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TEENAGE UNEMPLOYMENT: WHAT IS THE PROBLEM?

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ABSTRACT

This nontechnical paper was prepared as a background study for the NBER Conference on Youth Joblessness and Employment. Our analysis of data collected in the March 1976 and October 1976 Current Population Surveys leads us to the following conclusions:

Unemployment is not a serious problem for the vast majority of teenage boys. Less than 5 percent of teenage boys are out of school, unemployed and looking for full-time work. Many out of school teenagers are neither working nor looking for work and most of these report no desire to work. Virtually all teenagers who are out of work live at home. Among those who do seek work, unemployment spells tend to be quite short; over half end within one month when these boys find work or stop looking for work. Nevertheless, much of the total amount of unemployment is the result of quite long spells among a small portion of those who experience unemployment during the year.

Although nonwhites have considerably higher unemployment rates than whites, the overwhelming majority of the teenage unemployed are white. Approximately half of the difference between the unemployment rates of whites and blacks can be accounted for by demographic and economic differences.

There is a small group of teenagers with relatively little schooling for whom unemployment does seem to be a serious and persistent problem. This group suffers most of the teenage unemployment. Although their unemployment rate improves markedly as they move into their twenties, it remains very high relative to the unemployment rate of better educated and more able young men.

Martin Feldstein David Ellwood National Bureau of Economic Research 1050 Massachusetts Avenue Cambridge, MA 02138 Teenage Unemployment: What is the Problem?

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An individual is officially classified as unemployed if he is not working and is seeking a full-time or part-time job. In recent years, 50 percent of the unemployed were less than 25 years old. Teenagers alone accounted for half of this youth unemployment or 25 percent of total unemployment. In 1978, an average of 1.56 million teenagers were classified as unemployed, implying an average unemployment rate of 16.3 percent of the teenage labor force. 2

It is clear therefore that teenagers account for a large share of the high unemployment rate in the United States. But how much of this teenage unemployment represents a serious economic or social problem? How many of these unemployed are students or others seeking part-time work? How much of all teenage unemployment represents very short spells of unemployment by those who move from job to job and how much represents really long-term unemployment of those who cannot find any job or any job that they regard as acceptable?

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lindividuals who are on layoff from a job to which they expect to be recalled are also classified as unemployed even if they are not actively seeking work.

²The unemployment rate for a demographic group is calculated as the percentage of the corresponding labor force who are currently classified as unemployed. The labor force is defined as everyone in that demographic group who is either employed or unemployed. An individual may be both attending school and in the labor force if he or she is working part-time or full-time or is looking for such work.

Among those who are not officially classified as unemployed but are neither working nor in school, how many should really be regarded as "unemployed but too discouraged to look" and how many should be classified as just "not currently interested in working"? And even among those who are officially classified as unemployed, how many are unemployed by the official definition but not really interested in work at the current time?

To shed light on these questions, we have analyzed the detailed information on youth employment and unemployment that is collected in the Department of Labor's monthly Current Population Survey. We have not relied on the published summaries of this survey but have examined and tabulated the basic records on more than 5,000 individual teenage boys about whom information was obtained in the Current Population Surveys of March 1976 and a similar size sample in October 1976. Analyzing the raw data has the very important advantage of permitting us to examine a variety of special subgroups that cannot be studied with the published summaries.

In particular, we decided quite early in our study to limit our attention to male teenagers who are not enrolled in school. We believe that the problems and experience of the in-school and out-of-school groups of unemployed teenagers are very different and must be studied separately. Since, as we show below, half of the male unemployed teenagers are still in school, looking at both

In the earlier version of this paper, we focussed on the male teenagers who do not report attending school as their "major activity." An individual may be enrolled but also working. For most purposes, the two methods of classification give similar results but we were convinced by subsequent comment and analysis that classifying by enrollment is more appropriate, especially for 16 and 17 year olds.

²We are of course aware that remaining in school represents an economic decision and should in principle be regarded as endogenous to the problem we are studying. It would be interesting to extend the current analysis to examine the relation between work availability and the decision to remain in school.

groups together can obscure much that is important. Moreover, the social and economic problems of unemployment may be of greater significance for the out-of-school group than for those who are still in school. Limiting our analysis to boys also reflects a view that the problems and experiences of the boys are likely to differ substantially from those of girls of the same age so that the two should be studied separately.

Even with the study limited to out-of-school young men, we have a sample of 1,451 individuals in October 1976. This is large enough to make statistically reliable estimates of unemployment and employment rates for most major groups. In some cases, however, e.g., when nonwhites are classified by family income, the sample becomes too small to permit estimates to be made with great confidence. In these cases, as in others where a larger sample is desirable, it would be useful in the future to pool data from several monthly surveys.

