The labor market problems of today's high school dropouts

Of the 4 million young high school dropouts in 1986, 1 in 6 was unemployed; many were not in the labor force at all, and those who were, faced strong competition from high school graduates for limited job opportunities

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Among the Nation's unemployed, about 3 of 8 are young persons age 16 to 24. The high unemployment rates among youth reflect the problems often encountered by these new entrants to the job market. Without a doubt, the youth facing the greatest difficulties are the 4 million high school dropouts. Many dropouts do not participate in the job market at all; of those who do, 1 of 4 are unemployed.

The dropout problem

Education has long been recognized as vital in building an able and skilled work torce, and the 20th century has seen a tremendous rise in the educational level of the U.S. population. At the beginning of this century, only 10 percent of male students received a high school diploma. During the 1950's, more than half of all students graduated from high school. By the late 1960's, data from the National Center for Education Statistics put high school completion rates at about 75 percent, where they have since remained. This apparent halt in the rising trend of high school completions has resulted in heightened awareness of the dropout problem. Currently, there is debate on the appropriateness of using high school

completion rates (and the derived dropout rate) as a means of estimating the magnitude of the dropout problem. The adequacy of estimates obtained from other methods is also questioned given that the range of reported dropout rates extends from 14 percent to 25 percent.³ However, regardless of the measure chosen, there is little conclusive evidence to suggest that there has been significant improvement in the dropout situation over the last two decades.

Information on dropouts is obtained from several sources, including the administrative records of local school districts, longitudinal surveys of youth/student cohorts, and the Current Population Survey (CPS).4 This article assesses the labor market behavior of young high school dropouts, relying heavily on data from the CPS. Each October, a supplement to the regular CPS asks questions regarding the school enrollment status of household members, including the year they last attended school and the highest grade completed. Separate data are tabulated for high school graduates and high school dropouts⁵ and for two groups of special interest—recent dropouts (those who dropped out of school between October of the previous year and the current October) and recent graduates (those who completed high school during the current calendar year).

The number of recent dropouts has averaged about 700,000 a year for the last 20 years, although it was at its

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lowest level, 562,000, in 1986.⁶ The 1978 high of 839,000 roughly mirrors the population peak of baby-boomers. The following tabulation shows the number of recent dropouts, 1967–86:

	(thousands)		Recent dropouts (thousands)
1967	614	1977	832
1968	610	1978	839
1969	661	1979	812
1970	712		759
1971	657	1981	
1972	734	1982	668
1973	790	1983	597
1974	813	1984	601
1975	737	1985	612
1976	749	1986	562

The recent dropouts of 1986 were nearly equally divided among young men (53 percent) and young women (47 percent), which was typical of the last two decades. Although the dropout problem is often represented as primarily a problem among minority youth, only 16 percent of recent dropouts in 1986 were black, a proportion representative of black high school enrollment, while 80 percent were white. Since 1973, when data were first tabulated for Hispanics (most Hispanics are counted as white), a disproportionate number of dropouts have been of Hispanic origin. Most recently, 23 of 100 recent dropouts were Hispanic, although Hispanics account for only 9 percent of the enrolled high school population.

In October 1986, there were about 4 million young high school dropouts, representing nearly 1 of 8 of the 16- to 24-year-olds. To better understand this sizable group, this article first explores the phenomenon of dropping out of school before analyzing the labor market behavior and performance of young dropouts.

Dropping out: factors and reasons

Several factors have been theorized to explain what influences a youth's decision to drop out of high school. Reliable indicators of who will complete high school appear to be family background characteristics, such as income and parental education, and an individual's performance on intelligence tests and demonstrated reading skill. Studies have found that dropouts are more likely to score lower on ability tests and to come from families with relatively low income and education.

