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# THE TRANSITION FROM SCHOOL TO WORK: THE EXPERIENCES OF BLACKS AND WHITES 

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## ABSTRACT

Because much of the concern about youth unemployment is motivated by the large differences between the rates for blacks and whites, we have pursued our earlier work by analyzing separately for black and white youth the relationship between high school preparation and early labor force experience. We find no striking differences between the determinants of weeks worked by whites and non-whites upon graduation from high school. Although vocational training in high school bears little relationship to weeks worked upon graduation, hours worked while in high school bear a strong relationship to later employment for students and non-students, white and non-white. Academic performance as measured by standardized test scores and high school class rank is also positivelyrelated to later weeks worked by non-students, both white and non-white. Young persons find jobs in large part through friends and relatives or through direct application to employers or possibly a combination of the two. Persons who are not looking for work--and would then be classified as out of the labor force, according to standard definitions--are apparently quite distinct from persons who are looking for work. Those out of the labor force seem not to be "discouraged workers" for the most part. Controlling for other individual attributes, non-whites are much more likely than whites to be in a post-secondary school full-time (although without controlling for these attributes the reverse is true). A large proportion of young men in school are also working part-time and a significant number are working full-time. A sizeable proportion of persons in postsecondary schools would be classified as unemployed based on official definitions. Indeed the unemployment rate among these full-time students is generally more than twice the rate among young men not in school. Few high school graduates are chronically unemployed.

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THE TRANSITION FROM SCHOOL TO WORK:
THE EXPERIENCES OF BLACKS AND WHITES

## by

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In an earlier paper (Meyer and Wise [1979]), we analyzed the relationship between high school preparation and the early labor force experience of youth. We were particularly interested in the effect of vocational training in high school on wage rates and weeks worked after high school graduation and upon entry into the labor force. Our findings showed no relationship between job related training in high school and post-graduation weeks worked and wage rates. We did find, however, a strong relationship between hours worked while in high school and both weeks worked and wage rates in the first four years after graduation. High school class rank and test scores were also found to be positively related to early weeks worked and wage rates in the labor force. These findings and others led us to conclude that to prepare persons for the labor force, programs that emphasize work experience for youth may be the most likely to succeed; "the weight of our evidence is that it offers the best chance of enhancing future labor market experience." We also concluded on the basis of our findings that general academic preparation would have a greater payoff than the current forms of high school vocational training as well.

In our earlier paper, however, we did not attempt to distinguish the relative effects of different types of high school preparation on the early labor force experiences of white youth from those of black
youngsters. Because much of the concern about youth unemployment is motivated by the large differences between the rates for blacks and whites, we have been motivated to pursue our earlier work, in particular by analyzing separately for black and white youth the relationship between high school preparation and early labor force experience. Specifically, we ask whether work in high school among black youth bears a quantitative relationship to early labor force experience that is comparable to the relationship that exists among white youth. Concomitantly, we ask whether job training in high school is unrelated to the job success of black youth, as well as white youth. In addition, in contrast to our earlier work, we have estimated weeks worked equations for both students and non-students. A major motivation for treating both is that much of unemployment is accounted for by full-time students.

The analysis presented in this paper is subject to limitations and advantages similar to those of our early paper. It is based on male youth who graduated from high school. A large portion of young persons enter the labor force immediately upon graduation from high school. Many receive no further formal education. For these youth, as well as those who continue their education, high school preparation is a potentially important determinant of early labor force experience. Because the study is limited to high school graduates, its implications for high school dropouts must be indirect. Among all groups of youth, high school dropouts, and in particular black school dropouts, have the poorest labor force experiences. Nonetheless, labor force statistics suggest a high youth unemployment rate, even among high school graduates. And our results for high school graduates we think have strong implications for future generations of persons like those
who now drop out, if these future generations were to remain in school. The analysis is based on data collected by the National Center for Educational Statistics through the National Longitudinal Study of the High School Class of 1972. The Study collected a wide range of school, family background, attitude and aspiration information from approximately 23,000 high school seniors in the Spring of 1972. The 1972 survey was based on a nation-wide sample of high schools, stratified in such a way that schools in lower socioeconomic areas were somewhat oversampled. In addition to the base survey, the Study included three follow-up surveys in 1973, 1974, and 1976. The follow-up surveys were used to obtain information on postsecondary school and work choices as well as labor force experiences. 1 Unlike most other data sources, this one allows us to follow a single cohort in their transition from school to work.

We shall begin in Section I with a series of descriptive statistics that are intended to describe the nature of the transition from school to work, with a particular attempt to present data in such a way that differences that should exist between the experiences of black and white youth would be apparent. The descriptive statistics cover patterns of postsecondary school and work, labor force statistics, methods of job search, distinctions between "out of the labor force" and "unemployed," and descriptions of the extent of persistence of early labor force experience. These descriptive statistics reveal findings--some of which parallel the conclusions of our earlier paper--that may be summarized as follows:

1. Non-whites are less likely than whites to be in a post-secondary
2. For more detail, see Levinsohn et al [1978].
school full-time (although after controlling for individual attributes the reverse is true).
3. Among both whites and non-whites, most youth who go to school enter in the first year after high school and attend only in consecutive years; in and out sequences of school and work are the exception, although not rare.
4. Young persons find jobs in large part through friends and relatives or through direct application to employers or possibly a combination of the two.
5. Only a small proportion of out-of-school youth were looking for work--and thus unemployed--although the ratio was somewhat higher for nonwhites than for whites. The unemployment rates implied by this survey are much lower than the official government unemployment rates based on the Current Population Survey.
6. A large proportion of young men in school are also working part-time and a significant number are working full-time.
7. A sizeable proportion of persons in school would be classified as unemployed based on official definitions. Indeed the unemployment rate among full-time students is generally more than twice the rate among young men not in school. Few high school graduates are chronically unemployed.
8. Persons who are not looking for work--and would then be classified as out of the labor force, according to standard definition--are apparently quite distinct from persons who are looking for work. Those out of the labor force seem not to be "discouraged workers" for the most part.
9. The hourly wage rates of white and non-white high school graduates are very close. Among men out of school, non-whites work fewer weeks per
year than whites, but the difference declines continuously over the fouryear period following high school graduation.
10. There is only a weak relationship between weeks worked in the first year or two after graduation from high school and weeks worked two or three years later, but as young persons grow older there is increasing consistency between weeks worked in one year and weeks worked in the next.

The model that we have used to describe the relationship between high school preparation and weeks worked upon graduation is described in Section II. A major motivation for the procedure we have adopted is to provide estimates that represent the experience to be expected for any individual in the population even though in large part we observe wage rates and weeks worked for persons who are either not in school and have chosen to work instead or who are in school full-time. In a formal sense, we will correct for the selection bias attendant on relating weeks worked to high school preparation only for persons who elect not to be full-time students, or only for those who are full-time students. As we shall see, many students also are in the labor force, but we judged that the labor force experience of these youth should not be considered comparable to that of persons who are in the labor force full-time.

The results of our estimation procedure are presented in Section III. They may be summarized briefly.

1. We find no striking differences between the determinants of weeks worked by whites and non-whites.
2. Although vocational training in high school bears littie relationship to weeks worked upon graduation, hours worked while in high school bear a strong relationship to later employment for students and non-students,
white and non-white.
3. Academic performance as measured by standardized test scores and high school class rank is also positively related to later weeks worked by non-students, both white and non-white.

Concluding comments and discussion are presented in Section IV.

## I. Descriptive Statistics

To facilitate exposition, we have in many instances presented in the text simplified tabulations of more detailed information that is contained in several appendix tables, with the relevant appendix table cited in the text. Because for recent high school graduates both working and further schooling are common post-secondary choices, we will present data first on the schooling patterns followed by high school graduates. We will then present in turn information on how youth find jobs, their labor force status as students and as non-students, distinctions between the unemployed and those out of the labor force, hourly wage rates and annual earnings, and the relationship between weeks worked in successive years following high school graduation.

## A. School Status

The percent of white young men that attend a post-secondary school is considerably higher than the percent of non-white males who attend. The percent of youth in school part-time does not vary greatly by race. The percents of high school graduates in school in October 1972 and October 1976 are shown in Table 1.1

Although a lower percent of non-white youth than white youth are in school--about 12 percentage points until 1976 when many had completed four years of college--among youth with comparable scholastic aptitude, high school class rank, and socioeconomic background, non-white youth are considerably more likely than white youth

[^0]Table 1. Percent of Young Men in School, by Race, October 1972 and October 1976

| School Status | White |  | Non-White |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 1972 |  | 1976 | 1972 |
| In School, Full-Time | 53.6 | 22.1 | 42.3 | 17.7 |
|  | 5.1 | 1.2 | 5.3 | 1.8 |
| Two-Year | 13.8 | 1.7 | 12.6 | 2.6 |
| Four-Year | 31.7 | 18.3 | 19.7 | 12.0 |
| Other | 3.0 | 0.9 | 4.7 | 1.3 |
| In School, Part-Time | 4.6 | 7.7 | 4.4 | 7.0 |
| Not in School, | 42.4 | 70.2 | 53.3 | 75.3 |

a. Includes a small number of persons in graduate school in 1976. Source: Appendix Tables 1 and 5.
to go to a post-secondary school. The relevant numbers are not shown here but are detailed in Meyer and Wise [1979], and Venti and Wise [1980].

## B. School Attendance Patterns

Most youth who go to school enter in the first year after high school and attend only in consecutive years; in and out sequences of school and work are the exception. In Table 2 are shown the percent of persons in school full-time in each possible number and sequence of time periods. For example, the sequence 10101 indicates in school full-time in October 1972, October 1974, and October 1976, but not in school full-time in October 1973 and October 1975 ( 0.2 percent of white males followed this sequence). The sequences have been grouped by year of entry and number of interruptions.

Although there is some movement into and out of school, it is not

Table 2. Percent of Young Men in School Full-Time, October 1972-76, by Sequence and Groupa

| Sequence | White |  | Non-White |  | Group |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Percent of } \\ & \text { Total } \end{aligned}$ | Group Percent | Percent of Total | Group Percent |  |
| 00000 | 34.9 | 34.9 | 44.0 | 44.0 | Never in School |
| $\begin{aligned} & 10000 \\ & 11000 \\ & 11100 \\ & 11110 \\ & 11111 \end{aligned}$ | $\begin{array}{r} 9.2 \\ 7.0 \\ 3.9 \\ 13.2 \\ 12.4 \end{array}$ | 45.7 | $\begin{array}{r} 11.2 \\ 7.3 \\ 3.3 \\ 6.3 \\ 8.1 \end{array}$ | 36.2 | Continuous Attendance |
| $\begin{aligned} & 01000 \\ & 01100 \\ & 01110 \\ & 01111 \end{aligned}$ | $\begin{aligned} & 1.6 \\ & 0.9 \\ & 0.6 \\ & 1.0 \end{aligned}$ | 4.1 | $\begin{aligned} & 1.7 \\ & 0.8 \\ & 0.4 \\ & 1.0 \end{aligned}$ | 3.9 | Delayed Entry of One Year, Continuous Attendance |
| $\begin{aligned} & 00100 \\ & 00110 \\ & 00111 \\ & 00010 \\ & 00011 \\ & 00001 \end{aligned}$ | $\begin{aligned} & 1.4 \\ & 0.5 \\ & 0.5 \\ & 1.0 \\ & 0.7 \\ & 1.2 \end{aligned}$ | 5.3 | $\begin{aligned} & 1.9 \\ & 0.7 \\ & 0.5 \\ & 1.5 \\ & 1.0 \\ & 2.0 \end{aligned}$ | 7.6 | Delayed Entry of Two or More Years, Continuous Attendance |
| $\begin{aligned} & 10100 \\ & 10110 \\ & 10111 \\ & 11010 \\ & 11011 \\ & 11101 \end{aligned}$ | $\begin{aligned} & 1.1 \\ & 1.1 \\ & 1.2 \\ & 0.8 \\ & 1.1 \\ & 1.3 \end{aligned}$ | 6.6 | $\begin{aligned} & 1.2 \\ & 0.9 \\ & 1.3 \\ & 0.5 \\ & 0.6 \\ & 1.2 \end{aligned}$ | 5.7 | Single <br> Interruption |
| $\begin{aligned} & 00101 \\ & 01001 \\ & 01010 \\ & 01011 \\ & 01101 \\ & 10001 \\ & 10010 \\ & 10011 \\ & 10101 \\ & 11001 \end{aligned}$ | $\begin{aligned} & 0.1 \\ & 0.1 \\ & 0.1 \\ & 0.2 \\ & 0.2 \\ & 0.6 \\ & 0.7 \\ & 0.6 \\ & 0.2 \\ & 0.5 \end{aligned}$ | 2.8 | $\begin{aligned} & 0.1 \\ & 0.1 \\ & 0.1 \\ & 0.1 \\ & 0.1 \\ & 0.7 \\ & 0.6 \\ & 0.5 \\ & 0.2 \\ & 0.3 \end{aligned}$ | 2.5 | Multiple Interruptions |
| Total <br> Sample | 7659 |  | 1492 |  |  |

${ }^{\mathrm{a}}$ The percentages have been rounded to the nearest tenth. Differences between the sum of the numbers in the groups and the group totals reported to the left in each column are due to rounding. A "1" indicates in school full time.
The left digit pertains to October 1972.
the norm. Of young men who go to school at all, 70 percent of whites and 65 percent of non-whites begin in the first year after high school and attend only in consecutive years. Eighty-four percent of whites who attend at all and 78 percent of non-whites attend during the year immediately after high school. The table reveals, however, that non-traditional attendance patterns, although the exception, are not rare. For example, 14 percent of whites and 21 percent of non-whites who attend at all delay entry by one or more years, but then attend without interruption; while another 14 percent of whites and 15 percent of non-whites interrupt their schooling for one or more years. The differences between whites and nonwhites mirror those shown in Table 1, although it can be seen in Table 2 that the lower percent of non-whites than whites in school is accounted for largely by the lower percent of non-white youth that enter school right after high school graduation.

Some explanation of the delayed entry sequences is provided in Table 3. Define school track as the type of school first entered by the individual. School track will differ from the post-secondary alternative in 1972 to the extent that an individual delays school attendance. While 45 percent of young men in the vocational-technical track delay entry by one or more years, only 13 percent of the individuals in the college track delay by one or more years. Of men who eventually go to two-year colleges, 25 percent delay entry. In aggregate, of men not in school in October 1972, about 32 percent eventually attend some type of school.

To some extent the school sequence data may understate the movement in and out of school since they do not incorporate changes in academic status during the school year. Some evidence for this is provided by

Table 3. Percent of Young Men Who Delayed Entry to Post-Secondary School, by Tracka

| Track | Percent of <br> Total | Percent in <br> School in 1972 | Percent Not in <br> School in 1972 |
| :--- | :---: | :---: | :---: |
| Vocational- <br> Technical | 11.0 | 55.2 | 44.8 |
| Two-Year | 20.7 | 74.2 | 25.8 |
| Four-Year | 36.1 | 87.0 | 13.0 |
| Never in <br> School | 32.2 | 0.0 | 100.0 |

a. Total sample size is 9087.
examining the precentage of individuals with sequence patterns 11111 and 11110 (in school each of the first five and first four October periods respectively) who have not obtained an academic degree. About 71 percent of the first group and 26 percent of the second group have not obtained a "four year" college degree. Thus, a substantial number of individuals exhibit much slower academic progress than is commonly assumed. Unobserved movements in and out of school may contribute substantially to slow academic progress. (Furthermore, even measured years of school may overstate actual school attainment, defined in terms of a measure of academic progress such as accumulated credit hours.)