Since our analysis refers primarily to the unemployment experienced in October 1976 and, in some cases, during the preceding year, it is useful to describe briefly the state of the labor market during that period. In October 1976, the overall unemployment rate for the population as a whole was a relatively high 7.2 percent. Unemployment had been falling from a peak rate of 9.1 percent in June 1975. The mean durations of unemployment were therefore very long; the 14.2 week mean duration of unemployment for all the unemployed in the October 1976 survey was roughly 25 percent longer than the average duration of 11.5 weeks that prevailed in the years from 1960 through 1975. Our study should therefore be seen as an analysis of the experience of out-of-school young men during a time in which the labor market was depressed but improving.

In estimating unemployment and employment rates, a sample of 100 yields a standard error of no more than 0.005. Appendix Table A-1 presents selected sample sizes. Table A-2 presents the standard errors for probabilities based on selected sample sizes.

This should be remembered in interpreting any of our findings, a warning that will not be repeated. It would clearly be interesting to repeat our analysis for a year like 1974 when the unemployment rate for all persons was only 5.6 percent as well as for 1979 when those data became available.1

Our finding may be summarized very briefly:

Unemployment is not a serious problem for the vast majority of teenage boys. Less than 5 percent of teenage boys are unemployed, out of school, and looking for full-time work. Many out of school teenagers are neither working nor looking for work and most of these report no desire to work. Virtually all teenagers who are out of work live at home. Among those who do seek work, unemployment spells tend to be quite short; over half end within one month when these boys find work or stop looking for work. Nonetheless, much of the total amount of unemployment is the result of quite long spells among a small portion of those who experience unemployment during the year.

Although nonwhites have considerably higher unemployment rates than whites, the overwhelming majority of the teenage unemployed are white. Approximately half of the difference between the unemployment rates of whites and blacks can be accounted for by other demographic and economic differences.

There is a small group of relatively poorly educated teenagers for whom unemployment does seem to be a serious and persistent problem. This group suffers much of the teenage unemployment. Although their unemployment rate improves markedly as they move into their twenties, it remains very high relative to the unemployment rate of better educated and more able young men.

We have repeated the analysis for the two other recent years for which data are available, 1975 and 1977. The results are quite similar to those for 1976 reported in the text of this paper. Tables for these years are available from the authors.

l. More than 90 percent of all male teenagers are either in school,
working or both. Most unemployed teenagers are either in school or seeking
only part-time work. Only 5 percent of teenage boys are unemployed, out of
school and looking for full-time work.

Although the unemployment rate among teenage boys was 18.3 percent in October 1976, this figure is easily misinterpreted for two reasons. First since most teenagers are in school and neither working nor looking for work, the labor force size on which this unemployment rate is calculated is only a fraction of the teenage population. The unemployed therefore represent a much smaller percentage of the teenage population than they do of the teenage labor force. Second, more than half of the unemployed teenagers are actually enrolled in school and generally interested only in some form of part-time work.

It is reasonable to classify prime age men into the "employed" and "not employed" and to regard the situation of the first group as satisfactory from a social and economic standpoint and that of the second group as unsatisfactory. This is clearly inappropriate for teenagers. The "satisfactory" group for teenagers includes those in school as well as those at work and therefore more than 90 percent of this age group, almost the same as the "satisfactory status" rate for prime age males. Less than 5 percent of teenage boys are unemployed, out of school and looking for full-time work. The problem of unemployment affects only a very small fraction of teenagers.

The detailed statistics on which these statements are based are presented in Table 1. Nearly 70 percent of male teenagers were enrolled in school in October 1976. Among the teenage boys who are officially classifed as unemployed, more than half (52.7 percent) are enrolled in school. There are

Table 1

Activities of Male Teenagers, October 1976

		16–17	1	18-19		16–19
In School	Population	% of Population	Population	% of Population	Population	% of Population
Employed	1,307,233	31.1	731,300	18.5	2,038,533	25.0
Unemployed	317,419	7.5	126,620	3.2	444,039	5.4
Full Time	22,000	0.5	28,399	L •0	50,399	9.0
Part Time	295,419	7.0	98,221	2.5	393,640	8° †
Not-In-Labor- Force	2,174,278	51.8	1,048,669	26.5	3,222,947	39.5
Total Population	3,798,930	₦•06	1,906,589	48.3	5,705,519	6.69
Not in School						
Employed	209,259	5.0	1,506,038	38.1	1,715,297	21.0
Unemployed	82,454	2.0	316,251	8.0	398,705	6•4
Full Time	74,949	1.8	304,355	7 • T	379,304	7.4
Part Time	7,505	0.2	11,896	0•3	19,401	0.2
Not-In-Labor- Force	105,996	2.5	226,980	5.7	332,976	t, •1
Total Population	397,709	9.6	2,049,269	51.7	2,446,978	30.1
Total Civilian Population	4,196,639	100.0	3,955,858	100.0	8,152,497	100.0