Data from the October 1985 supplement to the CPS were used to look at two background variables for recent graduates and dropouts: family income and parental education. Because it lacks the necessary longitudinal capacity, the CPS cannot identify the parental education and family income of dropouts and graduates prior to their leaving school, but a reasonable proxy for the two variables is found by using data for recent graduates and

Table 1. Median family income by type of family in which 16- to 24-year-old recent high school dropouts and graduates reside, October 1985

		High school graduates			
Type of family and income!	High school dropouts	Enrolled in college	Not enrolled in college		
All families (thousands)	450	1,457	968		
Percent with income less than \$10,000	40.9	5.7	14.7		
Median family income	\$12,064	\$34,171	\$22,659		
Married-couple families (thousands)	231	1,190	699		
Percent with income less than \$10,000	23.4	2.9	8.8		
Median family income	\$21,249	\$37,593	\$26,575		
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Families maintained by women (thousands)	183	206	226		
Percent with income less than \$10,000	68.0	21.0	33.8		
Median family income	\$6,764	\$17,966	\$12,323		

dropouts who were still living with their parents when surveyed. (Thus, the discussion in this section excludes recent graduates and dropouts who were living on their own. 11)

As one might expect, family income differed significantly for recent dropouts and high school graduates. Median income was \$12,100 for families of recent dropouts, \$22,700 for families of recent high school graduates not enrolled in college, and \$34,200 for families of college-enrolled recent high school graduates. ¹² These income differences are explained, in part, by the distribution of family types for each group. For example, dropouts are more likely to come from families maintained by women, whose incomes, on average, are less than half those of married-couple families. (See table 1.)

A second factor, parental education, has also been suggested as influencing the dropout's decision. More than half of the recent dropouts were in families where the householder¹³ had completed less than 12 years of school; only 10 percent of college-enrolled recent graduates were in such families. (See table 2.) Dropouts are also more likely to live in families maintained by women, and these women tend to have relatively low levels of both educational attainment and income.

These findings support previous studies that show parental education and family income as factors associated with dropping out of high school. While the findings do not establish a causal relationship, they help identify youths who are "at risk" of dropping out. The data also suggest differences in the familial backgrounds of graduates and dropouts which will not be changed by obtaining a high school diploma, and which must be recognized when formulating programs dealing with the employment problems facing young dropouts.

In addition to the familial background factors, responses obtained from dropouts on their reasons for

leaving school add vital information to their portrait. Data on reasons for leaving school are available from the Center for Education Statistics' longitudinal survey of high school sophomores and seniors, begun in the spring of 1980. 14 The survey categorized reasons for dropping out as school-related, family-related, or other (the categories are not mutually exclusive; dropouts could give more than one reason). Among the other reasons, "offered job and chose to work" was listed separately and is of special interest in this analysis. The following tabulation shows the percent of dropouts, by reason, from the Center for Education Statistics' survey:

	Male	Female
Had poor grades	35.9	29.7
School not for me	34.8	31.1
		t self in the
Married or planned to get married	6.9	30.7
Was pregnant		23.4
Had to support family	13.6	8.3
Offered job and chose to work	26.9	10.7

For young women, the decision to leave school is primarily related to school or family matters. Many listed marriage or pregnancy as the reason for dropping out; only 11 percent listed "offered job and chose to work." In view of their low labor force participation after leaving school, it appears that work-related factors play a minor role in the decision of young women to drop out. Marital status and childbearing appear to be important factors. For many young men, the reasons given for dropping out

Table 2. Distribution of 16- to 24-year-old recent high school dropouts and graduates by the educational attainment of the householder in the family in which they reside, October 1985