Furthermore, many persons who enter post-secondary schools do not obtain a degree. As of October 1972, in addition to the large number of students who had been in school for five consecutive October periods without obtaining a degree, many others had dropped out without obtaining a degree. For example, of persons who entered four-year colleges and universities in the Fall 1972, approximately 20 percent had not obtained
a B.A. degree by October 1976 and were not in school at that time.
C. How Young Persons Find Jobs

Young persons find jobs in large part through friends and relatives or through direct application to employers or possibly a combination of the two. Youths who were working in October 1973 were asked which of several possible methods they had used during 1972 and 1973 in looking for and obtaining jobs. The alternative methods presented to the respondents together with the percent that used each method and the percent of those who used the method that obtained a job by that method are shown in Table 4. The alternative methods are not mutually exclusive so a given individual could have responded in the affirmative with respect to more than one alternative.

Close to 70 percent of all of the groups said that they made direct application to employers and among those who did, 80 percent or more used it successfully to find a job. About 60 percent used friends and relatives and among those who used this method, 80 percent or so did so successfully. Other methods were used much less often and in general with less success.

Public and private employment agencies and school employment serviced were used about twice as frequently by non-white men as by white men.

Unions are a conduit to employment for only a small percent of either; but among those who register with a union, white young men are considerably more likely than non-white youth to obtain a job through a union.

Table 4. Methods of Looking for Jobs and the Percent of Those Employed in October 1973 Who Had Used Each ${ }^{\text {a }}$

| Method | White |  | Non-White |  |
| :--- | ---: | :---: | :---: | :---: |
|  | Used | Successful | Used Successful |  |
| Direct Application to Employer | 69 | 86 | 66 | 79 |
| Friends or Relatives | 62 | 87 | 58 | 79 |
| Newspapers | 32 | 41 | 36 | 36 |
| Public Employment Service | 18 | 33 | 32 | 38 |
| Private Employment Agency | 7 | 29 | 14 | 29 |
| High School Employment Service | 7 | 43 | 19 | 47 |
| Other School Employment Service | 10 | 60 | 14 | 50 |
| Registered with Union | 8 | 63 | 10 | 40 |
| Civil Service | 7 | 29 | 13 | 31 |
| Professional Periodicals and | 4 | 25 | 8 | 25 |
| Organizations |  |  | 17 | 10 |
| Community Action or Welfare | 6 | 8 | 30 |  |
| Other | 6 | 8 | 63 |  |

a. The entry under "Used" gives the percent of youth who used that method and the entry under "Successful" gives the percent of those who used the method who found a job by the method.
D. Labor Force Status of Persons Not in School

Only a small proportion of young men not in school were looking for work. The unemployment ratios implied by this survey are much lower than the official government unemployment rates based on Current

Population Survey data. 1
While the percent of youth not in school rose very substantially between October 1972 and October 1976, the percent of out-of-school youth who were working full-time increased significantly, and the percent of out-of-school youth who were working part-time or who were out of the labor force fell dramatically (Table 5.) The percent of non-white men looking for work declined substantially, while the percent of white men looking for work increased slightly.

The percents of both white and non-white men working part-time fell by 1976 to less than half their 1972 levels, as did the percents out of the labor force. Although the percents of non-white youth in these categories were in general a bit higher than the percents of white youth, the differences were not large, especially by $1976 .^{2}$ In October 1972, the percent of non-white youth looking for work was about twice as high as the percent of white youth in this category, but by 1976 the percents of the two groups were quite close--5.7 percent for whites and 6.9 percent for non-whites.

These numbers suggest a rather consistent progression from school to work, but on average non-white youth get full-time jobs less quickly than white youth. After four years, however, the differences between white and non-white youth by these measures are not for the most part striking. By October 1976, a little over four years after high school

1. More discussion of this latter point is contained in Meyer and Wise [1979]. A detailed examination of differences between the CPS and the National Longitudinal Survey (Parnes) is contained in Freeman [1979].
2. From Appendix Tables 1 through 5, it can be seen that this was true for the last 2 or 3 October periods for which data are available.

Table 5. Percent Distribution of Young Men Not in School by Labor Force Status and by Race, October 1972 and October 1976

| Status | White |  | Non-White |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1972 | 1976 | 1972 | 1976 |
| Total | 42.4 | 70.2 | 53.3 | 75.3 |
|  | 71.9 | 80.1 | 60.1 | 71.9 |
| Working Part-Time | 9.2 | 4.1 | 11.4 | 5.1 |
| Military | 7.7 | 7.4 | 8.8 | 12.1 |
| Out of Labor Force | 6.6 | 2.7 | 9.0 | 4.1 |
| Looking for Work | 4.6 | 5.7 | 10.7 | 6.9 |

Source: Appendix Tables 1 and 5. More detail can be found in Appendix Tables 1 through 5.
graduation, only 5.7 and 6.9 percent respectively of white and non-white young men who were not in school were looking for work. As we concluded in our earlier paper, youth unemployment does not appear from these data to be a severe problem for this group of high school graduates, neither whites nor non-whites.

## E. Labor Force Status of Men in School

A large proportion of persons who are in school are also working part-time and a significant number are working full-time. As shown in Table 6, over 25 percent of youth in four-year schools work part-time, as of October 1972, while in 1976 almost half of white youth in four-year schools and a third of non-white youth were working part-time. The percent of youth in two-year and in vocational and technical schools who worked in 1972 was generally higher than the percent in four-year schools, ranging as

Table 6. Labor Force Status of Persons in School, Full-Time, by School Type and Race, October 1972 and October 1975, in Percent

| School Type and Labor Force Status | White |  | Non-White |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1972 | 1976 | 1972 | 1976 |
| Vocational-Technical: |  |  |  |  |
| Working Full-Time | 24.0 | 36.0 | 26.8 | 43.3 |
| Working Part-Time | 31.8 | 19.0 | 29.9 | 6.7 |
| Military | 4.2 | 12.0 | 4.1 | 13.3 |
| Out of Labor Force | 32.3 | 22.0 | 26.8 | 16.7 |
| Looking for Work | 7.8 | 11.0 | 12.4 | 20.0 |
| Two-Year: |  |  |  |  |
| Working Full-Time | 14.2 | 20.7 | 17.0 | 30.2 |
| Working Part-Time | 45.2 | 29.6 | 34.4 | 23.3 |
| Military | 0.3 | 2.2 | 0.9 | 0.0 |
| Out of Labor Force | 33.0 | 35.6 | 32.6 | 27.9 |
| Looking for Work | 7.3 | 11.9 | 15.2 | 18.6 |
| Four-Year: |  |  |  |  |
| Working Full-Time | 5.1 | 8.5 | 5.9 | 14.9 |
| Working Part-Time | 26.5 | 44.8 | 26.5 | 33.7 |
| Military | 0.2 | 0.3 | 0.3 | 1.1 |
| Out of Labor Force | 53.8 | 40.8 | 56.2 | 40.6 |
| Looking for Work | 4.4 | 5.6 | 11.2 | 9.7 |

high as 45 percent for white men in two year schools. By 1976, however, among white men the percent working part-time was larger for those in fouryear schools than for those in two-year and vocational schools. Many men who are full-time students in two-year and in vocational and technical schools also have full-time jobs--for example, 24 percent of white men and 27 percent of non-white men in voc-tech schools in 1972 and even larger
percents in 1976. Thus for many youths, and in particular those in voctech schools and to a lesser extent those in two-year colleges, school and work are joint activities.

Many students are also looking for work, with the percent of nonwhites that is looking considerably higher in most instances than the percent of whites that are looking for work. This is in contrast to the quite similar percents of white and non-white youth not in school who were looking for work. Also, the percent of two-year college students and voc-tech students that is looking for work is in general substantially higher than the percent of four-year college students. In neither 1972 nor 1976 were more than a third of vocational-technical and two-year college students out of the labor force. Among four-year college students, approximately 60 percent were out of the labor force in 1972 , but of those in school in 1976 only 40 percent were out of the labor force. That many students who had been in school for four or five years had not obtained a degree is likely to be associated with working while in school.

These labor force participation statistics are consistent with the supposition that two-year college and voc-tech programs are more commensurate with work that persons in these programs obtain than four-year college programs are with work that persons in these programs want to or are able to obtain.

## F. Labor Force Statistics for Men Not in School and for Full-Time Students

A sizeable proportion of persons in school would be classified as unemployed based on official definitions. Indeed the unemployment rate among full-time students is generally more than twice the rate among

Table 7. Labor Force Statistics, by School Statús and Race, October 1972 and October 1976, in Percent

| School and Labor Force Status | White |  | Non-White |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1972 | 1976 | 1972 | 1976 |
| Not in School: |  |  |  |  |
| Employed | 88.0 | 90.0 | 78.4 | 87.5 |
| In the Labor Force | 92.9 | 97.2 | 90.2 | 95.3 |
| Unemployed | 5.3 | 6.5 | 13.0 | 8.1 |
| Vocational-Technical |  |  |  |  |
| Employed | 58.2 | 62.5 | 59.1 | 57.7 |
| In the Labor Force | 66.3 | 75.0 | 72.0 | 80.8 |
| Unemployed | 12.3 | 16.7 | 17.9 | 28.6 |
| Two-Year |  |  |  |  |
| Employed | 59.6 | 51.5 | 51.8 | 53.5 |
| In the Labor Force | 66.9 | 63.6 | 67.1 | 72.1 |
| Unemployed | 10.9 | 19.0 | 22.8 | 25.8 |
| Four-Year |  |  |  |  |
| Employed | 31.6 | 53.4 | 32.5 | 49.1 |
| In the Labor Force | 36.1 | 59.1 | 43.7 | 59.0 |
| Unemployed | 12.2 | 9.5 | 25.7 | 16.7 |

young men not in school. Unemployment rates by school status, together with labor force participation rates and the percent of the population employed, are shown in Table 7.

While in 1972 for example, only 5.3 percent of out-of-school white youth were unemployed, $12.3,10.9$, and 12.2 percent respectively of men in vocational-technical, two-year, and four-year schools were unemployed. In 1976, only 8.1 percent of non-white out-of-school young men were unemployed, whereas 28.6 percent of those in vocational-technical schools
were unemployed, 25.8 percent of two-year students, and 16.7 percent of four-year college students.

At least two-thirds of persons in vocational-technical and two-year schools are also in the labor force. From 36 to 60 percent of four-year students are in the labor force.

According to this survey, 7.7 percent of all white male youth were unemployed in October 1972, while only 1.9 percent were both not in school and looking for work. Only 39.1 percent of those looking for work in 1972 were not in school. Among all non-white youth 16.2 percent were unemployed in 1972, while only 5.7 percent were both not in school and looking for work; and only 49 percent of those looking for work were not in school. Apparently many youth search for work while in school--either for current employment or for employment upon leaving school. It is also likely that some youth are in school because they were unable to find desired employment while not in school; they may have been unemployed when they entered school. By 1976, although the unemployment rate among persons in school was considerably higher than among those in school in 1972, because fewer youth were in school about 65 percent of unemployment was accounted for by persons out of school.

Are there chronically unemployed or out of work youth among these high school graduates? According to the figures in Table 8, not many. This table gives the percent of young men without work and the percent unemployed for each possible number of the five October periods for which data were available. Although consistent with the data above, nonwhite youth are without work more than white youth, there are few chronically unemployed among either group. For example, 80 percent of non-white and 89 percent of white youth were out of school and unemployed in none of

Table 8. Percent of Youth Out of School and Not Working, and Out of School and Unemployed, by Number of October Periods and Race

| Status and Number of Periods | Percent |  |
| :---: | :---: | :---: |
|  | White | Non-White |
| Not Working and Not in School: |  |  |
| None of 5 Periods | 82.7 | 72.2 |
| 1 of 5 Periods | 13.2 | 18.6 |
| 2 of 5 Periods | 3.1 | 6.3 |
| 3 of 5 Periods | 0.8 | 2.0 |
| 4 of 5 Periods | 0.1 | 0.5 |
| 5 of 5 Periods | 0.1 | 0.1 |
| Unemployed and Not in School: |  |  |
| None of 5 Periods | 88.8 | 79.8 |
| 1 of 5 Periods | 9.4 | 15.5 |
| 2 of 5 Periods | 1.4 | 3.9 |
| 3 of 5 Periods | 0.1 | 0.5 |
| 4 of 5 Periods | 0.0 | 0.4 |
| 5 of 5 Periods | 0.0 | 0.0 |

the five October periods, while 16 and 9 percent respectively were so classified in only one of the five periods. Somewhat more youth in both groups were not in school and not working, but very few were often in this position.

## G. Unemployed Versus Out of the Labor Force

In considering the possibility that some persons could be chronically without work, even though the average unemployment rate is rather low, we considered both the unemployed and those unemployed together with those out of the labor force. The latter classification suggests by implication that in their desire for work the unemployed may not be unlike those out of the labor force. But evidence from this survey tends not to favor this possibility. Persons who are not looking for work--and would thus be classified as out of the labor force, according to standard definitions-are apparently quite distinct from persons who are looking for work. Those out of the labor force seem not to be "discouraged workers" for the most part.

It is sometimes argued that to measure the extent of youth unemployment in particular, the distinction between unemployment and being out of the labor force is not a meaningful one. Indeed, it is sometimes suggested that all youth who are not employed should be thought of as unemployed, largely because it is argued that they would like to work but are so discouraged about the prospects for finding work that they do not look for jobs.

In several October periods young persons in the survey who were not employed were asked why they were not working. The form of the question allowed the respondents to indicate which of several possible reasons for not working applied to them. Although there were many possibilities and although respondents could answer affirmatively to several possibilities, thus complicating interpretation of the responses, the answers to at least three of the questions seemed clearly to distinguish those out of the labor force from those unemployed.

Presented to the respondents as one of the alternative reasons for not being employed was that there were "not enough jobs." The percent of the unemployed and the percent of those out of the labor force who indicated that this reason applied to them are shown in Table 8A for two October periods, by school status. It seems clear from the table that persons who are not looking for work do not say that a shortage of jobs is a reason for not working nearly as often as persons who are looking for work. The results seem to us to be inconsistent with the possibility that a large proportion of youth who are out of the labor force are discouraged workers; on the contrary, these responses suggest that at most only a small proportion could possibly be considered as though they wanted to work but had given up searching.

Table 8A. Percent of Young Men Who Said They Were Not Working Because There Nere "Not Enough Job Openings Available," by Labor Force Status and School Status, October 1972 and 1976

| School and Labor Force <br> Status | October <br> 1972 | October <br> 1976 |
| :--- | :---: | :---: |
| Not in School |  |  |
| Out of the Labor Force | 14 | 28 |
| $\quad$ Unemployed | 69 | 80 |
| In School Full-Time | 8 | 11 |
| $\quad$ Out of the Labor Force | 56 | 70 |
| $\quad$ Unemployed | 9 | 15 |
| In School Part-Time | 81 | 76 |
| Out of the Labor Force |  |  |
| Unemployed |  |  |

Most persons who were out of the labor force also did not give as a reason that they had "no career opportunities." The percents that said that this reason applied to them are shown in Table 8B. Again, only a small proportion of persons out of the labor force gave this as a reason for not working, although the proportions for each group except one were higher in 1976 than in 1972. In general, the percent of the unemployed who gave this as a reason was two to three times as high as the percent of those who were out of the labor force.