Source: Tabulations of the October 1976 Current Population Survey.

only 79,000 boys who are out of school and seeking full time work. Of course, the fact that half the teenage unemployed are in school does not mean that the unemployment rate among out-of-school teenage boys is half of the unemployment rate for all teenage boys. The two rates are in fact quite similar: 18.3 percent overall and 18.9 percent among out-of-school boys.

It is also clear that the experience of 16 and 17 year olds is very different from that of 18 and 19 year olds. While 90 percent of the younger boys are in school, only 48 percent of the older boys are. Among the 16 and 17 year olds who are classified as unemployed, nearly 80 percent are in school and less than 25 percent are seeking full-time work. In contrast, among the 18 and 19 year olds who are classified as unemployed, only 29 percent are in school and more than 75 percent are seeking full-time work. Only 1.8 percent of the 16 and 17 years olds are out of school, unemployed and seeking full time work. We are reminded that the official unemployment rate once included the experience of 14 and 15 year olds but that the age limit was raised to reflect the growing school enrollment of this group. It may again be time to raise the age threshold for official labor force participation. Excluding 16 and 17 year olds, with their official unemployment rate of more than 20 percent, would reduce the overall unemployment rate for men of all ages from 7.2 percent to 6.9 percent.

These comments should not be taken as minimizing the importance of unemployment for some young people. The figures do show however that only a very small fraction of teenagers are unemployed and that only 46 percent of

Recall that we classify as "in school" anyone who is enrolled, whether or not school is his major activity. If we use the "major activity" basis of classification instead, the number of out-of-school boys who are seeking full-time work is essentially unchanged at 394,000. The total unemployed and out-of-school group (seeking part-time or full-time work) is 399,000 based on "enrollment" and 416,000 based on "major activity."

the unemployed are both not in school and looking for full-time employment. Less than 5 percent of teenage boys are out of school, without work, and seeking full-time employment.

2. Most spells of teenage unemployment are quite short and most teenage jobseekers have relatively little trouble in finding work. The bulk of unemployment is experienced by a relatively small group of teenagers with long spells of unemployment.

Short spells are characteristic of most out-of-school male teenagers who become unemployed. In October 1976, 45.5 percent of the unemployed in this group had been unemployed for four weeks or less. The survey also found that 16.2 percent of the unemployed in this group had been unemployed for between 5 and 8 weeks. Only 10.7 percent of all the unemployed in the survey had been unemployed for as long as 26 weeks. Because those who find work relatively quickly are less likely to be counted in the distribution of unemployed, these figures actually overstate the fraction of longer spells. In fact, considerably more than one-half of all the teenage boys who become unemployed are no longer so within just one month.

The experience of young people during the summer also implies that finding employment is not difficult for most young people. Although detailed data is not available by sex and the level of school attainment, the published figures permit us to trace the overall experience of teenagers of both sexes on a month by month basis.² In March 1976, 3.8 million 16 to 19 year olds were in the full-time labor force. This rose to 7.0 million in June, 8.3

¹Clark and Summers report that 70 percent of spells end in one month; some of these spells end with the teenagers leaving the labor force. See Kim Clark and Lawrence Summers, "The Dynamics of Youth Unemployment," NBER Working Paper, No. 274, 1979.

²These figures come from the <u>1977 Handbook of Labor Statistics</u> (U.S. Department of Labor 1978).

million in July and 7.5 million in August before dropping back to approximately 4 million for the rest of the year. Of the 4.5 million extra entrants to the full-time labor force between March and July, 4.0 million or 89 percent were working in July. Although the number of unemployed rose between the spring and summer, the unemployment rate actually fell sharply from 22.6 percent in March to 16.3 percent in July and 15.3 percent in August. It is clear that this comparatively able group of teenage boys and girls had relatively little difficulty finding work.