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Type of family and	Eller askard	High school graduates			
educational attainment of householder	High school dropouts	Enrolled in college	Not enrolled in college		
All families ¹	100.0	100.0	100.0		
Less than 4 years of		r e i e e e e			
high school	55.1	10.3	32.0		
4 years of high school	26.7	35.5	46.3		
1 to 3 years of college	13.6	22.9	12.7		
4 years of college or more	4.7	31.4	9.0		
	Balance of				
Married-couple families	100.0	100.0	100.0		
Less than 4 years of	l Till		' ' ' ' '		
high school	53.5	10.1	33.9		
4 years of high school	27.4	34.3	43.9		
1 to 3 years of college	11.3	21.7	13.3		
4 years of college or more	7.8	33.9	8.9		
Tyour or comogo or more	l i i i				
Families maintained by women	100.0	100.0	100.0		
Less than 4 years of		i de la companya de			
high school	59.9	11.7	23.5		
4 years of high school	24.2	41.7	55.3		
1 to 3 years of college	15.9	30.6	11.9		
4 years of college or more	(²)	16.0	9.3		

¹Includes a small number of families maintained by men. 3.4 (2.0%)

Table 3. Labor force participation rates of 16- to 24-yearold female high school dropouts and graduates by marital status, presence of children, race, and Hispanic origin, March 1987

Marital status and		Droj	pouts		() () () () () () () () () ()
presence of children	Total White B		Black	Hispanic origin	Graduates ¹
		5 55			
Total	46.1	47.7	37.9	35.1	77.4
With no own children	59.5	62.4	40.6	58.0	87.1
With own children	35.6	35.5	36.3	21.2	60.0
Married, spouse		Fag 18.1			representation
present	39.5	37.9	(²)	22.8	67.9
children	51.4	47.9	(2)	(²)	81.5
With own children	35.5	34.7	(2)	18.4	58.4
Other marital status ³ With no own	50.0	55.4	35.7	45.4	82.9
children	61.6	66.9	36.5	65.3	88.8
With own children	35.8	36.8	35.1	25.1	
	35.6	30.0	35.1	25.1	62.4
Maintaining families		F 22 NO.			
with own children .	32.8	35.1	28.2	(*)	61.3

Data refer to graduates who completed 4 years of high school only.

of school suggest an implicit choice of work over further studies. For example, in addition to school-related reasons, "offered job and chose to work" and "had to support a family" figured prominently.

In analyzing data on the reasons for leaving school, it is important to note that "post hoc explanations provided by dropouts may be somewhat questionable because of the complexity of the dropout phenomenon and the natural tendency for persons to rationalize behavior which might be regarded by others as evidence of failure." However, data on the reasons for dropping out of school provide insight into the post-school behavior of dropouts. And the labor force behavior of dropouts, both female and male, is inextricably linked to the reasons and causes of dropping out.

Female dropouts

Between October of 1985 and 1986, more than a quarter of a million young women dropped out of high school. Only a little more than half of them were in the labor force in October 1986, continuing the historical pattern of comparatively low labor force participation among young female dropouts. About 20 years earlier, the participation rate for 16- to 24-year-old female dropouts was just 38 percent. Their participation has steadily increased over the last two decades, reaching 50 percent in 1986. However, their rate was still dramatically below the 77-percent rate for 16- to 24-year-old women who had ended their studies with a high school diploma.

Children and marriage. Childbearing and marriage would seem to be two important factors in explaining the

²Less than 0.5 percent.

²Data not shown where base is less than 75,000.

³Refers to single, widowed, divorced, or separated women.

low labor force participation of female dropouts. A special tabulation of the March 1987 CPS data provided a look at the relationship between marital status, presence of children, and labor force participation of 16- to 24-year-old female high school graduates who did not go to college¹⁶ and dropouts. As expected, the presence of children had a negative effect on the participation of both groups. However, regardless of marital or maternal status, dropouts have significantly lower rates of participation than do graduates. (See table 3.)