Table 8B. Percent of Young Men Who Said They Were Not Working Because "Jobs Available Offered Little Opportunity for Career Development," by Labor Force Status and School Status, October 1972 and 1976

| School and Labor Force <br> Status | October <br> 1972 | October <br> 1976 |
| :--- | :---: | :---: |
| Not in School |  |  |
| Out of the Labor Force | 10 | 22 |
| Unemployed | 27 | 38 |
| In School Full-Time |  |  |
| Out of the Labor Force | 5 | 11 |
| Unemployed | 17 | 26 |
| In School Part-Time | 7 | 21 |
| Out of the Labor Force | 19 | 41 |
| Unemployed |  |  |

Finally, in Table 8C are shown the percents of those not working who gave as a reason that they did not have the required experience. This reason also applied to a small percent of those out of the labor force, but to a much larger proportion of the unemployed. In short,

Table 8C. Percent of Young Men Who Said They Were Not. Working Because "They Required Work Experience I Did Not Have," by Labor Force Status and School Status, October 1972 and 1976

| School and Labor Force <br> Status | October <br> 1972 | October <br> 1976 |
| :--- | :---: | :---: |
| Not in School |  |  |
| Out of the Labor Force | 11 | 18 |
| Unemployed | 38 | 45 |
| In School Full-Time |  |  |
| Out of the Labor Force | 17 | 5 |
| $\quad$ Unemployed |  | 27 |
| In School Part-Time | 10 | 13 |
| Out of the Labor Force | 47 | 44 |
| Unemployed |  |  |

these responses suggest that unemployed youth are quite distinct from those out of the labor force and that this latter group is not composed in substantial part of discouraged job seekers.

## H. Wage Rates, Weekly Earnings and Hours, Annual Employment and Unemployment, and Number of Employers

The hourly wage rates of white and non-white high school graduates are very close. If anything, non-whites tend to earn a bit more per hour than whites. This is true in particular for young men who are in school. But because non-white males who are out of school work somewhat fewer hours per week on average than white males, their weekly earnings are somewhat less than weekly earnings of out-of-school white young men. Average hourly wage rates, weekly earnings, and weekly hours worked for persons not in school and for those in school are shown in Table 9. They cover all persons in the sample who were working in the

Table 9. Average Hourly Wage Rates, Weekly Earnings, and Weekly Hours Worked for Persons Working in October, by School Status and Race, 1972 and 1976

| Item and Race | Out of School |  | In School |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1972 |  | 1976 | 1972 |  | 1976 |
| Hourly Wage Rate (\$'s) |  |  |  |  |  |  |
| White | 2.72 | 4.63 | 2.34 | 4.04 |  |  |
| Non-White | 2.71 | 4.37 | 2.52 | 4.02 |  |  |
| Weekly Earnings (\$'s) |  |  |  |  |  |  |
| White | 111.08 | 197.41 | 61.03 | 127.21 |  |  |
| Non-White | 102.78 | 176.50 | 69.04 | 140.47 |  |  |
| Weekly Hours Worked |  |  |  |  |  |  |
| White | 41.65 | 43.22 | 26.18 | 30.64 |  |  |
| Non-White | 39.57 | 41.22 | 28.23 | 33.49 |  |  |

first full week of October of the year indicated. Persons working fulltime or part-time are included.

Wage rates for white and non-white young men out of school are virtually identical right after graduation. After four years, whites earn about 6 percent more per hour than non-whites, presumably due in part at least to the different schooling patterns of the two groups and to post-high school work experience. Non-whites also work about 2 hours per week less than whites in each of the time periods and thus have lower weekly earnings--about 8 percent in the first year and 11 percent after four years. On the other hand, non-white men who are in school work 1.5 to 3 hours per week more than whites, earn somewhat more per hour in all but the 1976 period, and have higher weekly earnings in each of the periods--between 5 and 19 percent depending on the period.

Average annual weeks worked, weeks looking, weeks out of the labor force, and number of employers, by school status, are shown in Table 10.

Table 10. Average Annual Weeks Worked, Weeks Looking for Work, Weeks Out of the Labor Force, and Number of Employers, by School Status and Race, 1972 and 1976

| Item and Race | Out of School |  | In School |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1972-73 | 1975-76 | 1972-73 | 1975-76 |
| Weeks Worked White Non-White | $\begin{aligned} & 41.84 \\ & 36.44 \end{aligned}$ | $\begin{aligned} & 45.22 \\ & 42.77 \end{aligned}$ | $\begin{aligned} & 29.68 \\ & 26.42 \end{aligned}$ | $\begin{aligned} & 34.01 \\ & 33.72 \end{aligned}$ |
| Weeks Looking for Work White Non-White | $\begin{aligned} & 3.03 \\ & 5.11 \end{aligned}$ | $\begin{aligned} & 3.21 \\ & 3.64 \end{aligned}$ | $\begin{aligned} & 2.09 \\ & 4.27 \end{aligned}$ | $\begin{aligned} & 2.94 \\ & 3.98 \end{aligned}$ |
| Weeks Out of the Labor Force <br> White <br> Non-White | $\begin{array}{r} 7.13 \\ 10.45 \end{array}$ | $\begin{aligned} & 3.57 \\ & 5.58 \end{aligned}$ | $\begin{aligned} & 20.23 \\ & 21.31 \end{aligned}$ | $\begin{aligned} & 15.05 \\ & 14.29 \end{aligned}$ |
| Number of Employers <br> White <br> Non-White | $\begin{aligned} & 1.87 \\ & 1.70 \end{aligned}$ | $\begin{aligned} & 1.39 \\ & 1.38 \end{aligned}$ | $\begin{aligned} & 1.78 \\ & 1.60 \end{aligned}$ | $\begin{aligned} & 1.55 \\ & 1.46 \end{aligned}$ |

Source: Appendix Tables

Among men out of school, non-whites work fewer weeks per year than whites, but the difference declines continuously over the four-year period. Non-whites work 13 percent less in the first year and 5 percent in the fourth. The differences are accounted for by both weeks looking for work and weeks out of the labor force. Differences among white and non-white men who are in school are somewhat less in general, although
as among persons not in school non-whites who are in school spend more weeks than whites looking for work.

## I. Does Early Experience Persist?

There is only a weak relationship between weeks worked in the first year or two after graduation from high school and weeks worked two or three years later, but as young persons grow older there is increasing consistency between weeks worked in one year and weeks worked in the next.

To describe the observed relationship between weeks worked in the first four years after graduation from high school, we have constructed a series of transition matrices. For each year we classified weeks worked into four intervals: 0 to 20,21 to 40,41 to 51 , and 52. For each pair of years we calculated the transition probabilities of moving from an interval in the earlier year to each of the intervals in the second year. They are presented in Table IIA for white youth and in Table 11B for non-white youth with the entries shown as percents. For example, the matrix headed "1974-75" in the middle of Table 11A says that 71 percent of the young men who worked 52 weeks in 1974 also worked 52 weeks in 1975; 4 percent worked between 0 and 20 weeks. The numbers below and to the left of each matrix are marginal proportions (percents). In 1974, for example, according to Table 11A, 50 percent of young white men worked 52 weeks. All entries have been rounded to the nearest percent.

The tables can also be used to calculate for each pair or years the joint probability of each of the interval combinations. For example, the matrix headed "1973-76" in the lower left of Table 11A says that 1.3 percent of the 2235 white men who were not in school in both 1973 and 1976 worked less than 20 weeks in each of those years ( 13 percent of 10 percent).


|  | 1973-76 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 10 | 13 | 17 | 23 | 48 |
| 18 | 14 | 24 | 24 | 38 |
| 29 | 4 | 18 | 29 | 51 |
| 42 | 4 | 10 | 20 | 65 |
|  | 7 | 15 | 24 | 54 |
|  | $N=2235$ |  |  |  |



Some persistence over time is due to measured attributes of individuals that are similar from one period to the next. Therefore the persistence that is observed cannot be attributed to a causal relationship between the number of weeks worked in one year and weeks worked in subsequent years. More detailed analysis revealed little effect of early weeks worked on weeks worked three or four years later (see Meyer and Wise [1979]).

The transition matrices reveal several phenomena. We will direct our remarks first to the results for white men (Table llA) and then discuss only briefly particular aspects of the results for non-white young men. The upper bound on weeks worked is reflected in the large probabilities of remaining in the 52 -week "interval" from one period to the next, much larger than for any other interval. This is apparently because many persons who work 52 weeks are indeed constrained by this limit. Any who "would work" 52 weeks or more are observed to remain at the limit. Even persons observed to work 52 weeks in one year may still be at 52 weeks in the second even if their "propensity" to work declined between the two time periods. From the diagonal matrices it can be seen that those who remain at the limit for consecutive years increases from the 64 percent between the first and the second, to 71 percent between the second and the third, to 82 percent between the third and the fourth.

Persistence in general increases over time, as can be seen from a comparison of the diagonal elements of the three diagonal matrices. For example, only 12 percent of persons who are in the lowest interval in the

1. Comparable conclusions were reached by Ellwood [1979], based on a different data set.
first year are also in that interval in the second. But 28 percent who are in this interval in the second are also there in the third, and 49 percent who are in this interval in the third year are also there in the fourth.

Apparently individual patterns become increasingly established. This finding suggests that our ability to identify from experience immediately after high school those persons who will be without work for long periods in subsequent years is quite limited, but that after a few years, experience in one year becomes a much better predictor of subsequent experience.

While experience in the fourth year seems strongly related to that in the third, the relationship between experience in the last year and earlier years declines rapidly with increasingly distant time periods. This pattern can be seen best by looking at the last row of matrices that compares experience in each of the first three years with experience in 1976. Of persons in the four intervals in 1975; 49, 11, 4, and 2 percent respectively are in the lowest interval in 1976. Of persons in the four intervals in 1973, the corresponding percents are $13,14,4$, and 4 . Whereas the likelihood that a person who was in the lowest interval in 1975 was also there in 1976 was 25 times as high as if he worked 52 weeks in 1975; if he were in the lowest interval in 1973, the likelihood of being in the lowest interval in 1976 was only about 3 times as high as if he had worked 52 weeks in 1973.

We conclude that whatever the determinants of weeks worked, they do not for the most part persist over these four years. Recall that a small part of the relationship seen in the transition matrices is
due to measured individual attributes. They are not distinguished in the matrices from unmeasured individual attributes (individual specific terms) commonly referred to as representing heterogeneity. Both measured and unmeasured individual specific characteristics produce some persistence over time. The remainder of the relationship over time may be due to a true state dependence effect or to serial correlation induced by correlation over time of other factors that affect weeks worked. Whatever the reason, however, there seems to be very little room for a causal effect of labor force experience in the first year of experience on the last. Any effect there may be dies out rapidly.

As youngsters age, their patterns of labor force experience become increasingly stable, as we might expect to find among persons moving from full-time school to full-time work, a process that is likely to involve considerable searching, job changing, and the like before settling into more or less permanent employment. ${ }^{1}$

Transition matrices for non-white males (Table liB) reveal a pattern that is in major outline like the pattern for all young men. Detailed comparison of the two tables seems to show, however, that persistence from earlier to later years may on average be a bit greater for non-whites than for whites, although the differences between the two groups are not striking. As judged by a comparison of the diagonal elements of the 1975-76 matrices in the two tables, young non-white men have by these

1. Relationships like those described in this section hold as well for persons who were in the labor force in each of the periods, who had no post-high school training.
last two years apparently established somewhat more consistent work patterns than white youth. In particular, while 49 percent of the 7 percent of white male youth who worked less than 20 weeks in 1975 also worked less than 20 weeks in 1976, 63 percent of the 13 percent of non-white youth in this category were also in the category in 1976.

## II. Weeks Worked Módel

We will estimate jointly a non-school attendance equation together with a weeks worked equation for students and a weeks worked equation for nonstudents for two separate year-long periods--the first between October 1972 and October 1973 and the second between October 1974 and October 1975. Estimates will be obtained separately for whites and non-whites.

The school attendance and weeks worked equations are estimated jointly for two reasons. One is that it is informative in talking about the transition from school to work to have in mind the determinants of early work versus school decisions, even when concentrating on the determinants of weeks worked. In particular we are able to compare the effects of individual attributes on schooling decisions of whites with the effects for non-whites. A second reason is that to obtain consistent estimates of the relationship between individual attributes and weeks worked we must account for the relationship between unmeasured determinants of weeks worked and unmeasured determinants of school attendance--that is, of being in the sample to which the weeks worked equation pertains, whether it be for students or non-students. We have corrected for "sample selection bias," which we shall see is substantial.

We have also found a large proportion of both non-students and students working 52 weeks per year and a sizeable proportion working zero weeks as well. The proportions are shown in the tabulation below.

## Non-Students

Whites Non-Whites

## Students

Whites Non-Whites

Percent working 52 weeks:

1972-73
39.7
33.3
16.5
14.3

1974-75
54.7
48.4
25.0 24.8

Percent working 0 weeks:
1972-73
5.0
10.7
4.7
11.4
1974-75
1.6
3.9
7.8
12.1

To account for the downward bias that this limit places on parameter estimates in the weeks worked equation, we have used a "double"-Tobit specification of weeks worked. Thus the model estimates jointly a Tobit weeks worked equation together with a probit specification of non-school attendance. The precise specification can be described briefly.

Suppose that observed weeks worked for persons not in school is denoted by small $y_{i}$ and the unobserved "propensity" to work is denoted capital $Y_{i}$. Suppose also that $S_{i}$ is an unobserved latent non-schooling variable with an associated indicator variable $s_{j}$ that takes the value 1 if individual $i$ is not in school and zero otherwise. Then we have

$$
y_{i}=\left\{\begin{array}{cr}
0 & \text { if } X_{i} B+\varepsilon_{i}<0 \\
Y_{i}=X_{i} B+\varepsilon_{i} & 0 \leq \text { if } X_{i} B+\varepsilon_{i}<0, \\
52 & \text { if } X_{i} B+\varepsilon_{i}>52,
\end{array}\right.
$$

$$
\begin{aligned}
& S_{i}=Z_{i} \delta+\eta_{i}, \text { with } \\
& s_{i}=\left\{\begin{array}{l}
1 \text { if } S_{i} \geq 0, \\
0 \text { if } S_{i}<0, \text { and }
\end{array}\right. \\
& {\left[\begin{array}{l}
Y_{1 i} \\
S_{i}
\end{array}\right] \sim N\left[\binom{X_{i} \beta_{1}}{Z_{i} \delta},\left(\begin{array}{cc}
\sigma_{1}^{2} & \rho_{1} \sigma_{1} \\
& 1
\end{array}\right)\right] \text { for persons not in school, }} \\
& {\left[\begin{array}{l}
Y_{0 i} \\
S_{i}
\end{array}\right] \sim N\left[\binom{X_{i} \beta_{0}}{Z_{i} \delta},\left(\begin{array}{ll}
\sigma_{0} & \rho_{0} \sigma_{0} \\
1
\end{array}\right)\right] \text { for persons in school, }}
\end{aligned}
$$

where $X_{i}$ is a vector of exogenous variables, $\beta_{1}$ and $\beta_{0}$ and $\delta$ are parameters, and $\rho_{1}$ and $\rho_{0}$ are correlations between $Y$ and $S$ for persons not in school and in school respectively, and $\sigma_{1}$ and $\sigma_{0}$ are the associated standard errors of the unobserved weeks worked propensities $Y_{1}$ and $Y_{0}$.