The labor market's ability to increase teenage employment by more than 100 percent between May and July is certainly remarkable. Employers clearly anticipate a seasonal increase in the supply of teenagers and organize production to take advantage of their availability. We are struck by the contrast between this experience and the claim that much of the current high teenage unemployment rate is due to the demographic shift that increased teenagers from 7 percent of the labor force in 1958 to 10 percent today. If production can adjust so rapidly to the seasonal shift in the demographic composition of the labor force, it would be surprising if it could not adjust to the much slower change in demography over the past two decades. This leads us to believe that too much weight has generally been given to the demographic explanation of the rising teenage unemployment rate.

While most teenagers have little problem with unemployment, teenage unemployment is concentrated in a group that experiences long periods of unemployment. Table 2 presents information on the distribution of unemployment in 1975 based on the responses of the out-of-school group in the March 1976 Current Population Survey. Table 2 reveals that in 1975 nearly

The March survey is used for these calculations because information on unemployment in the previous year is not collected in October.

Table 2

Distribution of Population and Total Unemployment by Weeks Unemployed in the Previous Year

Weeks Unemployed Last Year	Percent of Population	Percent of Those with Some Umemployment	Pecent of All Unemployment in the Year
None	63.7	0.0	0.0
1-4	8.5	23.5	3.8
5-8	4.9	13.5	5.0
9-13	5•2	14.4	9•3
14-26	9•3	25.7	31.3
26+	8.3	22.9	50.7

Source: Tabulations of the March 1976 Current Population Survey. All figures refer to male teenagers whose major activity in March 1976 was not classified as attending school.

two-thirds of these teenagers experienced no unemployment at all. Another 13 percent were unemployed for a total of less than two months. Only one teenager in twelve was out of work for a total of more than 26 weeks during the year, but this high unemployment group accounted for 52 percent of all the weeks of unemployment among these teenagers. Thus about half of all unemployment among male out-of-school teenagers in a year is concentrated in a group of roughly 250,000 boys.

3. Many of the teenagers who are out-of-school and out-of-work are not officially classified as "unemployed." Most of this "out of the labor force" group show relatively little interest in finding work. For many of them, there is relatively little pressure or incentive to find work.

More than 45 percent of the out-of-school but not employed teenage boys are officially classified as out-of-the-labor-force rather than unemployed. This means they reported having no work-seeking activity during the previous four weeks, including such things as asking friends or looking in the newspaper. The evidence that we present later in this section indicates that only a relatively small proportion of these young men would really like to work.

Kim Clark and Larry Summers² have shown that a substantial fraction of all measured spells of unemployment end with the individual leaving the labor force. They argue that the distinction between youngsters who are out of work and seeking a job and those who are out of work but not seeking employment is

An individual is classified as out of the labor force if he is neither employed nor seeking work. The figures in Table 1 indicate that there were 333,000 teenage boys who were not in the labor force in October 1976. By comparison there were 399,000 unemployed boys. The out-of-the-labor-force group thus accounted for more than 45 percent of those who were out of school but not working.

²Kim Clark and Lawrence Summers, "The Dynamics of Youth Unemployement," NBER Working Paper No. 274, 1979.

questionable and suggest further that most persons without work might be regarded as unemployed. According to this interpretation current unemployment figures understate the magnitude of the problem. While we agree that the distinction between the unemployed and those out of the labor force may be poorly captured in the data, our evidence suggests that the vast majority of those out of the labor force cannot reasonably be classified as "unemployed" with its implication of active interest in finding work. Indeed it is quite possible that current unemployment figures overstate the problem since many unemployed move frequently to the out of the labor force status where few report a desire for work.

Our interpretation of this evidence reflects our conclusion that the young men who are out of the labor force are <u>not</u> "discouraged workers" who have stopped looking because they believe no work is available. We have reached this conclusion after analyzing the data about the out of the labor force group that was collected in the March 1976 survey. These data are of two types: (1) questions about the individual's interest in working and beliefs about job availability and (2) evidence on the financial incentives and pressures to seek work.

When the out-of-school teenagers who had not done anything to look for work during the past four weeks were asked, "Do you want a job now?", only 37 percent answered yes.² Forty-six percent said no and 17 percent said they did

These questions are asked only of a random subsample of the out-of-the-labor-force group. Some of this information is available for March and not for October.

²The question in the CPS may be answered by one adult in the household for all persons in the household. The questions about a teenager are typically answered by his mother although the group that is out-of-school and out-of-work may be more likely than usual to be present at the interview.

not know.1

Among the out-of-the-labor-force group, only 3.5 percent said they wanted a job but believed there was no work, and 2.8 percent said that the prospective employers thought they were too young. Thus no more than 21 percent of those in the out of the labor force group desire employment but believe that search would not result in finding a job. In 63 percent of the cases, the individual just did not want a job. An additional 7.1 percent said they did not look because they were attending school even though school was not given as their major activity.