The presence of children has, by far, the greatest impact on the labor force participation of young female dropouts. Regardless of marital status, just over one-third of the dropouts who were mothers were in the labor force. Marital status, however, affects young women's dependence on family and government for financial support. About 44 percent of unmarried mothers lived with relatives, and many received government assistance. Using data from the Center for Human Resource Research's longitudinal study of young women age 14 to 24 that was begun in 1979, Frank L. Mott and Nan L. Maxwell found that about 32 percent of white dropouts with children and 74 percent of black dropouts with children received government assistance from at least one of the following programs: Aid to Families with Dependent Children, food stamps, and Supplemental Social Security.17

Among female dropouts with children, labor force participation rates vary substantially by race and ethnicity. For example, Hispanic dropouts have significantly lower rates than do their white or black counterparts. (See table 3.) Cultural attitudes regarding marriage, childrearing, and paid employment may help explain the variations in participation. Although both white and black dropout mothers have similar participation rates, they exhibit distinctly different marital patterns—only 1 of 10 black mothers was married, compared with about 6 of 10 white mothers and Hispanic mothers. (See table 4.) The high proportion of unmarried black dropouts explains, to some extent, the large percentage of black mothers receiving government assistance, compared with white mothers. This marital pattern also results in nearly half of all black dropout mothers living with relatives, and about 40 percent maintaining their own families.

Even when they do not have children, black female dropouts seem to have a very tenuous attachment to the labor force. Fewer than half of them were in the labor force in March 1987, in contrast to about 60 percent of their white or Hispanic counterparts.

Unemployment. The poor labor market performance of female dropouts is also exemplified by their high unemployment rates. In October 1986, the jobless rate for female dropouts age 16 to 24 was 30.4 percent, about $2\frac{1}{2}$

Table 4. Distribution of 16- to 24-year-old female dropouts, by marital status, presence of children, race, and Hispanic origin, March 1987

Marital status and presence of children	Total	White	Black	Hispanic origin	
otal female dropouts:					
Number (thousands)	2,024	1,577	391	454	
Percent	100.0	100.0	100.0	100.0	
Married, spouse present	37.2	44.1	10.2	45.8	
Other marital status1	62.8	55.9	89.8	54.2	
With no own children:					
Number (thousands)	887	714	144	171	
Percent	100.0	100.0	100.0	100.0	
Married, spouse present	21.1	23.7	9.7	26.9	
Other marital status ¹	78.9	76.3	90.3	72.5	
With own children:		Mile i g			
Number (thousands)	1,137	863	247	283	
Percent	100.0	100.0	100.0	100.0	
Married, spouse present	49.8	61.1	10.5	56.9	
Other marital status ¹	50.2	39.0	89.5	43.1	
Maintaining own family .	28.1	23.8	42.9	24.4	
Living with relatives	22.2	15.3	46.6	18.7	

¹Refers to single, widowed, divorced, or separated women.

times the rate for women this age who had ended their education with a high school degree.

From data collected in the October 1986 CPS supplement, a special tabulation was constructed to compare female dropouts and graduates as they go through the transition period during the 4 years after leaving high school. Using cross-sectional data, the following tabulation shows the effect of time out of school and age on the unemployment rates of dropouts and graduates:

Unemployment rates

	Dropouts	Graduates
Last attended high school:		
Current year (1986)	. 33.7	20.3
I year ago	. 40.3	14.3
2 years ago	. 31.8	16.6
3 years ago	. 36.5	8.2
4 years ago, or longer	. 26.4	10.8
Age in 1986:		
16-17	. 37.1	_
18-19	. 35.9	15.9
20-21	. 27.8	12.7
22-24	. 28.2	11.2

Unemployment rates for both groups show some decline with age and time out of school, although for dropouts the jobless rate remains exceptionally high. The unemployment rate was 34 percent for current-year dropouts, compared with 20 percent for 1986 high school graduates not enrolled in college. The gap between graduates' and dropouts' unemployment rates was smallest immediately after leaving school.