There are three possibilities for persons not in school and three for persons in school. For illustration, we will detail them for persons not in school; analogous expressions pertain to those in school. For an individual $i$ in school, the possibilities are : (i) he is not working at all so that $S_{i}>0$ and $y_{1 i}=0$, (ii) he is working between 0 and 52 weeks so that $\mathrm{S}_{\mathbf{i}}>0$ and $0<\mathrm{y}_{1 \mathrm{i}}<52$, or (iii) he is working 52 weeks so that $\mathrm{S}_{\boldsymbol{i}}>0$ and $y_{1 i}=52$. The probabilities of these outcomes, given $X_{i}$ and $z_{i}$, are given respectively by:

$$
\begin{align*}
& \operatorname{Pr}\left(S_{i}>0 \text { and } y_{1 i}=0\right)  \tag{i}\\
& \quad=\operatorname{Pr}\left(S_{i}>0 \text { and } Y_{1 i}<0\right) \\
& \quad=\operatorname{Pr}\left(\eta_{i}<Z_{i \delta} \text { and } \varepsilon_{i}<-x_{i} \beta_{1}\right. \\
& \quad=\int_{-Z_{i} \delta-\infty}^{\infty} \int^{-x_{i} \beta_{1}} f\left(\eta_{i}, \varepsilon_{i}\right) d \varepsilon_{i} d \eta_{i} \\
& \quad=\Phi\left[Z_{i} \delta,-\frac{x_{i} \beta_{1 i}}{\sigma_{1}}-\rho_{1}\right]=P_{1 i}(1)
\end{align*}
$$

(ii) $\operatorname{Pr}\left(S_{i}>0\right.$ and $y_{i}$ observed, with $0<y_{i}<$

$$
=\operatorname{Pr}\left(S_{i}>0 \mid Y_{i}\right) f\left(Y_{i}\right)
$$

$$
=\left[\frac{z_{i} \delta+\frac{\rho_{1}}{\sigma_{1}}\left(y_{1 i}-x_{i} \beta_{1}\right)}{\sqrt{1-\rho_{1}^{2}}}\right] \cdot \frac{1}{\sigma_{1}} \phi\left(\frac{\left(y_{1 i}-x_{i} \beta_{1}\right.}{\sigma_{1}}\right)
$$

$$
=P_{2 i}(i)
$$

(iii)

$$
\begin{aligned}
\operatorname{Pr} & \left(S_{i}>0 \text { and } Y_{1 i}=52\right) \\
& =\operatorname{Pr}\left(S_{\mathfrak{i}}>0 \text { and } Y_{1 i}>52\right) \\
& =\operatorname{Pr}\left(\eta_{i}<Z_{i} \delta \text { and } \varepsilon_{i}<X_{i} \beta_{1}-52\right) \\
& =\int_{-\infty}^{Z_{i} \delta} \int_{-\infty} X_{i} \beta_{1}-52 \\
& =\Phi\left(\eta_{i}, \varepsilon_{i}\right) d \varepsilon_{i} d \eta_{i} \\
& =P_{3 i}(1)
\end{aligned}
$$

where $f$ is a bivariate normal density function and $\Phi$ must now be interpreted as a standardized bivariate normal distribution function with correlation parameter $\rho$. The log-likelihood function for the complete sample of observations--including those in school as well as those not in school--is given by

$$
\begin{aligned}
& L= \sum_{i} N_{1}(1) \\
& \ln P_{1 i}(1)+\sum_{i}(2) \\
& N_{i} \\
& N_{2}(1) \\
& N_{2}(1)+\sum_{i} \ln P_{3 i}(1)+ \\
& \sum_{i=1} P_{1 i}(0)+\sum_{i=1}^{N_{2}(0)} P_{2 i}(0)+\sum_{i=1}^{N_{3}(0)} P_{3 i}(0),
\end{aligned}
$$

where the six summations distinguish the groups corresponding to the three possible outcomes for persons in (1) and out (0) of school. This likelihood function is maximized to obtain estimates of $\beta_{1}, B_{0}, \delta, \sigma_{0}$, $\rho_{\rho}$, and $\rho_{0}$.

There are at least two expectations that it is useful to distinguish, together with the derivatives with respect to the variables $X$. They are given by:
(a) $E(Y \mid X)=X B$,
(b) $E(y \mid X)=\operatorname{Pr}(Y \geq 52) \cdot 52+\operatorname{Pr}(0<Y<52)$.

$$
\begin{aligned}
& \quad \cdot E(Y \mid O<Y<52)+\operatorname{Pr}(Y \leq 0) \cdot 0 \\
& =\left\{1-\Phi\left[\frac{52-X B}{\sigma}\right]\right\} \cdot 52+\left\{\Phi\left[\frac{52-X \beta}{\sigma}\right]\right. \\
& \left.\quad-\Phi\left[\frac{-X \beta}{\sigma}\right]|\cdot X B+\sigma| \phi\left(\frac{-X B}{\sigma}\right)-\phi\left(\frac{52-X B}{\sigma}\right)\right\}
\end{aligned}
$$

The relationship between the expected value of $Y$, given by $X \beta$, and the expected value of weeks worked, $E(y)$, may be seen in the figure below,

in which one right-hand variable is assumed.
The derivatives of the expected values with respect to $X_{j}$ are given by:
(a) $\partial E(Y \mid X) / \partial X_{j}=B_{j}$,
(b) $\quad \partial E(y \mid X) / \partial X_{j}=\beta_{j}\left|\Phi\left[\frac{\overline{52-X B}}{\sigma}\right\rceil \cdot-\Phi\left[\frac{-X \beta}{\sigma}\right]\right|$

Recall that our maximum likelihood procedure estimates $\beta_{j}$. The derivative of the expected value of observed weeks worked is given by $\beta_{j}$ times the probability that $Y$ is not truncated (i.e. $0<Y<52$ ). At $X \beta=26$, this derivative is at its maximum and is given by .76B. It is important te distinguish the effect of a chance in an $X$ on the expected value of $y$ from the effect of a change in $X$ on $y$. The effect on hours worked in $B$ as long as $y$ is not at or pushed to zero or 52. At these extremes, the effect on $y$ is zero. It is the mixture of the effects of size $\beta$ and 0 that produce the curved graph of $E(y \mid X)$ in Figure 1.

The variables used in the analysis are defined below. ${ }^{2}$

1. Assuming that $\sigma=22$, the maximum is always at 26 but the multiple of $\beta_{j}$ depends on $\sigma$ and thus varies in our equation reported below.
2. To facilitate comparison, the model is the same one that we used in our earlier paper to describe weeks worked with the exception that in that paper we allowed only for the weeks worked limit of 52 , while in this paper we have also incorporated explicitly the floor of zero. In the earlier paper an insignificant number of individuals worked zero weeks. Explicit allowance for the zero floor would have had little effect on the results. We also estimated wage rates in that paper, but will not do so here. We will find that the experiences of whites and non-whites are very similar with respect to weeks worked and believe the same would be found for wage rates. Thus we believe that the results in our earlier paper should serve as good estimates for both groups. In addition, because the sample of nonwhite youth with wage rates is small, we have found it difficult to obtain precise estimates for that group, although preliminary analysis reveals similar parameter estimates for whites and non-whites.

Weeks Worked: Annual weeks worked, October to October.
Test Scores Total: Sum of scores on six tests--vocabulary, reading, mathematics, picture-number, letter groups, mosaic comparisons.

Class Rank in High School: Percentile ranking relative to other persons in individual's high school.

Job Training in High School: One if the individual received in high school "any specialized training intended to prepare you for immediate employment upon leaving school? (For example, auto mechanics, secretarial skills, or nurse's aid)," zero otherwise.

Hours Worked During High School: Response to the question, "On the average over the school year, how many hours per week do you work in a paid or unpaid job? (Exclude vacation.)" The response was by interval: $0,1-10,11-20$, and 21 or more. The last three intervals are entered separately as dummy variables. The excluded category is zero hours worked.

Parents' Income: Annual income of parents, in thousands.
Education of Mother (Father) Less Than High School: One if the youth's mother (father) had a college degree or more education, and zero otherwise. The excluded category is a high school degree but less than a college degree.

Rural: One if the individual's residents is in a rural area, zero otherwise. The excluded category is suburban, town, and urban.

State Wage: Annual average wage in manufacturing.
State Unemployment: Average annual unemployment rate.
Vocational School: One if the individual attends a postsecondary
vocational school, zero otherwise.
Junior College: One if the individual attends a junior college, zero otherwise. The excluded category is college.

Missing Variable Indicators: For test scores, class rank, parents' income. Each is one if the designated variable is missing and zero otherwise. The corresponding variable takes the value zero if it is missing and the recorded value if it is not.

The means and standard deviations of the variables are given in Table 12.

Table 12. Means and Standard Deviations of Variables

| Variable | Mean |  | Standard Deviation |  |
| :---: | :---: | :---: | :---: | :---: |
|  | White | Non-White | White | Non-White |
| All Persons |  |  |  |  |
| Test | 3.081 | 2.620 | 0.423 | 0.414 |
| Class Rank | 48.660 | 41.060 | 27.810 | 26.610 |
| Parents' Income | 12.249 | 7.744 | 5.122 | 4.897 |
| Education of Mother <br> Less Than High School | 0.225 | 0.539 | a | a |
| Education of Mother College Degree or More | 0.130 | 0.050 | a | a |
| Education of Father Less than High School | 0.291 | 0.587 | a | a |
| Education of Father College Degree or More | 0.210 | 0.057 | a | a |
| Rural | 0.229 | 0.187 | a | a |
| Wage | 4.223 | 4.015 | 0.584 | 0.635 |
| Unemployment | 3.634 | 3.315 | 1.811 | 1.798 |
| Non-Students |  |  |  |  |
| Job Training | 0.265 | 0.349 | a | a |
| Hours Worked in High School |  |  |  |  |
| 0 | 0.132 | 0.310 | a | a |
| 1-10 | 0.175 | 0.207 | a | a |
| 11-20 | 0.350 | 0.238 | a | a |
| 21 and over | 0.343 | 0.245 | a | a |

Table 12. Means and Standard Deviations of Variables (continued)

| Variable | Mean |  | Standard Deviation |  |
| :--- | :---: | :---: | :---: | :---: |
|  | White | Non-White | White | Non-White |
| Students |  |  |  |  |
| Job Training |  |  |  |  |
| Hours Worked in <br> High School | 0.096 | 0.165 |  |  |
| 0 |  |  |  |  |

a. Indicates 0, 1 dummy variable.

## III. Results

The parameter estimates are presented in Table 13, which for convenience has been divided into three parts. The non-school attendance estimates are in Table 13A. The parameter estimates in the weeks worked equation are presented in Tables 13B and 13C, for non-students and students, respectively. The estimates of $\rho, \sigma$, and the likelihood values and sample sizes are shown in Tables 13B and 13C. We shall briefly discuss first the implications of the non-school attendance parameter estimates. Then we shall discuss the relationships between school attendance and weeks worked. And finally we shall consider the weeks worked parameter estimates, first for non-students and then for students. Throughout, we shall emphasize comparison of the results for whites and non-whites.
A. School Attendance of Whites and Non-Whites

Persons have been classified as not in school if in the October beginning the period they were not attending school. We shall discuss the results only for the October 1972-October 1973 period; those for the later period are similar. Because the quantitative importance of the variables is not apparent from the estimates in Tablel3B, we will present simulations based on these estimates.

First consider the probability of school attendance in either 1972 or 1973 for whites and non-whites, evaluated at mean parameter values. For whites we have evaluated the probability at the means of the right-hand variables among whites, as well as the means among non-whites. The results are presented in the tabulation below.

Table 13A. Parameter Estimates for School Non-Attendance Equation ${ }^{\text {a }}$

| Variable | Whites |  | Non-Whites |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1972-73 | 1974-75 | 1972-73 | 1974-75 |
| Test | $\begin{aligned} & -0.967 \\ & (0.097) \end{aligned}$ | $\begin{aligned} & -0.755 \\ & (0.070) \end{aligned}$ | $\begin{aligned} & -0.981 \\ & (0.139) \end{aligned}$ | $\begin{aligned} & -0.761 \\ & (0.145) \end{aligned}$ |
| Class Rank | $\begin{gathered} -0.014 \\ (0.002) \end{gathered}$ | $\begin{gathered} -0.013 \\ (0.001) \end{gathered}$ | $\begin{aligned} & -0.009 \\ & (0.002) \end{aligned}$ | $\begin{aligned} & -0.015 \\ & (0.002) \end{aligned}$ |
| Income | $\begin{aligned} & -0.031 \\ & (0.008) \end{aligned}$ | $\begin{aligned} & -0.025 \\ & (0.005) \end{aligned}$ | $\begin{gathered} 0.000 \\ (0.010) \end{gathered}$ | $\begin{gathered} 0.003 \\ (0.010) \end{gathered}$ |
| Education of Mother Less Than High School | $\begin{gathered} 0.211 \\ (0.074) \end{gathered}$ | $\begin{gathered} 0.062 \\ (0.055) \end{gathered}$ | $\begin{gathered} 0.212 \\ (0.072) \end{gathered}$ | $\begin{gathered} 0.063 \\ (0.094) \end{gathered}$ |
| Education of Mother College Degree or More | $\begin{aligned} & -0.251 \\ & (0.110) \end{aligned}$ | $\begin{aligned} & -0.124 \\ & (0.071) \end{aligned}$ | $\begin{aligned} & -0.505 \\ & (0.222) \end{aligned}$ | $\begin{aligned} & -0.384 \\ & (0.226) \end{aligned}$ |
| Education of Father Less Than High School | $\begin{gathered} 0.175 \\ (0.069) \end{gathered}$ | $\begin{gathered} 0.273 \\ (0.051) \end{gathered}$ | $\begin{gathered} 0.264 \\ (0.076) \end{gathered}$ | $\begin{gathered} 0.198 \\ (0.097) \end{gathered}$ |
| Education of Father College Degree or More | $\begin{aligned} & -0.260 \\ & (0.090) \end{aligned}$ | $\begin{aligned} & -0.403 \\ & (0.063) \end{aligned}$ | $\begin{aligned} & -0.156 \\ & (0.192) \end{aligned}$ | $\begin{aligned} & -0.430 \\ & (0.228) \end{aligned}$ |
| Rural | $\begin{gathered} 0.265 \\ (0.071) \end{gathered}$ | $\begin{gathered} 0.347 \\ (0.051) \end{gathered}$ | $\begin{gathered} 0.105 \\ (0.094) \end{gathered}$ | $\begin{gathered} 0.213 \\ (0.111) \end{gathered}$ |
| Wage | $\begin{gathered} 0.162 \\ (0.057) \end{gathered}$ | $\begin{gathered} 0.019 \\ (0.033) \end{gathered}$ | $\begin{aligned} & -0.071 \\ & (0.064) \end{aligned}$ | $\begin{aligned} & -0.142 \\ & (0.061) \end{aligned}$ |
| Unemployment | $\begin{aligned} & -0.005 \\ & (0.018) \end{aligned}$ | $\begin{gathered} 0.010 \\ (0.014) \end{gathered}$ | $\begin{aligned} & -0.049 \\ & (0.022) \end{aligned}$ | $\begin{aligned} & -0.045 \\ & (0.027) \end{aligned}$ |
| Constant | $\begin{gathered} 2.814 \\ (0.377) \end{gathered}$ | $\begin{gathered} 2.930 \\ (0.267) \end{gathered}$ | $\begin{gathered} 2.955 \\ (0.395) \end{gathered}$ | $\begin{gathered} 3.634 \\ (0.475) \end{gathered}$ |
| Total Sample Size | 2824 | 3384 | 1212 | 1074 |

a. Included in the equation but not shown were dichotomous variables for missing test score, class rank, and family income.