We believe that much of the high unemployment and nonemployment rates among the out-of-school young men reflect the lack of pressure or incentive to find work. Although unemployment insurance is relatively unimportant for this age group,² the family acts as an alternative source of income when young people are not working.³ More than 87 percent of the unemployed in this group live with parents (80.5 percent) or other relatives (7.0 percent). Only 7.5 percent live alone or with a family of their own. Among the group that is not in the labor force, 97 percent live with parents (89.6 percent) or other relati-

Although the sample of individuals who were asked this question was so small that these percentages cannot be regarded as precise estimates of the true percentages for all teenagers who were out of the labor force, there are enough observations to assert that there is less than one chance in 10 of observing an estimated "yes" response rate as low as 37 percent if the "true" fraction of potential "yes" responses is even 50 percent or higher. (Evidence for October 1976 further supports this conclusion since an even lower fraction of the out-of-the-labor-force group expressed interest in working.)

²Data on the receipt of unemployment benefits were collected in a special May 1976 survey. Only 10 percent of unemployed male teenagers not in school received unemployment benefits.

³It would be very interesting to have more data on the way in which a young person's unemployment affects his family's cash and in-kind gifts to him and his expected contribution to the overall family budget.

ves (7.4 percent). While the unemployed teenagers come disproportionately from lower income families, nearly two-thirds of the unemployed were in families with incomes above \$10,000 in 1976 and 22 percent were in families with incomes over \$20,000.

4. The problem of unemployment and nonemployment is concentrated in a group with little education. The unemployment and nonemployment rates in this group drop sharply as they move into their early twenties. Nevertheless, the rates remain very high among those who do not complete high school.

Since unemployment is concentrated in a group of teenagers with relatively little schooling, it is worth emphasizing that nearly 70 percent of 16 to 19 year old males are still in school. The out-of-school group whose unemployment we are studying therefore left school before two-thirds of those in their age cohort. Moreover, for our out-of school group, unemployment rates are much higher among those who did not complete high school (12 years of education). Table 3 shows that these school dropouts accounted for 57.5 percent of the unemployed and 58.0 percent of the nonemployed. They had an unemployment rate of 28.2 percent and a nonemployment rate of 42.1 percent. The rates for nonwhite dropouts were even higher.

Table 4 compares the unemployment rates of teenagers with the unemployment rates of 20 to 24 year olds at each level of education. Among those with less than 12 years of education, the unemployment rate drops from 0.282 to 0.175, a drop of 38 percent. The decreases for the two groups with more years of schooling is relatively smaller (a 20 percent decline for both groups), but the final unemployment rates are substantially lower. Among 20 to 24 year olds, those who did not complete high school have nearly twice the unemployment rate of those who did. Note that the unemployment rate for all

Table 3

Education and Unemployment

Years of Schooling

	Less than 12 Years	12 Years	More than 12 Years	All
Percentage Distribution of				
Population	41.2	53.8	5.1	100.0
Labor Force	38.4	56.9	4.7	100.0
Unemployed	57•5	40.2	2.3	100.0
Nonemployed	58.0	37.3	4.7	100.0
Unemployment Rates				
Whites	.264	•105	.069	.163
Nonwhites	.412	•396	•513	.406
All	.282	•133	•093	.189
Nonemployment Rates	<u>.</u>			
Whites	•386	.171	.216	•259
Nonwhites	.618	•501	.796	-571
All	.421	.208	.277	•299

Source: Tabulations of the October 1976 Current Population Survey. All figures relate to teenage boys who were not enrolled in school at the time of the survey.

Table 4
Unemployment Rates by Age and Education

Years of Schooling	A	ge		d Race	Race	
			Whit	tes	Nonwh	ites
	16-19	20-24	16-19	20-24	16-19	20-24
Less than 12 Years	•282	.175	•264	•151	.412	.276
12 Years	•133	.106	.105	•098	•396	.168
More than 12 Years	•093	.074	•069	.063	•513	.184
All	.189	.110	•163	•097	.406	.207

Source: Tabulations of the October 1976 Current Population Survey. All figures relate to males who were not enrolled in school at the time of the survey.

20 to 24 year olds (0.110) is actually 42 percent lower than the teenage rate, reflecting the change in the mix of the labor force to those with more education and lower unemployment rates as well as the decline in rates within each demographic group.