Male dropouts

Because of their strong labor force attachment, the labor market problems of male dropouts have often

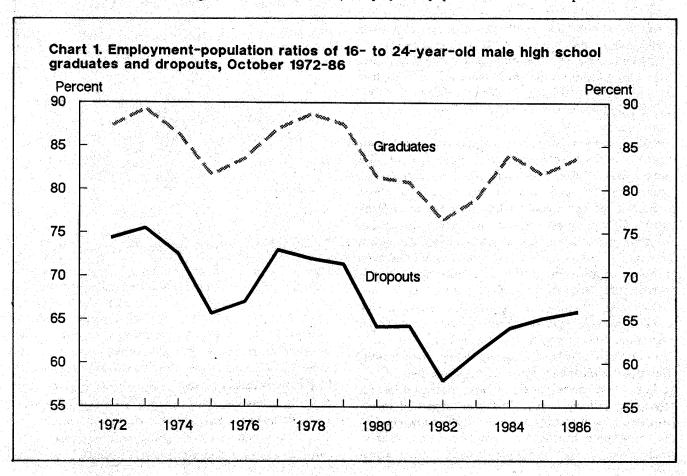
received more analytical attention than those of female dropouts. Numerous studies of the "youth employment problem" identify young male dropouts as the group most adversely affected by a slack youth labor market. 18 Job competition for full-time employment is keen, with dropouts competing not only among themselves, but also with high school graduates who did not go to college. The employment problems of black youth dropouts are often viewed as approaching crisis proportions.

The occupational distribution of young male dropouts suggests that they compete with male high school graduates who did not attend college. Among both groups, about two-fifths of the employed 16- to 21-year-olds were machine operators, fabricators, or laborers; about one-fourth were employed in precision production, craft, and repair jobs; and 1 of 7 was in service occupations. Such competition between graduates and dropouts often puts the dropout at a distinct disadvantage. In the extreme, the use of the high school diploma as an employment screening device could prevent the qualified dropout from even being considered by the employer.

The occupational distribution of high school dropouts is also noteworthy because of the small proportion (14 percent) employed in service occupations. A popular stereotype portrays employed youth as low-paid, often part-time workers in service occupations. However, male

dropouts are more likely to work full time in the goodsproducing sector as operators, fabricators, or laborers, and as precision production, craft, or repair workers. The sector's lagging performance does not promise very strong employment prospects for the recent dropouts who, in the past, have found jobs in mining, manufacturing, and construction.¹⁹

The jobless rates for high school dropouts and graduates provide some indication of the labor market performance of these competing groups. In October 1986, more than 1 of 5 male dropouts were unemployed, compared with 1 of 10 high school graduates. Among dropouts, the jobless rate for blacks (44 percent) was much higher than that for whites (18 percent) and Hispanics (15 percent). However, the most useful measure of the labor market success of male dropouts and high school graduates may be the employment-population ratio—that is, the employed as a proportion of the civilian noninstitutional population. This measure focuses on the more clear-cut and analytically important distinction between employment and "nonemployment" (this category includes those unemployed and those not in the labor force), particularly for out-of-school young men, for whom it is sometimes difficult to distinguish between being outside the labor force and being unemployed.²⁰ In October 1986, the employment-population ratio was 56 percent for recent



male dropouts, and 70 percent for recent high school graduates. Although the employment-population ratios for dropouts generally increase with age and time out of school, the gap between graduates and dropouts remains fairly constant. Using cross-sectional data for October 1986, the following tabulation illustrates the impact of the age and time out of school variables on employment-population ratios:

			ratios	

	Graduates	Dropouts
Last attended school:		Diopouis
Current year (1986)	69.4	47.6
1 year ago	81.1	58.5
2 years ago	80.9	61.0
3 years ago		64.8
4 years ago, or longer.	87.7	73.6
Age in 1986:		
16–17		44.2
18-19	73.7	63.0
20-21	83.1	68.2
22-24	88.3	74.1

Both aging and time out of school give young men a chance to mature and gain valuable work experience as they pass through a "moratorium period," where employment is often of secondary importance.²¹ However, over the last two decades there has been an alarming downtrend in employment-population ratios of out-of-school youth, particularly for young black dropouts. It is no longer clear whether the normal increase in such ratios that is typically associated with aging will be enough to integrate these black dropouts into the labor force during their prime working years.²²

Nonemployment of out-of-school youth. While quite sensitive to cyclical changes over the last 15 years, the employment-population ratio of male dropouts and high school graduates has trended downward—although more moderately for high school graduates. (See chart 1.) From October 1973 (1 month prior to a business cycle peak) to October 1986 (4 years into an expansion), the employment-population ratio of black dropouts fell 25 percentage points, while the white and the Hispanic ratios declined only 7 and 8 percentage points, respectively. Similarly, the decline in the employment-population ratio for black graduates was more severe than that for their white or Hispanic counterparts. (See chart 2.)