Table 13B. Parameter Estimates for Non-Student Weeks Worked Equation ${ }^{\text {a }}$

| Variables | Whites |  | Non-Whites |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1972-73 | 1974-75 | 1972-73 | 1974-75 |
| Hours Worked in High School |  |  |  |  |
| 1 to 10 | $\begin{gathered} 0.496 \\ (2.140) \end{gathered}$ | $\begin{gathered} 0.958 \\ (1.700) \end{gathered}$ | $\begin{gathered} 2.581 \\ (2.686) \end{gathered}$ | $\begin{gathered} 2.086 \\ (2.976) \end{gathered}$ |
| 11 to 20 | $\begin{gathered} 8.304 \\ (1.992) \end{gathered}$ | $\begin{gathered} 5.696 \\ (1.527) \end{gathered}$ | $\begin{gathered} 8.513 \\ (2.738) \end{gathered}$ | $\begin{gathered} 3.971 \\ (2.925) \end{gathered}$ |
| 21 or more | $\begin{aligned} & 13.236 \\ & (2.068) \end{aligned}$ | $\begin{gathered} 9.181 \\ (1.603) \end{gathered}$ | $\begin{aligned} & 10.586 \\ & (2.715) \end{aligned}$ | $\begin{aligned} & 10.270 \\ & (3.024) \end{aligned}$ |
| Class Rank | $\begin{gathered} 0.168 \\ (0.040) \end{gathered}$ | $\begin{gathered} 0.162 \\ (0.029) \end{gathered}$ | $\begin{gathered} 0.126 \\ (0.065) \end{gathered}$ | $\begin{gathered} 0.111 \\ (0.078) \end{gathered}$ |
| Test | $\begin{aligned} & 13.290 \\ & (2.239) \end{aligned}$ | $\begin{gathered} 9.221 \\ (1.806) \end{gathered}$ | $\begin{aligned} & 15.319 \\ & (4.421) \end{aligned}$ | $\begin{aligned} & 12.140 \\ & (4.507) \end{aligned}$ |
| Job Training | $\begin{gathered} 1.547 \\ (1.661) \end{gathered}$ | $\begin{gathered} 1.541 \\ (1.300) \end{gathered}$ | $\begin{gathered} 4.894 \\ (2.068) \end{gathered}$ | $\begin{gathered} 2.829 \\ (2.366) \end{gathered}$ |
| Income | $\begin{gathered} 0.288 \\ (0.167) \end{gathered}$ | $\begin{gathered} 0.342 \\ (0.137) \end{gathered}$ | $\begin{gathered} 0.624 \\ (0.289) \end{gathered}$ | $\begin{gathered} 0.826 \\ (0.267) \end{gathered}$ |
| Wage | $\begin{aligned} & -2.969 \\ & (1.337) \end{aligned}$ | $\begin{aligned} & -2.281 \\ & (0.847) \end{aligned}$ | $\begin{aligned} & -1.293 \\ & (1.852) \end{aligned}$ | $\begin{aligned} & -0.877 \\ & (1.695) \end{aligned}$ |
| Unemployment | $\begin{aligned} & -0.603 \\ & (0.405) \end{aligned}$ | $\begin{aligned} & -0.650 \\ & (0.344) \end{aligned}$ | $\begin{aligned} & -0.157 \\ & (0.670) \end{aligned}$ | $\begin{gathered} -1.344 \\ (0.765) \end{gathered}$ |
| Correlation | $\begin{aligned} & -0.843 \\ & (0.058) \end{aligned}$ | $\begin{aligned} & -0.780 \\ & (0.058) \end{aligned}$ | $\begin{aligned} & -0.911 \\ & (0.043) \end{aligned}$ | $\begin{aligned} & -0.490 \\ & (0.270) \end{aligned}$ |
| Standard Error | $\begin{aligned} & 21.558 \\ & (1.102) \end{aligned}$ | $\begin{aligned} & 23.801 \\ & (0.786) \end{aligned}$ | $\begin{aligned} & 29.514 \\ & (1.976) \end{aligned}$ | $\begin{aligned} & 25.361 \\ & (2.008) \end{aligned}$ |
| Number of NonStudents | 1800 | 1800 | 632 | 445 |

a. Included in the equation but not shown were dichotomous variables for missing test score, class rank, and family income.

Table 13C. Parameter Estimates for Student Weeks Worked Equation ${ }^{\text {a }}$

| Variable | Whites |  | Non-Whites |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1972-73 | 1974-75 | 1972-73 | 1974-75 |
| Hours:Worked in High School |  |  |  |  |
| 1 to 10 | $\begin{gathered} 4.360 \\ (1.452) \end{gathered}$ | $\begin{gathered} 3.860 \\ (1.690) \end{gathered}$ | $\begin{gathered} 3.666 \\ (2.743) \end{gathered}$ | $\begin{gathered} 1.993 \\ (3.373) \end{gathered}$ |
| 11 to 20 | $\begin{aligned} & 10.729 \\ & (1.278) \end{aligned}$ | $\begin{aligned} & 13.097 \\ & (1.594) \end{aligned}$ | $\begin{aligned} & 11.746 \\ & (2.397) \end{aligned}$ | $\begin{gathered} 9.414 \\ (3.663) \end{gathered}$ |
| 21 or more | $\begin{aligned} & 15.684 \\ & (1.452) \end{aligned}$ | $\begin{aligned} & 16.743 \\ & (1.945) \end{aligned}$ | $\begin{aligned} & 17.540 \\ & (2.574) \end{aligned}$ | $\begin{aligned} & 11.551 \\ & (3.721) \end{aligned}$ |
| Class Rank | $\begin{aligned} & -4.185 \\ & (3.005) \end{aligned}$ | $\begin{array}{r} 0.0163 \\ (3.563) \end{array}$ | $\begin{aligned} & -1.559 \\ & (5.191) \end{aligned}$ | $\begin{gathered} 8.905 \\ (9.534) \end{gathered}$ |
| Test | $\begin{gathered} 5.308 \\ (7.183) \end{gathered}$ | $\begin{gathered} 0.507 \\ (2.564) \end{gathered}$ | $\begin{gathered} 4.626 \\ (4.232) \end{gathered}$ | $\begin{gathered} 9.561 \\ (6.302) \end{gathered}$ |
| Job Training | $\begin{gathered} 1.547 \\ (1.577) \end{gathered}$ | $\begin{gathered} 4.311 \\ (2.297) \end{gathered}$ | $\begin{gathered} 0.597 \\ (2.326) \end{gathered}$ | $\begin{gathered} 5.199 \\ (3.825) \end{gathered}$ |
| Income | $\begin{aligned} & -0.396 \\ & (0.121) \end{aligned}$ | $\begin{aligned} & -0.068 \\ & (0.151) \end{aligned}$ | $\begin{gathered} 0.345 \\ (0.230) \end{gathered}$ | $\begin{array}{r} 0.0139 \\ (0.290) \end{array}$ |
| Wage | $\begin{gathered} 0.996 \\ (0.324) \end{gathered}$ | $\begin{gathered} 0.395 \\ (0.896) \end{gathered}$ | $\begin{gathered} 0.445 \\ (1.685) \end{gathered}$ | $\begin{gathered} 2.587 \\ (2.189) \end{gathered}$ |
| Unemployment | $\begin{aligned} & -0.263 \\ & (0.270) \end{aligned}$ | $\begin{aligned} & -0.318 \\ & (0.360) \end{aligned}$ | $\begin{aligned} & -0.451 \\ & (0.533) \end{aligned}$ | $\begin{gathered} 2.046 \\ (0.955) \end{gathered}$ |
| Vocational School | $\begin{aligned} & 11.733 \\ & (1.547) \end{aligned}$ | $\begin{aligned} & 15.904 \\ & (2.258) \end{aligned}$ | $\begin{gathered} 7.918 \\ (2.634) \end{gathered}$ | $\begin{gathered} 6.306 \\ (3.839) \end{gathered}$ |
| Junior College | $\begin{gathered} 9.626 \\ (1.146) \end{gathered}$ | $\begin{aligned} & 10.303 \\ & (1.610) \end{aligned}$ | $\begin{gathered} 6.387 \\ (2.161) \end{gathered}$ | $\begin{gathered} 2.620 \\ (3.139) \end{gathered}$ |
| Correlation | $\begin{gathered} 0.039 \\ (0.171) \end{gathered}$ | $\begin{gathered} 0.138 \\ (0.135) \end{gathered}$ | $\begin{gathered} 0.192 \\ (0.211) \end{gathered}$ | $\begin{gathered} 0.379 \\ (0.274) \end{gathered}$ |
| Standard Error | $\begin{aligned} & 10.049 \\ & (0.430) \end{aligned}$ | $\begin{aligned} & 23.665 \\ & (0.582) \end{aligned}$ | $\begin{aligned} & 22.146 \\ & (0.955) \end{aligned}$ | $\begin{aligned} & 26.575 \\ & (2.237) \end{aligned}$ |
| Number of Students | 1024 | 1584 | 580 | 629 |

a. Included in the equation but not shown were dichotomous variables for missing test score, class rank, and family income.

## Probability of Attending School

|  | Whites |  | Non-Whites |
| :--- | :---: | :---: | :---: |
| Evaluated at the Mean $X$ for Whites | .68 | .83 |  |
| Evaluated at the Mean $X$ for Non-Whites | .36 | .58 |  |

Although white young men are more likely to be in school than nonwhites, it can be seen from the tabulation that given individual academic and socioeconomic attributes, non-whites are considerably more likely than whites to attend a post-secondary school. Given the mean $X$ for either blacks or whites, the difference between the estimates for whites and nonwhites reflects a race effect. For either race, the difference between the estimates based on the mean for whites and the mean for non-whites reflects the effect of differences in measured attributes of the two groups.

We have also evaluated for each group the partial relationship between attendance and individual attributes, by calculating the difference in attendance probabilities for selected values of specified variables, with other variables held at their sample means. ${ }^{2}$ They are shown below.

1. Venti and Wise [1980a, 1980b], find that this is true also when only four-year colleges and universities are considered,
2. For both whites and non-whites the representative (mean) individual was chosen so that the probability of attending school was 0.60 .

## WHITE

| $\frac{\text { High }}{(1)}$ | $\frac{\text { Low }}{(2)}$ | $\frac{\text { Difference }}{(3)}$ |  | $\frac{\text { High }}{(1)}$ | $\frac{\text { Low }}{(2)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\text { Difference }}{(3)}$ |  |  |  |  |
| .75 | .44 | .31 | .75 | .44 | .31 |



The estimates for whites and non-whites are quite close, with two exceptions. Family income is unrelated to the attendance of non-whites, while it is related to the attendance of whites. Also, relative to the effect of test scores, the effect of high school class rank is smaller for non-whites than for whites. One explanation of this latter result is that the academic preparation of classmates of non-white students is less than the preparation of classmates of whites; thus a giveri class rank represents lower academic achievement in the schools attended by non-whites.

## B. Weeks Worked Equations

Recall that the parameter estimates in Table 13B indicate the effect of associated variables on weeks worked $Y$, except if $Y$ is 0 or 52 . Then the effect is zero. To obtain estimates for a random person in the sample, some of whom could be working 52 or 0 weeks, evaluated at the mean $X$ over the total sample, either for persons in school or for persons out of school, the estimated coefficients must be multiplied by the relevant adjustment factor. They are as follows:

\[

\]

We shall present results based only on the estimated parameters. These indicate the effect of the variables as long as neither limit is reached. If you were to want the expected effect for a person selected at random, not knowing whether the person were at a limit, the estimated values should be multiplied by the adjustment factors.

The estimated relationship between hours worked in high school and weeks worked upon graduation and entry into the labor force is very substantial for both whites and non-whites and the estimated parameters for the two groups are very similar. The relevant estimated parameters are presented in the tabulation below.

Estimated Effect on Weeks Worked

Whites


1972-73

1974-75
Non-Students

| 1 to 10 | 0.5 | 1.0 | 2.6 | 2.1 |
| :--- | ---: | ---: | ---: | ---: |
| 11 to 20 | 8.3 | 5.7 | 8.5 | 4.0 |
| 21 or more | 13.2 | 9.2 | 10.6 | 10.3 |
|  |  | Students |  |  |
|  |  | 3.9 | 3.7 | 2.0 |
| 1 to 10 | 10.7 | 13.1 | 11.7 | 9.4 |
| 11 to 20 | 15.7 | 16.7 | 17.5 | 11.6 |

There appear to be no appreciable and consistent differences among the estimates for whites and non-whites. It can be seen from the tabulation that the relationship between hours worked in high school and weeks worked in the labor force could be very substantial. For example, among nonstudents, those who worked over 20 hours per week in high school are estimated to work on the order of 10 weeks more per year than those who did work at all in high school.

Evaluated at the mean $X$ and using the appropriate adjustment factor, twenty or more hours of work in high school for an individual selected at random from the population is estimated to be associated with about 4 more weeks of work after graduation than the estimate for a person who did work in high school. In none of these cases do the estimates for whites differ in general from those for non-whites.

The relationship between work while in high school and subsequent employment is if anything even more striking for students than for nonstudents.

Whether these relationships reflect individual specific characteristics that affect both work in high school as well as work after graduation, or whether work in high school itself contributes to later employment possibilities is open to question. We have discussed this at some length in our earlier paper and will not repeat the discussion here. We observe, however, that the strong relationship between working while in high school and working while in a post-secondary school suggests to us the effect of individual specific attributes of youth that play a role in determining work in both situations.

Both class rank in high school and the test scores are substantially related to weeks worked for non-students. The standard deviation of class rank is about 25 and of the test scores is about 1. The estimated effect on weeks worked of standard deviation changes in high school class rank and test scores are shown below.

|  | Estimated Effect of Standard Deviation oll Weeks Worked, Non-Students |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Whites |  | Non-Whites |  |
|  | 1972-73 | 1974-75 | 1972-73 | 1974-75 |
| Class Rank in High School | 4.2 | 4.1 | 3.2 | 2.8 |
| Test Score Total | 13.3 | 9.2 | 15.3 | 12.2 |

Among youth in both groups, by these measures, the effect of test scores is much greater than the effect of class rank. This is true in particular for non-whites although in general the differences between whites and non-whites are not great. Evaluated at the mean of $X$ for the total sample, a standard deviation increase in test scores for a white youth selected at random is associated with an increase in weeks worked of 4.2
and 2.6 respectively in 1972-73 and 1974-75. For a non-white the increases are 5.4 and 5.2 respectively. The relative difference between whites and non-whites may result from differences in the qualities of the high schools attended by the two groups. Relative to test scores, class rank may be a poorer indicator of ability in lower quality than in higher quality high schools. The effects of high school class rank and test scores on weeks worked by students are not significantly different from zero in any case and thus we have not reported standard deviation simulations for students.

The estimated effect of job training in high school is positive in all cases, but by standard criteria significantly different from zero only for non-student non-whites in 1972-73 and student whites in 1974-75. The estimated effect for non-whites is larger than for whites in each comparison except students in 1974-75. Marginal effects are as follows:

Estimated Effect on Weeks Worked of Job Training in High School Whites

Non-Whites
1972-73 1974-75 $\quad$ Non-Students
1.5
1.5
4.9
2.8

Students

## 1.5

4.3
0.6
5.2

These numbers suggest the possibility that for non-student non-white youth, vocational training in high school may have had some effect on employment after graduation, at least in the first year. Even in this year, however, these estimates appear small relative to the estimated
relationships between test scores and weeks worked or between hours worked in high school and weeks worked upon graduation. We are hesitant to make too much of a single statistically significant coefficient because in our earlier work although in general we found no effect of vocational training in high school, we found a statistically significant estimate for one year. It happened, however, to be for the 1975-76 October to October period. Here we find that for neither whites nor non-whites is the estimate significant for the 1974-75 annual period. The results for students are also ambiguous, as is the relationship between the effects for students versus non-students.