A similar pattern is seen for each race group. Among those with less than 12 years of education, the white unemployment rate drops by 43 percent and the nonwhite unemployment rate drops by 33 percent. For the groups with more education, the gains are relatively greater for nonwhites but the sample is too small to regard these differences as statistically significant.

Table 5 presents comparable figures for nonemployment. It will again be seen that the rates for the lowest education group improve substantially with time but still remain quite high. Once again, the total rate declines by more than the decline at each education level because the out-of-school population changes to include a higher fraction of young men with more education.

Although these two tables show that there is a substantial improvement in the condition of the low education teenagers as they age, the figures should also serve as a warning that the problem of high unemployment and nonemployment among the low education group does not fully correct itself as these problem teenagers get older.

5. Nonwhites have considerably higher rates of unemployment and nonemployment than whites do. However, since nonwhites are a relatively small fraction of the teenage population, they account for only a small portion of unemployment and non employment. Lowering the unemployment rate of the nonwhite group to the rate of the white group would eliminate less than 60,000 unemployed teenagers in the whole country and would only lower the unemployment rate for all out-of-school male teenagers from 19 percent to 16 percent.

Table 5

Nonemployment Rates by Age and Education

Years of Schooling	A	ge		Age and Race			
			Whi	tes	Nonwh	<u>nites</u>	
	16-19	20-24	16-19	20-24	16-19	20-24	
Less than 12 Years	.421	.264	•386	•215	.618	.436	
12 Years	•208	.147	•171	•129	•501	.286	
More than 12 Years	•277	.112	•216	.101	•796	•235	
A11	•299	.162	•259	•137	.571	•330	

Source: Tabulations of the October 1976 Current Population Survey. All figures relate to males who were not enrolled in school at the time of the survey.

Nonwhite teenagers suffer very high rates of unemployment and nonemployment. Forty percent were unemployed in October 1976; nearly 60 percent were without work. While these figures clearly show a serious employment problem for nonwhite teenagers, it should be remembered that since the bulk of teenagers are white, the bulk of the out-of-school teenage unemployed are also white.

Table 6 summarizes the racial composition of unemployment and nonemployment among out-of-school male teenagers. Since nonwhites constitute only 12.7 percent of the 2.45 million boys in this group, they account for only a small fraction of the overall unemployment and nonemployment despite their relatively high unemployment and nonemployment rates. In October 1976, whites represented 77 percent of the unemployed, 76 percent of the not employed and 14 percent of those not in the labor force. Even among those out of work for 23 weeks or more, whites accounted for 77 percent.

By using the March 1976 survey, it is possible to obtain additional information on the relative magnitudes of white and nonwhite unemployment. (This requires using the "major activity" criteria of classifying an individual's "school" status; this decreases the in school population and raises the share of whites in the unemployed from 77 percent to 81 percent.) The March survey figures indicate that whites accounted for 79 percent of those who experienced at least 26 weeks of unemployment in 1975 and 80 percent of the weeks of unemployment in that year. The March survey also provides evidence on unemployment in the central cities of Standard Metropolitan Statistical Areas. Because nonwhites constituted 24.3 percent of the male teenage out-of-school labor force in the central cities of Standard Metropolitan Statistical Areas (in comparison to 24.2 percent nationally), they accounted for a larger share of

Table 6
Unemployment Experience of White and Nonwhite Out-of-School Male Teenagers

	Number of Persons		Proportion of Persons		Unemployment and Nonemployment Rates	
	White	Nonwhite	White	Nonwhite	White	Nonwhite
Unemployed*	307,214	91,491	77.1	22.9	.163*	.406
Not Employed**	553,382	178,299	75.6	24.4	•259 **	•571
Not in Labor** Force	246,168	86,808	73.9	26.1	•115**	.278
Long Term Unemployed (more than 13 weeks in the current spell)	81,619	23,973	77•3	22.7	N/A	N/A

Source: Tabulations of the October 1976 Current Population Survey. All figures relate to teenage boys who were not enrolled in school at the time of the survey.

^{*} Rate as a percent of labor force.

^{**} Rate as a percent of population.

total unemployment in central cities. But even there, nonwhites represented only 36 percent of the unemployed. Whites accounted for 64 percent of the unemployment in the central cities and 84 percent outside the SMSA's. Even among families with incomes of less than \$10,000, whites accounted for 70 percent of the unemployment nationally and 50 percent in central cities. The stereotyped image of an unemployed teenager as a black central city resident corresponds to less than 15 percent of the unemployed.