While low employment-population ratios among dropouts demonstrate that a large proportion are not working, that measure alone does not capture the underlying dynamics of the labor force activity of dropouts. It is important to know whether low employment-population ratios are a result of frequent, short spells of nonemployment or a product of extended periods

Table 5. Distribution of 20- to 24-year-old male high school dropouts with work experience by number of weeks worked, race, and Hispanic origin, 1979 and 1986

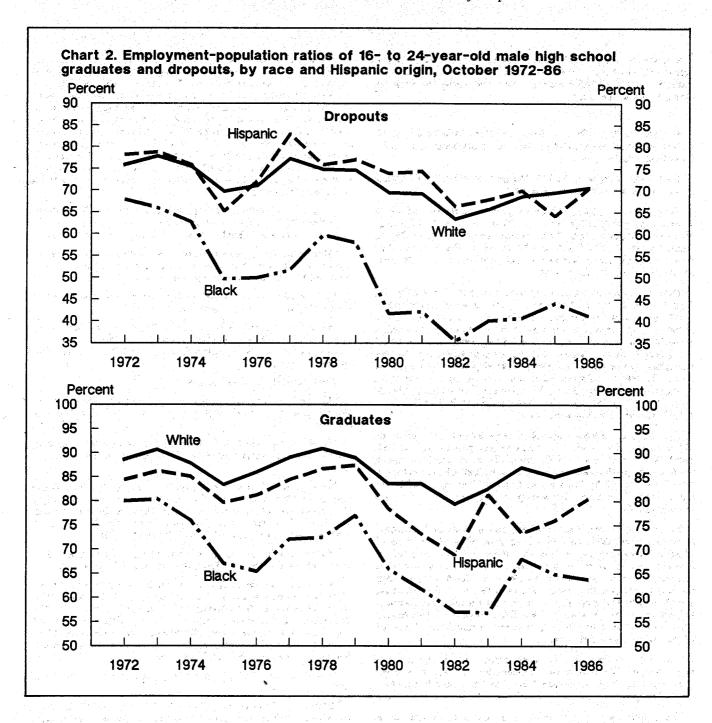
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Weeks worked	Total White		Black		Hispanic origin			
	1979	1986	1976	1986	1979	1986	1979	1986
	2.6	1, 7		100			17.5	100
Total with work experience	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
50-52 weeks	45.6	49.6	47.2	53.3	37.7	28.1	47.2	58.9
40-49 weeks	16.7	12.4	17.5	12.2	13.4	10.8	13.4	9.1
27-39 weeks	14.4	9.3	13.8	9.8	17.7	6.6	17.7	9.9
1 – 26 weeks	23.8	28.8	21.2	24.6	31.2	54.5	22.1	21.9
14-26 weeks.	13.7	16.0	12.7	13.9	13.9	27.5	15.6	11.3
1 – 13 weeks .	10.2	12.7	8.5	10.7	17.3	26.9	6.5	10.6

of nonemployment. A study sponsored by the National Bureau of Economic Research identified long spells of nonemployment as the primary cause of low employmentpopulation ratios of out-of-school black youth. 23 Analysis of CPS work experience data confirm the existence of long periods of nonemployment among a sizable proportion of dropouts. During 1986, 17 percent of men age 20 to 24 with less than 4 years of high school had no work experience at all; 25 percent had worked 26 weeks or less. By comparison, about 40 percent of the black dropouts reported no employment whatsoever for the year. Since 1974 (when data were first available), the proportion of black dropouts with no work experience during the year has increased dramatically. This is also true among high school graduates, where blacks clearly had the highest incidence of and greatest rise in nonemployment. The following tabulation shows the proportion of 20- to 24year-old male graduates and dropouts with no work experience during selected calendar years:

			Hispanic
Total	White	Black	origin
5.3	4.6	9.0	9.2
5.4	3.7	15.2	8.7
9.6	7.2	22.9	9.5
6.7	4.8	15.7	8.9
10.4	9.1	15.1	8.8
12.4	9.3	23.9	9.4
19.6	14.9	40.1	14.3
16.8	11.8	39.7	9.6
	5.3 5.4 9.6 6.7 10.4 12.4 19.6	5.3 4.6 5.4 3.7 9.6 7.2 6.7 4.8 10.4 9.1 12.4 9.3 19.6 14.9	5.3 4.6 9.0 5.4 3.7 15.2 9.6 7.2 22.9 6.7 4.8 15.7 10.4 9.1 15.1 12.4 9.3 23.9 19.6 14.9 40.1

There has also been a slight polarization in the distribution of weeks of work for the dropouts who do work. The proportion working 50-52 weeks rose from 46 percent in 1979 to 50 percent in 1986, while the percentage working 26 weeks or less also increased slightly. (See table 5.) Black dropouts, however, have shown a decrease in the proportion working full year, as well as a large increase in the number working half a year or less.



YOUNG HIGH SCHOOL DROPOUTS face a difficult time in today's labor market. Unemployment rates are high, especially among black dropouts. Only half of all female dropouts are in the labor force at any time, and many of these young women have the additional responsibility of motherhood, often without a spouse. A surprisingly small proportion of male dropouts are employed, with many experiencing long periods of nonemployment.

In a labor market demanding increasingly higher skill levels, school dropouts face declining employment opportunities. Further, they must compete with high school graduates for these limited jobs. The data suggest that dropouts are less likely to achieve success in the labor market than are high school graduates. However, it would be misleading to infer that the employment problems of dropouts would be solved solely by obtaining a high school diploma. While the importance of education cannot be overstated, there are differences in the family background and personal characteristics of dropouts and graduates that affect labor market success. These differences cannot be overcome simply by obtaining a diploma.

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¹Jerald G. Bachman, Swayzer Green, and Ilona D. Wirtanen, *Youth in Transition*, Vol. III (Ann Arbor, University of Michigan, Institute for Social Research, 1971), p. 4.

²Unpublished data from the U.S. Department of Education, Center for Education Statistics, Washington, DC.

³For a discussion of the different dropout measures and the debate surrounding the dropout problem, see Chester E. Finn, Jr., "The high school dropout puzzle," *The Public Interest*, Spring 1987, pp. 3-22; and "School Dropouts: The Extent and Nature of the Problem," Briefing Report to Congressional Requesters, GAO/HRD-86-106BR (U.S. General Accounting Office, June 1986).

⁴Data in this article were derived primarily from the October Current Population Survey (CPS). The CPS is a monthly survey of approximately 60,000 households conducted and tabulated for the Bureau of Labor Statistics by the Bureau of the Census. Most analysis in this article relates to persons 16 to 24 years of age in the civilian noninstitutional population. Because it is a sample survey, estimates derived from the CPS may differ from actual counts that could be obtained from a complete census. Therefore, estimates based on a small sample should be interpreted with caution. For further information on sampling reliability, see *Students*, *Graduates*, and *Dropouts*, *October 1980–82*, Bulletin 2192 (Bureau of Labor Statistics, 1983).

⁵In this article, the term "high school dropouts" refers to individuals who are not enrolled in school and have not completed 4 years of high school. The term is somewhat of a misnomer, as this group contains a small proportion of persons who never attended high school. In October 1986, 14 percent of the "high school dropouts" had left school before ever attending high school. No attempt is made to analyze this small group separately.