Finally, we find that parents' income bears a statistically significant and substantial relationship to weeks worked by non-students, especially for non-whites. The estimated effects of a standard deviation increase in parents' income (more accurately 5.5 thousand which is approximately one standard deviation) are as follows:

Estimated Effect of a Standard Deviation Increase in Income | White | Non-White |  |
| :--- | :--- | :---: |
| 1972-73 1974-75 | 1972-73 |  |
| Non-Students |  |  |

1.6
1.9
3.4
4.5

Students
-2.2 -- 1.9 --

A possible explanation for the differences between whites and non-whites is that the relationship between income and weeks worked is non-linear with the largest marginal effects for youth from low income families. The mean value of parents' income for non-whites is much lower than the mean
for whites. In general, family income may be related to weeks worked because as shown above a large proportion of youth find jobs through family contacts. Those from higher income families may have better contacts. The income effects for students are not statistically different from zero in 1974-75. For the 1972-73 period the estimated effect is negative for whites and positive for non-whites.

Finally, students in vocational and junior college work considerably more than those in four-year colleges, especially among whites, as shown in the following tabulation:

|  | Whites |  | Non-Whites |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1972-73 | 1974-75 | 1972-73 | 1974-75 |
| Vocational School | 11.7 | 15.9 | 7.9 | 6.3 |
| Junior College | 9.6 | 10.3 | 6.4 | 2.6 |

These results appear plausible since both junior college and vocational school programs are more likely than four-year programs to be closely related to particular jobs. The courses of study in these schools may also be academically less time consuming.
IV. Summary

Our intent has been to distinguish possible differences in the determinants of school attendance and labor force experience of white and nonwhite high school graduates. The paper parallels in many respects our earlier work on high school preparation and early labor force experiences. Among these high school graduates, we find no striking differences between the determinants of the work experience of the two groups, nor of their school attendance, although after controlling for measured attributes non-whites are much more likely than whites to attend a post-secondary school.

|  | White |  |  |  |  | Non-White |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1972 | 1973 | 1974 | 1975 | 1976 | 1972 | 1973 | 1974 | 1975 | 1976 |
| In School, Full-Time ${ }^{\text {a }}$ | 53.6 | 43.3 | 38.2 | 35.2 | 22.1 | 42.3 | 30.3 | 26.5 | 23.3 | 17.7 |
| In School, Part-Time | 4.6 | 7.2 | 6.2 | 6.6 | 7.7 | 4.4 | 7.4 | 6.5 | 7.4 | 7.0 |
| Not in School, Total | 42.4 | 49.5 | 55.7 | 58.2 | 70.2 | 53.3 | 62.3 | 67.1 | 69.4 | 75.3 |
| Working FullTime | 71.9 | 76.2 | 74.1 | 77.5 | 80.1 | 60.1 | 67.7 | 63.3 | 69.7 | 71.9 |
| Working PartTime | 9.2 | 5.1 | 4.9 | 4.2 | 4.1 | 11.4 | 6.2 | 5.1 | 5.2 | 5.1 |
| Military | 7.7 | 11.2 | 11.9 | 10.8 | 7.4 | 8.8 | 14.2 | 16.1 | 15.7 | 12.1 |
| Out of Labor Force | 6.6 | 4.5 | 2.3 | 2.7 | 2.7 | 9.0 | 6.2 | 2.9 | 3.1 | 4.1 |
| Looking for Work | 4.6 | 2.8 | 6.7 | 4.7 | 5.7 | 10.7 | 5.8 | 12.6 | 7.3 | 6.9 |
| Labor Force b Statistics: Emplovment Ratio | . 880 | . 914 | . 898 | . 916 | . 909 | . 784 | . 860 | . 840 | . 877 | . 875 |
| Labor Force Participation | . 929 | . 946 | . 974 | . 969 | . 972 | . 902 | . 928 | . 965 | . 964 | . 953 |
| Unemployment Ratio | . 053 | . 035 | . 079 | . 053 | . 065 | . 130 | . 073 | . 155 | . 090 | . 081 |

$$
\text { a. Includes a small number of persons in graduate school in } 1975 \text { and } 1976 .
$$

b. for persons not in school and not in the military.
Appendix Table 1b. Percent of Female Youth in School and Work Categories, and Labor Force

|  | Whito |  |  |  |  | Non-White |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1972 | 1973 | 1974 | 1975 | 1976 | 1972 | 1973 | 1974 | 1975 | 1976 |
| In School, Full-Time ${ }^{\text {a }}$ | 51.7 | 39.0 | 32.4 | 29.0 | 13.8 | 47.4 | 34.1 | 27.8 | 25.3 | 16.3 |
| In School, Part-time | 4.0 | 5.9 | 5.7 | 5.3 | 7.4 | 5.1 | 7.7 | 6.5 | 5.2 | 6.7 |
| Not in School, Total | 44.4 | 55.0 | 62.0 | 65.6 | 78.8 | 47.5 | 58.2 | 65.8 | 69.5 | 77.0 |
| Working Full-time | 59.3 | 63.8 | 61.8 | 61.8 | 61.7 | 43.8 | 50.7 | 51.9 | 59.8 | 61.0 |
| Working Part-time | 13.5 | 9.8 | 8.1 | 8.9 | 9.7 | 12.4 | 11.2 | 8.9 | 8.8 | 7.9 |
| Military | 0.4 | 1.1 | 1.5 | 1.4 | 1.0 | 0.8 | 0.8 | 1.2 | 1.5 | 1.4 |
| Out of Labor Force | 18.7 | 19.4 | 22.0 | 23.6 | 22.0 | 22.5 | 21.4 | 24.4 | 19.4 | 18.8 |
| Not Homemaker | 9.5 | 6.5 | 2.1 | 2.3 | 2.2 | 15.7 | 11.9 | 4.2 | 3.1 | 3.5 |
| Homemaker | 9.2 | 12.9 | 19.9 | 21.3 | 19.8 | 6.8 | 9.5 | 20.2 | 16.3 | 15.3 |
| Looking for Work | 8.3 | 5.9 | 6.5 | 4.3 | 5.6 | 20.5 | 15.8 | 13.5 | 10.4 | 10.9 |
| Not Homemaker | 6.7 | 3.6 | 4.5 | 2.3 | 2.8 | 16.4 | 10.8 | 9.5 | 5.3 | 5.6 |
| Homemaker | 1.6 | 2.3 | 2.0 | 2.0 | 2.8 | 4.1 | 5.0 | 4.0 | 5.1 | 5.3 |
| Labor Force Statistics: |  |  |  |  |  |  |  |  |  |  |
| Employment Ratio | . 731 | . 744 | . 710 | . 717 | . 721 | . 567 | . 624 | . 616 | . 697 | . 699 |
| Labor Force Participation | . 813 | . 803 | . 776 | . 761 | . 778 | . 773 | . 783 | . 753 | . 803 | . 809 |
| Unemployment Ratio | . 100 | . 074 | . 085 | . 057 | . 073 | . 267 | . 203 | . 182 | . 132 | . 136 |

a. Includes a small number of persons in graduate school in 1975 and 1976. - Kaez! !! m ayf u! zou pue looyวs u! zou suos.ad dof ' q
Appendix Table 2a. Distribution of Males by School and Work Status, October $1972^{\text {a }}$


$N=2224 \quad$ ( 135 missing)
Appendix Table 3a. Distribution of Males by School and Work Status, October 1973

| School <br> Status | Work Status |  |  |  |  |  | Work Status |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Non-White |  |  |  |  |  |
|  | Total | Full Time Work | Part Time Work | $\begin{aligned} & \text { Mili- } \\ & \text { tary } \end{aligned}$ | Out of Labor Force | $\begin{aligned} & \text { Looking } \\ & \text { for } \\ & \text { Work } \end{aligned}$ | Total | Full Time Work | Part Time Work | Military | Out of Labor Force | Looking for Work |
| Total | 100.00 | 46.81 | 19.15 | 6.36 | 23.08 | 4.59 | 100.00 | 50,96 | 15.79 | 9.65 | 16.18 | 7.40 |
| Full-Time: Vocational Technical | 3.81 | $\begin{array}{r} 25.61 \\ 2.09 \end{array}$ | $\begin{array}{r} 31.71 \\ 6.32 \end{array}$ | $\begin{aligned} & 6.40 \\ & 3.84 \end{aligned}$ | $\begin{array}{r} 27.44 \\ 4.59 \end{array}$ | $\begin{aligned} & 8.23 \\ & 6.87 \end{aligned}$ | 3.62 | $\begin{array}{r} 30.30 \\ 2.15 \end{array}$ | $\begin{array}{r} 31.82 \\ 7.37 \end{array}$ | $\begin{aligned} & 3.03 \\ & 1.14 \end{aligned}$ | $\begin{array}{r} 16.67 \\ 3.81 \end{array}$ | $\begin{array}{r} 18.18 \\ 8.96 \end{array}$ |
| Two-Year | 11.14 | 17.54 4.17 | 45.72 26.63 | 0.10 0.18 | 28.50 13.56 | 8.14 19.34 | 8.45 | $\begin{array}{r} 20.78 \\ 3.44 \end{array}$ | $\begin{aligned} & 39.61 \\ & 21.05 \end{aligned}$ | $\begin{aligned} & 0.00 \\ & 0.00 \end{aligned}$ | $\begin{aligned} & 24.68 \\ & 12.46 \end{aligned}$ | $\begin{aligned} & 14.94 \\ & 17.16 \end{aligned}$ |
| Four-Year | 27.97 | 6.53 3.90 | 30.93 45.05 | 0.25 1.10 | 55.89 67.99 | 6.49 39.69 | 17.33 | 9.49 3.23 | $\begin{aligned} & 29.75 \\ & 32.63 \end{aligned}$ | 0.63 1.14 | 51.90 55.71 | 8.23 19.40 |
| Other | 0.38 | $\begin{array}{r} 21.21 \\ 0.17 \end{array}$ | $\begin{aligned} & 3.03 \\ & 0.06 \end{aligned}$ | $\begin{array}{r} 27.27 \\ 1.65 \end{array}$ | $\begin{array}{r} 48.48 \\ 0.82 \end{array}$ | $\begin{aligned} & 0.00 \\ & 0.00 \end{aligned}$ | 0.93 | $\begin{array}{r} 29.41 \\ 0.54 \\ \hline \end{array}$ | $\begin{array}{r} 23.53 \\ 1.40 \\ \hline \end{array}$ | $\begin{array}{r}35.29 \\ 3.41 \\ \hline\end{array}$ | 11.76 0.69 | $\begin{aligned} & 0.00 \\ & 0.00 \\ & \hline \end{aligned}$ |
| Part-Tine: <br> Vocational <br> Technical | 1.50 | $\begin{array}{r} 79.84 \\ 2.56 \end{array}$ | $\begin{array}{r} 13.18 \\ 1.03 \end{array}$ | $\begin{aligned} & 3.88 \\ & 0.91 \end{aligned}$ | $\begin{aligned} & 2.33 \\ & 0.15 \end{aligned}$ | $\begin{aligned} & 0.78 \\ & 0.25 \end{aligned}$ | 1.76 | $\begin{array}{r} 68.75 \\ 2.37 \end{array}$ | $\begin{array}{r} 12.50 \\ 1.40 \end{array}$ | $\begin{aligned} & 6.26 \\ & 1.14 \end{aligned}$ | $\begin{aligned} & 6.25 \\ & 0.69 \end{aligned}$ | $\begin{aligned} & 6.25 \\ & 1.49 \end{aligned}$ |
| Two-Year | 3.07 | 60.61 3.98 | 23.86 3.83 | 4.55 2.19 | 7.95 1.07 | 3.03 2.04 | 2.96 | 44.44 2.58 | 35.19 6.67 | 3.70 1.14 | 7.41 1.38 | 9.26 3.73 |
| Four-Year | 2.00 | 42.44 1.81 | 36.05 3.71 | 4.07 1.28 | 14.53 1.22 | 2.91 1.27 | 1.97 | 47.22 1.83 | 36.11 4.21 | 2.78 0.57 | 11.11 1.38 | 2.78 0.75 |
| Other | 0.59 | $\begin{array}{r} 58.82 \\ 0.75 \end{array}$ | 9.80 0.30 | 21.57 2.01 | 9.80 0.25 | 0.00 0.00 | 0.71 | $\begin{array}{r} 84.62 \\ 1.18 \\ \hline \end{array}$ | 15.38 0.70 | 0.00 0.00 | 0.00 0.00 | $\begin{aligned} & 0.00 \\ & 0.00 \end{aligned}$ |
| Hot in School | 49.52 | $\begin{aligned} & 76.16 \\ & 80.57 \end{aligned}$ | $\begin{array}{r} 5.05 \\ 13.07 \end{array}$ | $\begin{aligned} & 11.16 \\ & 86.84 \end{aligned}$ | $\begin{array}{r} 4.82 \\ 10.35 \end{array}$ | $\begin{array}{r} 2.82 \\ 30.53 \end{array}$ | 62.26 | $\begin{aligned} & 67.67 \\ & 82.67 \end{aligned}$ | $\begin{array}{r} 6.17 \\ 24.56 \end{array}$ | $\begin{aligned} & 14.19 \\ & 91.48 \end{aligned}$ | $\begin{array}{r} 6.17 \\ 23.88 \end{array}$ | $\begin{array}{r} 5.82 \\ 48.51 \end{array}$ |
|  | $N=8598$ |  |  | (453 missing) |  |  |  | $N=1823$ |  | (133 missing) |  |  |


