents, rather than by husbands.

The increasing parental time spent in the workplace and in commuting to work puts a substantial squeeze on families to find time for other important activities, including time for parents to spend with children. Suzanne Bianchi (2000) points out that many parents have been resourceful in finding time to spend with children. She discusses one study that shows hours per day mothers spent in care of family members actually changed very little from 1925 to 1975.¹⁷ And she cites her own research, comparing mothers' time with children in 1965 and 1998, finds that even with the increase in single parenting and market work by mothers, mothers are spending as much time with their children now as in 1965. There is also evidence of modest increases in time spent with children by married fathers.

Though Bianchi reminds us that the difficulty families often face in finding time for family and work is not a new phenomenon, she also emphasizes that coping with the time crunch is clearly a serious challenge. In the context of our report this issue is prominent because parental time spent with teenage children represents an important investment in the well being of young Americans.

A substantial literature on development of adolescents emphasizes that teens' own decisions and behaviors are critical for their present well-being and their future. Our report emphasizes, for instance, the growing importance of educational choices teens make. The economic advantage of gaining a strong education, and building basic skills has never been higher, and the relative cost of falling behind is also increasing. Similarly, much of the risk to teens' health is the result of the behavior of teens and those around them. The leading causes of death among teens are accidents, suicide, and homicide. In addition, the future health and economic status of teens is greatly affected by decisions they make while they are young, including sexual behavior and the decision to start smoking. It is thus understandable that parents are deeply concerned about ways of encouraging their teens to make good decisions and about protecting them from threats to that harm their present and future welfare.

Researchers tell us that, in fact, a teen's family environment makes a real difference. One recent research report published in the *Journal of the American Medical Association* highlights the key importance of parents' involvement in their teenage children's lives for a host of

¹⁷ This study cited by Bianchi is by Bryant and Zick (1996). These authors point out that in 1925 many women not in paid work nonetheless worked long hours on farms or on difficult domestic chores. (Because of data limitations, the analysis is restricted to white, two-parent families.)

important outcomes.¹⁸ Using a large and detailed data set, the National Longitudinal Study on Adolescent Health ("Add Health" data, collected from several thousand adolescents in grades 7 to 12), the authors of the report examined a variety of issues, including the role of parents in affecting teen behavior.

[Need to add a discussion of the Resnick results and other related literature—one or two paragraphs.]

Here we present additional analysis from the public use version of the Add Health data that underscores some of the key and interesting findings that are emerging from this important research.¹⁹ We find that the data provide evidence suggesting a key role for parents in many of their teen children's decisions, including many of the behaviors highlighted in the previous section of our report.

Our interest is in examining the relationship between various teen outcomes of interest—like school performance or smoking behavior—with a range of measures of parental involvement with the teen—like how much time parents spend with their teen or how close the teen feels to parents. In conducting this analysis, we use statistical procedures that control for differences in teen outcomes that arise on the basis of age, sex, family structure, and poverty status. Our strategy is to first divide our sample into 24 demographic groups, and then conduct a series of regression analyses in which the dependant variable is the teen outcome and the independent variables are a parental involvement variable along with 24 indicator variables controlling for demographic group of the teen.²⁰ The resulting estimate can be interpreted as the average relationship between the parent variable and teen outcome across the demographic groups.

[We are currently generating statistics for this section. We anticipate that we will have a two-page write-up of a number of interesting findings showing teens do better on a number of dimensions—higher grades in school, lower rates of sexual activity among young teens, lower suicidal ideation, fewer violent altercations, etc.—when they eat meals with a parent, have close parent-teen relationships, or are involved in more activities together with a parent.]

¹⁸ See Michael Resnick, et al., "Protecting Adolescents From Harm: Findings From the National Longitudinal Study on Adolescent Health," *Journal of the American Medical Association*, September 1997. An accessible summary of many of the study's findings can be found in Robert Blum and Peggy Rinehart, "Reducing the Risk: Connections That Make a Difference in the Lives of Youth," Division of General Pediatrics and Adolescent Health, University of Minnesota.

¹⁹ One key disadvantage of the public-use version of the data is that only about half of the sample has been released. Thus the analysis presented here is generally based on around 6000 observations.

²⁰ We divide our sample into 3 age groupings (14 and younger, 15 to 16, and 17 and older), 2 sexes, 2 basic family structures (teens who live with two parents, and other families), and 2 poverty groupings (households in which one or more parent receives welfare, and other households). This 3 by 2 by 2 by 2 design gives 24 distinct demographic groups. For example, one group would be "13-14 year-old boys who live with two parents neither of whom receive welfare." Our use of the extensive interaction design conditions on only on differences on the teen outcome variable that arise because of age, for example, but for age effects that vary by sex or by poverty status. Or, as another example, allows for the possibility that the average effect of family structure on the teen outcome variable differs by age and gender. The estimates of the coefficients on the demographic variables may be of independent interest but we focus here strictly on the estimated effects of the parental involvement variables.