⁶Data refer to recent graduates and dropouts age 16 to 24. In addition, an average of 86,000 persons 14 and 15 years of age dropped out of school annually over the same period. While the data presented on dropouts refer to persons who had not completed high school when surveyed, a number of dropouts do return to school or obtain high school equivalency certificates at a later date. Estimates of returnees are as high as half of all dropouts. For further information, see Andrew J. Kolstad and Jeffrey A. Owings, *High School Dropouts Who Changed Their Minds About School* (U.S. Department of Education, Center for Education Statistics, April 1986).

⁷This was the first year in which blacks did not make up a disproportionate share of recent dropouts. Because of the relatively small size of the black youth population, the 1986 anomaly may be a result of sampling error, and not indicative of a change in the past trend.

⁸These figures are not intended as a dropout rate, but only as an indication of the prevalence of dropouts in the 16- to 24-year-old population. See footnote 3 for references on the distinction among these and other measures of the dropout problem.

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⁹Bachman and others, Youth, ch. 3.

¹⁰This group is identified as recent graduates and dropouts who are relatives of the householder. Included may be a very small number of individuals who are not sons or daughters of the householder, but are otherwise related (such as a sister or a cousin). The householder, a proxy for the dropout's or graduate's parent, is the person (or one of the persons) in whose name the housing unit is owned or rented. In married-couple families, the term householder is replaced by reference person, but is defined identically. In cases of joint ownership or rental partnership by husband and wife, the reference person is self-designated, invariably the husband. Although several simplifying assumptions have been made, the data are believed to accurately portray the characteristics of the specified population.

¹¹Only a small percentage of dropouts are on their own. For example, in October 1985, 91 percent of recent high school graduates and 74 percent of recent high school dropouts were living with their parents.

¹²Median income figures are tabulated from data collected on the CPS control card. This method yields estimates that lack a high degree of precision, but allows for intergroup comparisons.

¹³A householder is the person (or one of the persons) in whose name the housing unit is owned or rented. See footnote 10.

¹⁴Samuel S. Peng, High School Dropouts: Descriptive Information from High School and Beyond, Bulletin NCES 83-221b (Washington, U.S. Department of Education, National Center for Education Statistics, November 1983).

15 Peng, High School Dropouts, p. 4.

¹⁶All analyses regarding high school graduates refer to those individuals with 4 years of high school education only, unless otherwise specified.

¹⁷Frank L. Mott and Nan L. Maxwell, "School-Age Mothers: 1968 and 1979," Family Planning Perspectives, November/December 1981, p. 290.

¹⁸See Richard B. Freeman and David A. Wise, eds., The Youth Labor Market Problem: Its Nature, Causes, and Consequences (Chicago, National Bureau of Economic Research, 1982); and Richard B. Freeman and Harry J. Holzer, eds., The Black Youth Employment Crisis (Chicago, National Bureau of Economic Research, 1986).

¹⁹Thomas Nardone, "Decline in youth population does not lead to lower jobless rates," *Monthly Labor Review*, June 1987, pp. 40 – 41.

²⁰For a discussion of the distinction between unemployment and out of the labor force, see Kim B. Clark and Lawrence H. Summers, "The Dynamics of Youth Unemployment," in Freeman and Wise, eds., *The Youth Labor Market Problem: Its Nature, Causes and Consequences*, and Christopher J. Flinn and James J. Heckman, "Are Unemployment and Out of the Labor Force Behaviorally Distinct Labor Force States?" *Journal of Labor Economics*, 1983, vol. 1, no. 1.

²¹Paul Osterman, *Getting Started* (Cambridge, The MIT Press, 1980), p. 27.

²²Richard B. Freeman and Harry J. Holzer, "The Black Youth Employment Crisis: Summary of Findings," in Freeman and Holzer, eds., *The Black Youth Employment Crisis*.

²³John Ballen and Richard B. Freeman, "Transitions between Employment and Nonemployment," in Freeman and Holzer, eds., *Black Youth Employment Crisis*.