| School Status | Work Status |  |  |  |  |  |  |  |  | Work Status |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White |  |  |  |  |  |  |  |  | Non-White_m |  |  |  |  |  |  |  |  |
|  | Total | Work FT | Work | Not Hmkr | Mili- tary | Out of Labor Force Hmkr |  | Looki <br> for <br> Hmkr | ng ork Not Hmkr | Total | Work FT | Work | PT Not Hmkr | Mili- tary | Out <br> Labo <br> Forc <br> Hmkr |  | Look For Hmkr | ing Work Not Hmkr |
| Total | 100 | 40.5 | 0.4 | 21.3 | 0.6 | 7.8 | 23.0 | 1.4 | 5.0 | 100 | 36.7 | 1.2 | 18.9 | 0.5 | 6.7 | 20.9 | 3.3 | 11.9 |
| Full-Time. Vocational Technical | 4.3 | 11.4 1.2 | 0.0 0.0 | 28.4 5.7 | 1.1 7.7 | 2.4 1.3 | 48.1 9.0 | 0.5 1.6 | 8.1 7.1 | 4.7 | 23.1 2.9 | 1.9 7.4 | 20.2 5.0 | 0.0 0.0 | 2.8 2.0 | 34.6 7.7 | 1.9 2.7 | 15.4 6.0 |
| Two-Year | 9.1 | 4.9 2.2 | 0.4 9.7 | 30.0 21.3 | 0.0 0.0 | 1.3 1.5 | 31.8 12.6 | 0.1 0.8 | 6.5 12.0 | 9.4 | 13.4 3.4 | 1.4 11.1 | 33.0 16.4 | 0.0 0.0 | 2.4 3.3 | 31.1 14.0 | 0.5 1.4 | 18.2 14.3 |
| Four-Year | 25.3 | 3.5 2.2 | $\begin{aligned} & 0.1 \\ & 3.2 \end{aligned}$ | $\begin{aligned} & 33.9 \\ & 40.1 \end{aligned}$ | 0.0 0.0 | 1.0 3.1 | 54.6 60.1 | 0.2 3.3 | 6.8 34.9 | 19.7 | 4.3 2.3 | 0.7 11.1 | 37.6 39.2 | 0.2 9.1 | 2.1 6.0 | 42.6 40.1 | 0.5 2.7 | 12.1 20.0 |
| Other | 0.4 | $\begin{array}{r} 22.2 \\ 0.2 \end{array}$ | $\begin{aligned} & 2.8 \\ & 3.2 \end{aligned}$ | $\begin{array}{r} 27.8 \\ 0.6 \end{array}$ | $\begin{aligned} & 8.3 \\ & 5.8 \end{aligned}$ | $\begin{aligned} & 2.8 \\ & 0.2 \end{aligned}$ | $\begin{array}{r} 25.0 \\ 0.5 \end{array}$ | $\begin{aligned} & 2.8 \\ & 0.8 \end{aligned}$ | $\begin{aligned} & 8.3 \\ & 0.7 \end{aligned}$ | 0.4 | $\begin{array}{r} 22.2 \\ 0.2 \end{array}$ | 0.0 0.0 | 11.1 0.2 | 0.0 0.0 | 0.0 0.0 | 33.3 0.6 | 0.0 0.0 | 33.3 1.1 |
| ```Part-Time: Vocational Technical``` | 1.2 | 58.3 1.7 | 1.0 3.2 | 21.4 1.2 | $\begin{aligned} & 1.0 \\ & 1.9 \end{aligned}$ | 4.9 0.8 | $\begin{aligned} & 7.8 \\ & 0.4 \end{aligned}$ | $\begin{aligned} & 1.9 \\ & 1.6 \end{aligned}$ | $\begin{aligned} & 3.9 \\ & 0.9 \end{aligned}$ | 2.0 | 52.3 2.8 | 0.0 0.0 | 6.8 0.7 | 0.0 0.0 | 13.6 4.0 | 11.4 1.1 | 2.3 1.4 | 13.6 2.3 |
| Two-Year | 2.5 | 58.2 3.6 | 0.9 6.5 | 24.4 2.8 | 0.5 1.9 | 1.9 0.6 | 6.6 0.7 | 0.5 0.8 | 7.0 3.5 | 3.1 | 54.4 4.5 | 1.5 3.7 | 20.6 3.3 | 0.0 0.0 | 1.5 0.7 | 11.8 1.7 | 1.5 1.4 | 8.8 2.3 |
| Four-Year | 1.7 | $\begin{array}{r} 31.9 \\ 7.3 \end{array}$ | 0.7 3.2 | 45.8 3.6 | 0.0 0.0 | 4.2 0.9 | 13.9 1.0 | 0.7 0.8 | 2.8 0.9 | 2.1 | 37.0 2.1 | 2.2 3.7 | 39.1 4.3 | 0.0 0.0 | 2.2 0.7 | 13.0 1.3 | 0.0 0.0 | 6.5 1.1 |
| Other | 0.6 | $\begin{array}{r} 63.5 \\ 1.0 \end{array}$ | $\begin{aligned} & 1.9 \\ & 3.2 \end{aligned}$ | 19.2 0.6 | $\begin{aligned} & 1.9 \\ & 1.9 \end{aligned}$ | 7.7 0.6 | 1.9 0.1 | $\begin{aligned} & 1.9 \\ & 0.8 \end{aligned}$ | $\begin{aligned} & 1.9 \\ & 0.2 \end{aligned}$ | 0.6 | $\begin{array}{r} 64.3 \\ 1.1 \end{array}$ | 7.1 3.7 | 7.1 0.2 | 0.0 0.0 | 7.1 0.7 | 7.1 0.2 | 7.1 1.4 | 0.0 0.0 |
| Not in School | 54.9 | $\begin{aligned} & 63.9 \\ & 86.6 \end{aligned}$ | $\begin{array}{r} 0.5 \\ 67.7 \end{array}$ | $\begin{array}{r} 9.3 \\ 24.0 \end{array}$ | $\begin{array}{r} 0.9 \\ 80.8 \end{array}$ | $\begin{aligned} & 13.0 \\ & 91.1 \end{aligned}$ | $\begin{array}{r} 6.5 \\ 15.6 \end{array}$ | $\begin{array}{r} 2.3 \\ 89.3 \end{array}$ | $\begin{array}{r} 3.6 \\ 39.6 \end{array}$ | 58.2 | $\begin{aligned} & 50.8 \\ & 80.6 \end{aligned}$ | $\begin{array}{r} 1.2 \\ 59.3 \end{array}$ | $\begin{array}{r} 9.9 \\ 30.6 \end{array}$ | $\begin{array}{r} 0.8 \\ 90.9 \end{array}$ | 9.6 82.7 | 11.9 33.3 | $\begin{array}{r} 5.0 \\ 89.0 \end{array}$ | $\begin{aligned} & 10.8 \\ & 52.8 \end{aligned}$ |

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$\cdot \mathrm{e}$
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\text { Appendix Table 4b. Percentage Distribution of Females by School and Work Status, October 1974, by Race }{ }^{\mathrm{a}}
$$
 a. The top figures in each of the paired entries are row percentages and the bottom figures are column percentages.
Appendix Table 5a. Distribution of Males by School and Work Status, October 1975

Appendix Table 5b.

Appendix Table 6a

| School Status | Work Status |  |  |  |  |  | Work Status |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White |  |  |  |  |  |  |  |  | 1'ili- | Out of | Looking |
|  | Total | Full Time Work | Part Time Work | Military | Out of <br> Labor <br> Force |  | Total | Time Work | Time Work | tary | Labor Force | for Work |
|  |  | 63.66 | 12.79 | 6.30 | 11.51 | 5.74 | 100.00 | 62.71 | 9.02 | 10.65 | 9.99 | 7.63 |
| Tctal | 100.00 | 63.66 | 12.79 |  |  |  |  |  |  |  |  |  |
| Full-Time: Yocational Technical | 1.24 | $\begin{array}{r} 36.00 \\ 0.70 \end{array}$ | $\begin{array}{r} 19.00 \\ 1.85 \end{array}$ | $\begin{array}{r} 12.00 \\ 2.36 \end{array}$ | $\begin{array}{r} 22.00 \\ 2.38 \end{array}$ | $\begin{array}{r} 11.00 \\ 2.39 \end{array}$ | 1.82 | 43.331.25 | $\begin{aligned} & 6.67 \\ & 1.34 \end{aligned}$ | $\begin{array}{r} 13.33 \\ 2.27 \end{array}$ | $\begin{array}{r} 16.67 \\ 3.03 \end{array}$ | $\begin{array}{r} 20.00 \\ 4.88 \end{array}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\begin{array}{r} 35.56 \\ 5.19 \end{array}$ | 11.85 | 2.60 | 30.23 | 23.26 | 0.00 | 27.91 | 18.61 |
| Two-Year | 1.67 | 20.74 0.54 | $\begin{array}{r} 29.63 \\ 3.89 \end{array}$ | $\begin{aligned} & 2.22 \\ & 0.59 \end{aligned}$ |  | 3.48 |  | 1.25 | 6.71 | 0.00 | 7.27 | 5.69 |
|  | 18.33 | $8.45$ | $\begin{aligned} & 44.83 \\ & 59.44 \end{aligned}$ | $\begin{aligned} & 0.32 \\ & 1.38 \end{aligned}$ | $\begin{aligned} & 40.81 \\ & 71.32 \end{aligned}$ | $\begin{array}{r} 5.60 \\ 16.30 \end{array}$ | 12.04 | $\begin{array}{r} 14.86 \\ 2.80 \end{array}$ | $\begin{aligned} & 33.71 \\ & 43.63 \end{aligned}$ |  | 40.5752.12 | 9.7113.82 |
| Four-Year |  |  |  |  |  |  |  |  |  | 1.14 |  |  |
|  | 0.90 | $\begin{array}{r} 30.14 \\ 0.43 \end{array}$ | $\begin{array}{r} 19.18 \\ 1.36 \end{array}$ | $\begin{array}{r} 30.14 \\ 4.32 \end{array}$ | $\begin{array}{r} 17.81 \\ 1.41 \end{array}$ | $\begin{aligned} & 2.74 \\ & 0.43 \end{aligned}$ | 1.27 | $\begin{array}{r}33.33 \\ 0.68 \\ \hline\end{array}$ | 4.76 <br> 0.67 | $\begin{array}{r} 23.81 \\ 2.84 \end{array}$ | $\begin{array}{r} 23.81 \\ 3.03 \\ \hline \end{array}$ | $\begin{array}{r} 14.29 \\ 2.44 \\ \hline \end{array}$ |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |
| Part-Tine: Vocational Technical | 1.49 | $\begin{array}{r} 78.33 \\ 1.83 \end{array}$ | $\begin{aligned} & 3.33 \\ & 0.39 \end{aligned}$ | $\begin{array}{r} 9.17 \\ 2.16 \end{array}$ | $\begin{aligned} & 5.00 \\ & 0.65 \end{aligned}$ | $\begin{aligned} & 4.17 \\ & 1.09 \end{aligned}$ | 1.27 | 80.951.64 | 0.000.00 | 9.521.14 | 9.521.21 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 2.72 |  | 6.67 | 13.33 | 2.22 | 4.44 |
|  | 2.48 | $\begin{array}{r} 71.00 \\ 2.76 \end{array}$ | $\begin{array}{r} 13.50 \\ 2.63 \end{array}$ | $\begin{aligned} & 7.00 \\ & 2.75 \end{aligned}$ | $\begin{aligned} & 4.50 \\ & 0.97 \end{aligned}$ | $\begin{aligned} & 4.00 \\ & 1.74 \end{aligned}$ |  | 3.19 | 2.01 | 3.41 | 0.61 | 1.63 |
| Two-Year |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 3.36 | $\begin{array}{r} 52.40 \\ 2.76 \end{array}$ | $\begin{array}{r} 29.52 \\ 7.68 \end{array}$ | $\begin{aligned} & 5.90 \\ & 3.14 \end{aligned}$ | $\begin{aligned} & 7.38 \\ & 2.16 \end{aligned}$ | $\begin{aligned} & 4.80 \\ & 2.83 \end{aligned}$ | 2.06 | 70.592.32 | 14.36 | 2.94 | 5.88 | 5.88 |
| Four-Year |  |  |  |  |  |  |  |  |  | 0.57 | 1.21 | 1.63 |
| Four-Year |  |  |  | $\begin{array}{r} 20.00 \\ 1.18 \end{array}$ |  | $\begin{array}{r} 10.00 \\ 0.65 \end{array}$ | 0.91 |  | 0.00 | 40.00 | 6.67 | 13.33 |
|  | 0.37 | $\begin{array}{r} 53.33 \\ 0.31 \end{array}$ | $\begin{array}{r} 13.33 \\ 0.39 \end{array}$ |  | $\begin{aligned} & 3.33 \\ & 0.11 \end{aligned}$ |  |  | 0.58 | 0.00 | 3.41 | 0.61 | 1.63 |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 70.17 | $\begin{aligned} & 80.05 \\ & 88.23 \end{aligned}$ | $\begin{array}{r} 4.10 \\ 22.37 \end{array}$ | $\begin{array}{r} 7.37 \\ 82.12 \end{array}$ | $\begin{array}{r} 2.67 \\ 15.80 \end{array}$ | $\begin{array}{r} 5.82 \\ 71.09 \end{array}$ | 75.30 | $\begin{aligned} & 71.86 \\ & 86.29 \end{aligned}$ | 5.0642.28 | 12.0685.23 | 4.1030.91 | $\begin{array}{r} 6.91 \\ 68.29 \end{array}$ |
| Not in |  |  |  |  |  |  |  |  |  |  |  |  |

Appendix Table 6b. Percentage Distribution of Females by School and Work Status, October 1976, by Race ${ }^{\text {a }}$

Appendix Table 7a. Average Hourly Wage Rates, Weekly Earnings, and Weekly Hours Worked
for Males Working in October, by School Status, Race, and Year

Appendix Table 7b. Average Hourly Wage Rates, Weekly Earnings, and Weekly Hours Worked

| Item and Race | Out of School |  |  |  |  | In School |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1972 | 1973 | 1974 | 1975 | 1976 | 1972 | 1973 | 1974 | 1975 | 1976 |
| Hourly Wage Rate (\$'s) <br> All Females | $\begin{gathered} 2.21 \\ (2874) \end{gathered}$ | $\begin{gathered} 2.52 \\ (3763) \end{gathered}$ | $\begin{gathered} 2.87 \\ (4162) \end{gathered}$ | $\begin{gathered} 3.24 \\ (4522) \end{gathered}$ | $\begin{gathered} 3.65 \\ (5496) \end{gathered}$ | $\begin{gathered} 2.02 \\ (1705) \end{gathered}$ | $\begin{gathered} 2.23 \\ (1912) \end{gathered}$ | $\begin{gathered} 2.54 \\ (1788) \end{gathered}$ | $\begin{gathered} 2.97 \\ (1839) \end{gathered}$ | $\begin{gathered} 3.50 \\ (1288) \end{gathered}$ |
| White | $\begin{gathered} 2.14 \\ (2371) \end{gathered}$ | $\begin{gathered} 2.46 \\ (3063) \end{gathered}$ | $\begin{gathered} 2.86 \\ (3344) \end{gathered}$ | $\begin{gathered} 3.25 \\ (3587) \end{gathered}$ | $\begin{gathered} 3.07 \\ (4418) \end{gathered}$ | $\begin{gathered} 1.96 \\ (1420) \end{gathered}$ | $\begin{gathered} 2.19 \\ (1577) \end{gathered}$ | $\begin{gathered} 2.52 \\ (1467) \end{gathered}$ | $\begin{gathered} 2.94 \\ (1485) \end{gathered}$ | $\begin{gathered} 3.49 \\ (1037) \end{gathered}$ |
| Non-White | $\begin{array}{r} 2.54 \\ (503) \end{array}$ | $\begin{array}{r} 2.79 \\ (700) \end{array}$ | $\begin{array}{r} 2.91 \\ (818) \end{array}$ | $\begin{array}{r} 3.23 \\ (935) \end{array}$ | $\begin{gathered} 3.56 \\ (1078) \end{gathered}$ | $\begin{array}{r} 2.30 \\ (285) \end{array}$ | $\begin{array}{r} 2.42 \\ (335) \end{array}$ | $\begin{gathered} 2.64 \\ (321) \end{gathered}$ | $\begin{array}{r} 3.06 \\ (354) \end{array}$ | $\begin{array}{r} 3.53 \\ (251) \end{array}$ |
| Weekly Earnings (\$'s) <br> All Females | 78.55 | 91.24 | 107.54 | 122.68 | 138.24 | 42.82 | 50.61 | 59.79 | 73.04 | 100.07 |
| White | 78.25 | 90.94 | 107.74 | 123.15 | 139.19 | 41.99 | 49.76 | 58.64 | 70.61 | 97.84 |
| Non-White | 79.94 | 92.55 | 106.71 | 120.90 | 134.35 | 46.94 | 54.62 | 65.04 | 83.21 | 109.31 |
| Weekly Hours Worked All Females | 37.05 | 38.01 | 38.17 | 38.06 | 38.02 | 21.67 | 22.49 | 22.67 | 23.85 | 28.22 |
| White | 37.33 | 38.24 | 38.20 | 38.04 | 37.97 | 21.67 | 22.26 | 22.41 | 23.28 | 27.64 |
| Non-White | 35.73 | 37.01 | 38.02 | 38.15 | 38.22 | 21.68 | 23.59 | 23.83 | 26.24 | 30.59 |

[^2]
Appendix Table 8a.