The figures in Table 6 imply that reducing the nonwhite unemployment rate from 40.6 percent to the 16.2 percent that prevailed among whites would cut nonwhite unemployment from 91,491 to 36,732, a reduction of 54,759. This accounts for only 13.4 percent of the total of 408,705 unemployed male out-of-school teenagers. Reducing the nonwhite unemployment rate to the white rate would therefore only lower the total unemployment rate from 18.9 percent to 16.3.

Again, we want to stress that we are not minimizing the importance of the high rates of unemployment and nonemployment among the nonwhite teenagers. With 57 percent not employed, there is clearly a serious employment problem among nonwhite out-of-school teenagers. It is important, however, to recognize that the vast majority of employed and nonemployed teenagers are white. Reducing the unemployment rate of nonwhite teenagers to the corresponding rate for whites would eliminate less than 15 percent of all the current unemployment among teenage boys who are not in school.

6. Approximately half of the difference between the unemployment rates of white and nonwhites can be accounted for by other demographic and economic differences. Among the very low income households, the unemployment rates of

Among the 370,273 unemployed whites, 97,701 lived in central cities of SMSA's. For nonwhites, the corresponding figures are 88,964 and 55,781.

whites and nonwhites are similar. Rising family income appears to be associated with a much greater fall in the unemployment rate for whites than for nonwhites.

We have examined how unemployment rates differ within each race by schooling, family income, and age. More specifically, we have divided the population into 48 non-overlapping groups based on all interactions among these three factors. Thus, one group contains only those 17 year olds with exactly 12 years of schooling who live in a family whose income (excluding that of the teenagers) is between \$10,000 and \$20,000. Each group is further divided into whites and nonwhites, and the unemployment rate is calculated for each subgroup. On the basis of this detailed information, we can calculate how much of the white-nonwhite difference in unemployment rates is due to differences between the rates in each of the 48 demographic groups and how much is due to differences in the demographic composition of the white and nonwhite groups. The results are summarized in the first two columns of Table 7.

The actual unemployment rate for white, male teenage boys who are out of school is 16.3 percent; the corresponding rate for nonwhites is 40.6 percent. It nonwhites had the same demographic composition as whites but retained their annual unemployment rates in each demographic group, their overall unemployment rate would fall from 40.6 percent to 27.9 percent. This is shown in Table 7 as the unemployment rate based on "white weights and nonwhite rates." These figures imply that the difference in the demographic composition of the two race group accounts for 12.7 percentage points of the 24.3 percentage point difference in the overall unemployment rates, i.e. for more than 50 percent of the difference between the races.

Although the number of observations in each of the 48 cells is small, the standard error of the mean depends essentially on the total number of observations. Similar results are obtained with the data for the March Survey.

Table 7

Demographically Adjusted Unemployment and Nonemployment Rates of Whites and Nonwhites

	Unemploy	ment Rates	Nonemploy	ment Rates
	White Weights	Nonwhite Weights	White Weights	Nonwhite Weights
White	•163	•210	•259	•325
Nonwhite	•279	•406	.469	•571

Source: Tabulations of the October 1976 Current Population Survey. All figures refer to out-of-school male teenagers.

Table 7 also shows the implications of reversing this procedure and calculating the unemployment rate that whites would have if they retained their actual unemployment rate in each demographic group but had the same demographic composition as the nonwhites. With the nonwhite demographic weights, the white unemployment rate would rise from 16.3 percent to 21.0 percent, an increase of 4.7 percentage points or only about 20 percent of the difference between the observed unemployment rates.

Similar calculations for nonemployment rates are also presented in Table 7. The first type of adjustment, i.e., using the white demographic composition, results in a decrease in the nonwhite nonemployment rate from 31.2 percentage points to 21.0 percentage points, a reduction of 33 percent. Similarly, applying nonwhite weights to white unemployment rates raises the white nonemployment rate from 25.9 percent to 32.5 percent, and accounts for only 21 percent of the race difference in nonemployment rates.

In short, a limited set of demographic factors can account for a substantial part of the racial difference in unemployment rates and a smaller part of the difference in nonemployment rates. Changing the demographic weights is more important for the nonwhite population than for whites.

We have extended our analysis of the relationship between race and unemployment by examining the unemployment rates of white and nonwhite teenagers in families at different income levels. Two interesting conclusions emerge from this analysis. First, among low income families there is relatively little difference in the unemployment rates of whites and nonwhites. More precisely, in families with incomes below \$10,000 (excluding any income of the teenager) white out-of-school boys had an unemployment rate of 0.26 while nonwhites had a

Twe use the March 1976 survey to obtain more detailed income information.

rate of 0.30. Similarly, the nonemployment rates for whites was 0.39 while that for nonwhites was 0.45.