| Item and Race | Out of School |  |  |  | In School |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1972-73 | 1973-74 | 1974-75 | 1975-76 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
| Weeks Worked |  |  |  |  |  |  |  |  |
| All Hales | $\begin{aligned} & 40.70 \\ & (3174) \end{aligned}$ | $\begin{aligned} & 45.79 \\ & (2746) \end{aligned}$ | $\begin{aligned} & 44.53 \\ & (3.574) \end{aligned}$ | $\begin{aligned} & 44.74 \\ & (4319) \end{aligned}$ | $\begin{aligned} & 29.24 \\ & (5798) \end{aligned}$ | (5346) | (5696) | (4944) |
| White | $\begin{aligned} & 41.84 \\ & (2500) \end{aligned}$ | $\begin{aligned} & 46.22 \\ & (2183) \end{aligned}$ | $\begin{aligned} & 45.21 \\ & (2846) \end{aligned}$ | $\begin{aligned} & 45.22 \\ & (3464) \end{aligned}$ | $\begin{aligned} & 29.68 \\ & (5007) \end{aligned}$ | $\begin{aligned} & 35.23 \\ & (4598) \end{aligned}$ | $\begin{aligned} & 34.05 \\ & (4899) \end{aligned}$ | $\begin{aligned} & 34.01 \\ & (4274) \end{aligned}$ |
| Non-White | $\begin{aligned} & 36.44 \\ & (674) \end{aligned}$ | $\begin{aligned} & 44.09 \\ & (588) \end{aligned}$ | $\begin{aligned} & 41.88 \\ & (728) \end{aligned}$ | $\begin{aligned} & 42.77 \\ & (855) \end{aligned}$ | $\begin{aligned} & 26.42 \\ & (791) \end{aligned}$ | $\begin{aligned} & 34.96 \\ & (748) \end{aligned}$ | $\begin{aligned} & 33.90 \\ & (797) \end{aligned}$ | $\begin{aligned} & 33.72 \\ & (670) \end{aligned}$ |
| Weeks Looking for Work All Males | $\begin{gathered} 3.47 \\ (3174) \end{gathered}$ | $\begin{gathered} 2.70 \\ (2746) \end{gathered}$ | $\begin{gathered} 3.63 \\ (3574) \end{gathered}$ | $\begin{gathered} 3.29 \\ (4319) \end{gathered}$ | $\begin{gathered} 2.38 \\ (5798) \end{gathered}$ | $\begin{gathered} 2.43 \\ (5346) \end{gathered}$ | $\begin{gathered} 2.97 \\ (5696) \end{gathered}$ | $\begin{gathered} 3.08 \\ (4944) \end{gathered}$ |
| White | $\begin{gathered} 3.03 \\ (2500) \end{gathered}$ | $\begin{gathered} 2.58 \\ (<188) \end{gathered}$ | $\begin{gathered} 3.45 \\ (2846) \end{gathered}$ | $\begin{gathered} 3.21 \\ (3464) \end{gathered}$ | $\begin{gathered} 2.09 \\ (5007) \end{gathered}$ | $\begin{gathered} 2.18 \\ (4598) \end{gathered}$ | $\begin{gathered} 2.80 \\ (4899) \end{gathered}$ | $\begin{gathered} 2.94 \\ (4274) \end{gathered}$ |
| Non-White | $\begin{array}{r} 5.11 \\ (674) \end{array}$ | $\begin{array}{r} 3.16 \\ (558) \end{array}$ | $\begin{array}{r} 4.34 \\ (728) \end{array}$ | $\begin{array}{r} 3.64 \\ (855) \end{array}$ | $\begin{array}{r} 4.27 \\ (791) \end{array}$ | $\begin{array}{r} 4.01 \\ (748) \end{array}$ | $\begin{array}{r} 4.00 \\ (797) \end{array}$ | $\begin{array}{r} 3.98 \\ (670) \end{array}$ |
| Weeks Out of the <br> Labor Force |  |  |  |  |  |  |  |  |
| All Males | $\begin{gathered} 7.84 \\ (3174) \end{gathered}$ | $\begin{gathered} 3.51 \\ (2746) \end{gathered}$ | $\begin{gathered} 3.84 \\ (3574) \end{gathered}$ | $\begin{gathered} 3.97 \\ (4319) \end{gathered}$ | $\begin{array}{r} 20.38 \\ (5798) \end{array}$ | $\begin{aligned} & 14.38 \\ & (5346) \end{aligned}$ | $\begin{aligned} & 15.00 \\ & (5696) \end{aligned}$ | $\begin{aligned} & 14.95 \\ & (4944) \end{aligned}$ |
| White | $\begin{gathered} 7.13 \\ (2500) \end{gathered}$ | $\begin{gathered} 3.20 \\ (2183) \end{gathered}$ | $\begin{gathered} 3.35 \\ (2846) \end{gathered}$ | $\begin{gathered} 3.57 \\ (3464) \end{gathered}$ | $\begin{array}{r} 20.23 \\ (5007) \end{array}$ | $\begin{aligned} & 14.60 \\ & (4598) \end{aligned}$ | $\begin{aligned} & 15.15 \\ & (4899) \end{aligned}$ | $\begin{aligned} & 15.05 \\ & (4274) \end{aligned}$ |
| Non-White | $\begin{aligned} & 10.45 \\ & (674) \end{aligned}$ | $\begin{array}{r} 4.75 \\ (588) \end{array}$ | $\begin{array}{r} 5.78 \\ (728) \end{array}$ | $\begin{array}{r} 5.58 \\ (855) \end{array}$ | $\begin{aligned} & 21.31 \\ & (721) \end{aligned}$ | $\begin{aligned} & 13.03 \\ & (748) \end{aligned}$ | $\begin{aligned} & 14.10 \\ & (797) \end{aligned}$ | $\begin{aligned} & 14.29 \\ & (670) \end{aligned}$ |

Appendix Table 8a. Average Annual Weeks Worked, Weeks Looking for Work, Weeks Out of the Labor Force, and
Number of Employers, for liale Youths, by School Status, Race, and

| Item and Race | Out of School |  |  |  | In School |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1972-73 | 1973-74 | 1974-75 | 1975-76 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
| Number of Employers |  |  |  |  |  |  |  |  |
| All Males | $\begin{gathered} 1.84 \\ (3141) \end{gathered}$ | $\begin{gathered} 1.57 \\ (2721) \end{gathered}$ | $\begin{gathered} 1.38 \\ (3548) \end{gathered}$ | $\begin{gathered} 1.39 \\ (4284) \end{gathered}$ | $\begin{gathered} 1.75 \\ (5756) \end{gathered}$ | $\begin{gathered} 1.73 \\ (5316) \end{gathered}$ | $\begin{gathered} 1.44 \\ (5667) \end{gathered}$ | $\begin{gathered} 1.54 \\ (4928) \end{gathered}$ |
| White | $\begin{gathered} 1.87 \\ (2476) \end{gathered}$ | $\begin{gathered} 1.57 \\ (2169) \end{gathered}$ | $\begin{gathered} 1.38 \\ (2830) \end{gathered}$ | $\begin{gathered} 1.39 \\ (3444) \end{gathered}$ | $\begin{gathered} 1.78 \\ (4977) \end{gathered}$ | $\begin{gathered} 1.74 \\ (4572) \end{gathered}$ | $\begin{gathered} 1.45 \\ (4874) \end{gathered}$ | $\begin{gathered} 1.55 \\ (4260) \end{gathered}$ |
| Non-White | $\begin{gathered} 1.70 \\ (665) \end{gathered}$ | $\begin{aligned} & 1.56 \\ & (552) \end{aligned}$ | $\begin{array}{r} 1.41 \\ (718) \end{array}$ | $\begin{array}{r} 1.38 \\ (840) \end{array}$ | $\begin{array}{r} 1.60 \\ (779) \end{array}$ | $\begin{array}{r} 1.64 \\ (744) \end{array}$ | $\begin{array}{r} 1.40 \\ (793) \end{array}$ | $\begin{array}{r} 1.46 \\ (668) \end{array}$ |

a. The number of respondents is shown in parenthesis under each average. The numbers for nonwhite and white may not add to the total because race is sometimes unknown.
Appendix Table 8b. Average Annual Weeks Worked, Weeks Looking for Work, Weeks Out of the Labor Force,
and Number of Employers, for Female Youths, by School Status, Race, and Year

| Item and Race | Out of School |  |  |  | In School |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1972-73 | 1973-74 | 1974-75 | 1975-76 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
| Weeks Worked |  |  |  |  |  |  |  |  |
| All Females | $\begin{array}{r} 34.18 \\ (3444) \end{array}$ | $\begin{array}{r} 39.68 \\ (2676) \end{array}$ | $\begin{array}{r} 33.22 \\ (4234) \end{array}$ | $\begin{array}{r} 33.25 \\ (5056) \end{array}$ | $\begin{array}{r} 24.54 \\ (5589) \end{array}$ | $\begin{array}{r} 33.37 \\ (4995) \end{array}$ | $\begin{aligned} & 31.16 \\ & (5366) \end{aligned}$ | $(4530)$ |
| White | $\begin{array}{r} 35.61 \\ (2758) \end{array}$ | $\begin{array}{r} 40.39 \\ (2176) \end{array}$ | $\begin{array}{r} 33.69 \\ (3388) \end{array}$ | $\begin{array}{r} 33.50 \\ (4045) \end{array}$ | $\begin{array}{r} 25.32 \\ (4593) \end{array}$ | $\begin{array}{r} 33.85 \\ (4104) \end{array}$ | $\begin{array}{r} 31.63 \\ (4322) \end{array}$ | $\begin{array}{r} 31.90 \\ (3665) \end{array}$ |
| Non-White | $\begin{aligned} & 28.47 \\ & (686) \end{aligned}$ | $\begin{aligned} & 36.57 \\ & (500) \end{aligned}$ | $\begin{aligned} & 31.33 \\ & (846) \end{aligned}$ | $\begin{array}{r} 32.24 \\ (1011) \end{array}$ | $\begin{aligned} & 20.98 \\ & (996) \end{aligned}$ | $\begin{aligned} & 31.13 \\ & (891) \end{aligned}$ | $\begin{array}{r} 29.22 \\ (1044) \end{array}$ | $\begin{aligned} & 30.29 \\ & (865) \end{aligned}$ |
| Weeks Looking for Work All Females | $\begin{gathered} 3.49 \\ (3444) \end{gathered}$ | $\begin{gathered} 2.59 \\ (2676) \end{gathered}$ | $\begin{gathered} 3.05 \\ (4234) \end{gathered}$ | $\begin{gathered} 2.93 \\ (5056) \end{gathered}$ | $\begin{gathered} 2.90 \\ (5589) \end{gathered}$ | $\begin{gathered} 2.55 \\ (4995) \end{gathered}$ | $\begin{gathered} 2.66 \\ (5366) \end{gathered}$ | $\begin{gathered} 3.07 \\ (4530) \end{gathered}$ |
| White | $\begin{gathered} 2.89 \\ (2758) \end{gathered}$ | $\begin{gathered} 2.23 \\ (2176) \end{gathered}$ | $\begin{gathered} 2.69 \\ (3388) \end{gathered}$ | $\begin{gathered} 2.64 \\ (4045) \end{gathered}$ | $\begin{gathered} 2.43 \\ (4593) \end{gathered}$ | $\begin{gathered} 2.23 \\ (4104) \end{gathered}$ | $\begin{gathered} 2.34 \\ (4322) \end{gathered}$ | $\begin{gathered} 2.86 \\ (3665) \end{gathered}$ |
| Non-White | $\begin{array}{r} 5.90 \\ (686) \end{array}$ | $\begin{array}{r} 4.11 \\ (500) \end{array}$ | $\begin{array}{r} 4.48 \\ (846) \end{array}$ | $\begin{gathered} 4.10 \\ (1011) \end{gathered}$ | $\begin{array}{r} 5.08 \\ (996) \end{array}$ | $\begin{array}{r} 4.00 \\ (891) \end{array}$ | $\begin{gathered} 3.95 \\ (1044) \end{gathered}$ | $\begin{array}{r} 3.96 \\ (865) \end{array}$ |
| Weeks Out of the Labor Force |  |  |  |  |  |  |  |  |
| All Females | $\begin{array}{r} 14.33 \\ (3444) \end{array}$ | $\begin{gathered} 9.74 \\ (2676) \end{gathered}$ | $\begin{array}{r} 15.73 \\ (4234) \end{array}$ | $\begin{array}{r} 15.82 \\ (5056) \end{array}$ | $\begin{array}{r} 24.55 \\ (5589) \end{array}$ | $\begin{array}{r} 16.08 \\ (4995) \end{array}$ | $\begin{array}{r} 18.18 \\ (5366) \end{array}$ | $\begin{aligned} & 17.33 \\ & (4530) \end{aligned}$ |
| White | $\begin{array}{r} 13.51 \\ (2758) \end{array}$ | $\begin{gathered} 9.38 \\ (2176) \end{gathered}$ | $\begin{array}{r} 15.62 \\ (3388) \end{array}$ | $\begin{array}{r} 15.86 \\ (4045) \end{array}$ | $\begin{array}{r} 24.25 \\ (4593) \end{array}$ | $\begin{array}{r} 15.91 \\ (4104) \end{array}$ | $\begin{array}{r} 18.02 \\ (4322) \end{array}$ | $\begin{array}{r} 17.24 \\ (3665) \end{array}$ |
| Non-White | $\begin{aligned} & 17.64 \\ & (686) \end{aligned}$ | $\begin{aligned} & 11.32 \\ & (500) \end{aligned}$ | $\begin{aligned} & 16.19 \\ & (846) \end{aligned}$ | $\begin{array}{r} 15.66 \\ (1011) \end{array}$ | $\begin{aligned} & 25.94 \\ & (996) \end{aligned}$ | $\begin{aligned} & 16.86 \\ & (891) \end{aligned}$ | $\begin{array}{r} 18.82 \\ (1044) \end{array}$ | $\begin{aligned} & 17.74 \\ & (865) \end{aligned}$ |

Appendix Table 8b.
Average Annual Weeks Worked, Weeks Looking for Work, Weeks Out of the Labor Force,
and Number of Employers, for Female Youths, by School Status, Race, (continued)

| Item and Race | Out of School |  |  |  | In School |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1972-73$ | $1973-74$ | $1974-75$ | $1975-76$ | $1972-73$ | $1973-74$ | $1974-75$ | $1975-76$ |
| Number of Employers |  |  |  |  |  |  |  |  |
| All Females | 1.53 | 1.44 | 1.08 | 1.11 | 1.56 | 1.71 | 1.33 | 1.46 |
| White | $(3420)$ | $(2662)$ | $(4199)$ | $(5018)$ | $(5550)$ | $(4972)$ | $(5326)$ | $(4517)$ |
|  | 1.57 | 1.46 | 1.08 | 1.11 | 1.60 | 1.74 | 1.36 | 1.51 |
|  | $(2739)$ | $(2165)$ | $(3365)$ | $(4021)$ | $(4576)$ | $(4087)$ | $(4293)$ | $(3655)$ |
|  | 1.40 | 1.34 | 1.11 | 1.12 | 1.33 | 1.56 | 1.21 | 1.23 |
|  | $(681)$ | $(497)$ | $(834)$ | $(997)$ | $(974)$ | $(885)$ | $(1033)$ | $(862)$ |

a. The number of respondents is shown in parenthesis under each average. The numbers for non-white
and white may not add to the total because race is sometimes unknown.


[^0]:    1. More detail is found in Appendix Tables 1 through 5.
[^1]:    $N=2231 \quad$ (128 missing)

[^2]:    a. The data pertain to the first full week in October of each year. The numbers reporting figures in each year are in parenthesis under the wage rates. They are the same for weekly earnings and weekly hours worked.