Our second finding is that rising family income appears to be associated with a much greater fall in unemployment rates for whites than for nonwhites. Among white teenagers, the unemployment rate drops from 0.26 in families with incomes below \$10,000 to 0.14 in families with incomes of \$10,000 to \$20,000. The nonwhites show no decline at all; the unemployment rate actually rises slightly from 0.30 to 0.33. The same lack of improvement with income is seen in the nonemployment rates of nonwhites; while the white nonemployment rate drops from 0.39 to 0.22, the nonwhite rate rises from 0.45 to 0.54. Only when family incomes rise to more than \$20,000 does the experience of whites and nonwhites become similar. The unemployment rates for this income group are 0.26 and 0.18 for whites and nonwhites respectively while the corresponding nonemployment rates are 0.24 and 0.25.

The poor employment of middle income nonwhites remains a puzzle to us. Our sample is too small to pursue this by further disaggregation but we believe that much could be learned by pooling samples in order to explore whether this apparent difference between middle income whites and nonwhites was just due to chance in our sample and, if not, whether it can be explained by such things as location or education.

7. Conclusion.

It is our conclusion that unemployment is not a serious problem for the vast majority of teenage boys. School is the predominant activity of the young. For many of the out of school but not employed group, the data provide evidence of weak labor force attachment and little incentive or pressure to find work. Most youngsters who do seek work remain unemployed only a short time.

Nonwhites suffer disproportionately high unemployment rates, but whites still represent the vast majority of unemployed young people. Nearly half of the differences in white and nonwhite unemployment rates are attributable to demographic differences in age, schooling, and family income. Unemployment rates of whites and nonwhites appear to be much more similar at the high and low ends of the income distribution than in the middle. The mystery is the middle class nonwhite teenagers who suffer far more unemployment than their white counterparts.

There is a small group of relatively poorly educated young men for whom teenage unemployment is a serious problem. High school dropouts suffer over half of the teenage unemployment and these persons show only a slow improvement as they reach their twenties.

In considering these findings, it should be borne in mind that the results reported in this paper are based on samples for 1976 only. As we noted above, we have repeated the analysis by examining data from 1975 and 1977 and found quite similar results. It would nevertheless be useful to extend these calculations to other years in which economic conditions were substantially different from 1975 through 1977.

This paper is not the place to discuss the implications of our evidence for appropriate policies to deal with youth unemployment. It is appropriate however to conclude with a few words of caution. Since we have emphasized that the real problem of teenage unemployment is currently concentrated in the relatively small group that experiences long periods of unemployment, it may be tempting to believe that the problem could be solved by a program of targeted job creation. The 250,000 boys with long periods of unemployment who currently account for more than half of the year's unemployment among out-of-school

teenage boys could in principle be hired for a cost of \$3 billion even if they were paid more than twice the minimum wage. The primary danger in such an approach is that the provision of relatively attractive public sector jobs could induce a very much larger number of boys to seek such positions. This could detour many of those who have little or no problem with unemployment away from more productive jobs or from additional schooling. The challenge to public policy is thus to create opportunities for employment and on-the-job training for those who would otherwise experience long periods of nonemployment without providing adverse incentives to the vast majority of young people.¹

Isee the discussion of such policies in Martin Feldstein, "Lowering the Permanent Rate Of Unemployment," Joint Economic Committee, U.S. Congress (Government Printing Office: Washington, 1973) and Martin Feldstein, "Economics of the New Unemployment," The Public Interest, 1973.

Table A-1

Selected Sample Sizes of Males

Not Enrolled in School - October 1976

	16-	19	20-	-24
October	White	Non-White	Write	Non-White
All education levels			-1.6-	
Population Labor force	1250 1106	201 154	3460 3305	461 396
				•
Under 12 years education				
Population Labor force	507 421	97 68	654 604	166 132
× ×			30.	-3-
12 years education	60 -			
Population Labor force	680 632	96 82	1757 1696	202 176
·				
Over 12 years education		_		
Population Labor force	63 53	8 4	1049 1005	93 88

Table A-2

Table of Standard Errors for Probabilities

Estimated Probability of Rate

Sample Size	.1 or .9	.2 or .8	.3 or .7	.4 or .6	.5 or .5
10	•10	•13	•15	.16	•17
25	•06	•08	•09	•10	•10
50	•04	•06	•07	•07	•07
100	•03	•04	•05	•05	•05
250	.02	•03	•03	•03	•03
500	•01	.02	•02	•02	•02
1000	•01	.01	.01	.01	.01